

NPL FORMER SCIENTISTS FORUM

[Registrar of Societies, Govt. of National Capital Territory of Delhi – Registration No. SI/60178/2007]



NEWSLETTER

(FOR RESTRICTED CIRCULATION)

Number 6

September 2009

SPECIAL ISSUE ON BEING EIGHTY

| | Page No. |
|--|--------------------|
| Between Ourselves - Message from the President of the Forum | 1 |
| From Secretary's Desk | 2-4 |
| Re-constituted Management Committee of the Forum (6 th AGM held on 16 th April 2009) | 5-6 |
| 80-Plus Club Citations | 7-12 |
| Professor Ajit Ram Verma : A Tribute – Dr. Krishan Lal | 13-14 |
| Re-treading the Footprints Left Behind – Dr. S R Das | 15-17 |
| Dr. Vikrak Kumar & NPL-FSF | 18 |
| Advice from a 90 Year Old | 19 |
| Know Your Mobile | 20 |
| Mobile Revolution – Dr. S R Das | 20-21 |
| Medical Issues Related - Memoranda and Circulars | 22-45 |
| Additions & Changes in the List of CGHS Empanelled Hospitals & Diagnostic Centres | 46-50 |
| Watch that Neck | 51 |
| 7 Don'ts After a Meal | 51 |
| Green Tea may protect against Blood Cell Cancer | 51 |
| Switching Over from Apple to Banana | 52 |
| Pension & Family Pension – As per the Recommendations of the 6 th Central Pay Commission | 53-57 |
| ABOUT FORUM MEMBERS | 58-65 |
| Recognitions & Honours | 58-59 |
| Post-Retirement Publications | 60-61 |
| Sharing Joys of Members | 61 |
| Acharya Jagadish Chandra Bose – 150 th Birth Centenary | 62 |
| Transitions | 63-65 |
| Scholarships & Awards | 66-67 |
| Metrology in Sports | 68-70 |
| SUPERSTITIONS & MYTHS | 71-75 |
| Exercise – Ten Myths & One Truth | 71 |
| Trust your Genes not the Planets | 72 |
| Three Times Thirteen Tips for Better Life | 73 |
| Questionnaire for Self Assessment Survey on Superstitions & Myths | 74-75 |
| The Laws of Ultimate Reality | 76 |
| Audited Statement of Accounts – Financial Year 2008-2009 | 77-79 |
| Donations Received From Members After 01. 09. 2008 | 80 |
| Membership List – Status as on 12. 08. 2009 (Updated as on 03. 09. 2009) | 81-90 |
| ADVERTISEMENTS | |
| National Physical Laboratory, New Delhi | Four |
| Council of Scientific & Industrial Research, New Delhi | Back Cover Page |
| Advanced Materials and Processes Research Institute, Bhopal | Inside Back Cover |
| S V Engineering Centre, Faridabad | Inside front Cover |
| INSERTS – Coloured Photographs | 50 |
| Inauguration of the 80-Plus Club by Dr. Vikram Kumar, Director, NPL, on March 16, 2009 | Three Pages |
| Release of the Forum's Newsletter No. 5, by Dr. Anil Kumar Gupta on 27 th October, 2008 | After Page 12 |
| Recipients of NPL-FSF Scholarships & Awards 2008 at the hands of Dr. Vikram Kumar, Director, NPL, | After Page 12 |
| Formula for Success | After page 67 |
| Brochure on Mobility of Personnel compiled by Ministry of Personnel, Public Grievances & Pensions | 17 |
| If a Child Lives with... | 57 |
| Live in the Present | 72 |
| | 90 |

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Industrial Waste Utilization



FRP Gear Case



Al MMC Brake Drum



Blast Resistant Panel

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Natural Fiber Composites
Industrial Wastes Utilization
Building Materials
Nano Materials



Radiation Shielding Material



Instant House



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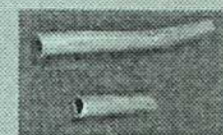
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FEM of Piston Block



Porthole Die



Extruded Tubes



Process Modeling Map



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NEWSLETTER

Number – 6

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On Being Eighty

Growing **old** is inevitable, growing **up** is optional.

It's not the years in your life that count, it's the **life** in your years

It is important to have a **twinkle** in your wrinkles

You can't help getting older, but you don't have to get **old**

Yesterday is history. Tomorrow is a mystery. Today is a gift. That's why we call it the **PRESENT**

Many times, in order to survive, we have to start a change process. We sometimes need to get rid of old memories, habits and other traditions. Only freed from the past burdens, can we take advantage of the present.

Life would be infinitely happier
if we could be born
at the age of Eighty
And gradually
approach Eighteen

NPL FORMER SCIENTISTS FORUM

ON BEING EIGHTY

from Press Clippings

If your mind is strong, age keeps pace with it. If you're a thinking, creative person doing work which the world is looking to pass a judgement on, it's one hell of a feeling. I don't hang on to my lows. Temperamentally, I pass on, I hop across. Life is beautiful in all its phases. I'm a man who if he gets hung on a thought, starts working on it day in and day out. I'm my own master. No one is dictating to me. If you can achieve a certain milestone in your career ... free in mind and free in spirit ... it's the greatest thing

At the age of 85 years, Dev Anand is busy working on his film "Chargesheet"

[From the Article on Dev Anand by Shalini Singh appearing in the Hindustan Times Dated April 19, 2009, Page 11]

I do all things I used to do. I eat a lot of meat and fish, drink plenty of milk and walk 3 kms a day. I feel even fitter than before.

At the age of 79, Guirija Suingh became the oldest recorded kidney donor in the country after donating his kidney to his daughter-in-law Manju Singh, 49, in January 2009.

[From the Article "Dad's the Way to Live" by Sanchita Sharma appearing in the Hindustan Times Dated April 12, 2009, Page 14]

At 100, I have a mind that is superior, thanks to experience, than when I was 20

Rita Levi Montalcini who shared the 1986 Nobel Prize for Medicine with Stanley Cohen celebrated her 100th Birthday on 15th April 2009.

[From a News Item "At 100, Italian Scientist Works" appearing in the Hindustan Times Dated April 20, 2009, Page 14]

Even at 80, Dara Singh is still the mentor of choice in India's first wrestling reality show

The 80-year-old pehlwan is part of an Indian version of WWE called 100% De Dhana Dhan with home grown stars. The young wrestlers on his show will not only find an idol but an ideal teacher, mentor and vanguard. And what makes it even better is how he instills the killer spirit in them but with a touch of patriotism and good intent. Dara Singh still goes on 8-10 km morning walks on the beach daily.

[From a News Item appearing in the Hindustan Times Dated September 6, 2009, Page 18]

Lata (Mangeshkar) Stands Tall at 80, with Memorable Songs

I want to continue singing till my last breath.... I really wanted to be a classical singer when I started working

[From the Article by Pankaj Vohra, appearing in the Hindustan Times Dated September 28, 2009, Page 13]

Publication Committee

| | |
|-------------------------------|-------------|
| Dr. Raghunath Bhattacharyya | Chairman |
| Dr. Shiv Nath Singh | Co-Chairman |
| Shri Gyanendra Kumar Arora | Convener |
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| Dr. Suresh Kumar Gupta | Member |
| Shri Kameshwer Nath Bhatnagar | Member |

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Gyanendra Kumar Arora



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Dr V N BINDAL MSc. PhD.
President, (NPL-FSF)

F-139, Mansarovar Garden
New Delhi-110015
15th September 2009

BETWEEN OURSELVES

To be respectful to elders is an important part of Indian Culture. Attaining an age of eighty, offers a special occasion for celebrations. Around this age a person has the distinction of seeing 1000 full moons (*Sahstra Purn Chandra Darshan*). He/She also gets the opportunity of completing eighty *Parikrama* around the Sun, the mighty source of energy and life. In addition to these astronomical achievements, a person of this age acquires great wisdom and is rich in experience of life.

This year, we organized a function to honor our members of 80+ age. By the grace of God, we had 16 such blessed members. Prof. A R Verma was one of them. It was very unfortunate that we lost him just a few weeks before this function. As its first Patron, he took great interest in the activities of the Forum. We are certainly going to miss him.

The year 2009 is the *International Year of Astronomy (IYA 2009)*. This year the 400th anniversary of first telescopically recorded astronomical observations by Galileo Galilei, is being celebrated. The great Indian astronomer *Aryabhata* (475-550 AD) explained clearly the phenomenon of eclipse, almost 1500 years ago. But even today, many of our countrymen believe in the mythological episode of *Rahu – Ketu*, as the cause of Solar and Lunar eclipse. Astrologers are enjoying very lucrative business in our country. They try to confuse their clients by equating astronomy with astrology. Superstitious beliefs are dominating many walks of our life.

The Forum has leading scientists of the country as its members, as such it owes a responsibility to the Nation, to create an Scientific Temper and to attempt to relieve the society from the clutches of superstitions. Spiritually also, we should have more faith in God and in our good deeds than the fear of getting harmed by the so called *evil spirits*. Khalil Gibran (1883 – 1931) said that *Fear of devil is one way of doubting God*. As a first step, in order to create a *self realization* and to find how superstitious, we ourselves are, a *Self Assessment Survey on Superstitions* is being conducted during one of the meetings of the Forum. We may possibly conduct such surveys in some other groups also.

We are all aware that Dr. Vikram Kumar, Director NPL, retired this year. He had a very helpful attitude towards the Forum. We are sure that he will keep his active association with us in future also.

This year the Forum is offering 5 Scholarships and 7 Awards for the promotion of education. On the suggestion of Dr. Vikram Kumar, modalities for giving scholarships for the education of young children of staff members, who unfortunately expire during service, are also being worked out. Any donations from the members for this noble cause are welcome.

I take this opportunity to thank all the members for their interest and cooperation in the functioning of the Forum.


(V.N. BINDAL)

From Secretary's Desk

I have great pleasure in presenting the report on the activities of NPL Former Scientists Forum for this Sixth Issue of the 'Newsletter' – a special issue on "ON BEING EIGHTY". This Report attempts to highlight the developments that have taken place subsequent to the release of the last issue of the Newsletter by Dr. Anil Kumar Gupta on October 27, 2008. Dr. Anil Kumar Gupta was presented with a Memento of the Forum by Dr. V N Bindal, the President of the Forum.

Subsequently, three meetings of the Management Committee were held on 27th February 30th April and 12th August 2009 and two meetings of the Forum were also held on 16th March and 16th April 2009.

As would be recalled, the meeting held on 27. 10. 2008 was a General Body meeting and also the Diwali Meeting and it was essentially a single-point agenda meeting at which the Resolution that had been passed unanimously at the earlier General Body Meeting held on 30. 04. 2008 regarding the Re-formulated Aims & Objects of the Forum to replace the Aims & Objects, constituting Para 3 of the Memorandum of Association under which the Forum had been registered with the Registrar of Societies were confirmed. The Re-formulated Aims & Objects of the Forum had been published on Page 5 of the Forum's Newsletter No. 5 dated September 2008. Page 4 of that issue also carried a facsimile copy of the Certificate of Registration No. S/60178/2007 dated 29th October 2007.

1. Meetings of the Management Committee and the Forum: The most significant highlight of the meeting of the Management Committee held on 27th February 2009 was the approval to the removal of the names of 11 members and of the Forum on account of default of payment of arrears despite repeated reminders and requesting the members of the Forum to furnish information on the following lines:

1. Full Name, Recorded Date of Birth and the actual date of Birth, if different) and Place of Birth.
2. Parentage, and the influence of the parents, brothers, sisters, or guardians in shaping their career
3. Educational career and the influence of the teachers starting from High School/ Metric etc., carrying information about the Institution/ University/ Subject, year and their special achievements. In case of Doctorate Degree Holders, also the title of their doctoral thesis, and the names of their guides.
4. Career before joining National Physical Laboratory, and career development during association with NPL, starting from the first post (including Research Assistantship etc) till their duration of association with the Laboratory, the last post held, and the reason for leaving the Laboratory.
5. Guidance to others in their career development, and Information about their associates and other contemporaries with whom they had special interaction or who helped them in their career development to the extent they can recall, viz. their dates of birth, period of association with NPL, specialization, and date/ year of expiry (in case already deceased)
6. Areas of Specialization, and highlights about their research and other publications, participation in national/ international conferences, deputation assignments, specialized training etc. within the country and abroad
7. The major achievements for which they can lay a just claim during their association with NPL, including Planning/ Execution/ Implementation of Scientific as well as Administrative Programmes and Organization of Special Events/ Lectures/ Reference Publications etc
8. The activities in which associated after severing connection with the Laboratory. For members who left NPL before their retirement from this Laboratory, the institutions served, the positions held etc.
9. Honours, Awards and Recognitions received e.g. Fellowships of the Learned Societies within India and Abroad, indicating also the year of the recognition. Special Lectures invited to deliver, and association with the Advisory Boards of various Journals etc.
10. Special Events of historical significance held during their association with NPL, and any documents of historical significance of the Laboratory that they have.
11. National and International personalities – Nobel Laureates, Scientists, Academicians, and other personalities - that they have intimately known and who have influenced them in their career development.
12. Hobbies in the younger age and the present hobbies e.g. writing of prose/ poetry/ indoor/ outdoor games/ fine arts, collection of stamps/ coins, gardening etc. and any significant achievements therein, as also their present pastime, viz. study of literature, reviewing books, viewing Educational and Quiz Programmes/ Films/ Serials on T V/ Solving Puzzles etc.
13. Information about their family – wife, children, brothers, sisters - their careers and welfare.
14. Any events of special significance which they may like to mention.

It was also decided to have a 80-Plus Club of the Forum and to have the next meeting of the Forum for inauguration of that Club. That meeting was held on March 16, 2009 to facilitate 16 members of the Forum who had already attained the age of 80 years or more. It had also been visualized as a Holi Milan meeting, but unfortunately, on account of the demise of Dr. A R Verma – the Senior-most Patron of the Forum and who was also to be facilitated at this meeting, it was decided not to celebrate it as a Holi Milan Meeting by Gulal Tilak as had been notified. Instead, before the start of the meeting a Condolence Resolution was passed on his demise. A Tribute to Dr. Verma from Dr. Krishan Lal and a write-up on him also appear in this issue of the Newsletter.

Dr. Vikram Kumar, Director, NPL inaugurated the 80-Plus Club and presented the 80-Plus Certificates, the Citations and the Mementoes to the eight Members of the 80-Plus Club by turn as the citations of Shri Dev Kumar, Shri S N Segal, Shri Shiv Nath, Dr. S R Das, Shri S C Vasishth, Shri S K Suri, Shri M K Balchandani, and Shri J N Ojha were read out. This was supplemented by a Power-Point presentation by Shri G K Arora of all the Members of the Club including those who could not be present at the meeting. Photographic coverage of this function appears in this issue of the Newsletter

Another significant feature of this meeting was a Power-Point presentation by Shri V P Wasan, about the procedure to be followed by the Members of the Forum, whose Children and Grand-children were also eligible for the various awards instituted by the Forum, along with the Children of the Staff Members of NPL.

As per the Rules & Regulations of the Forum, the Management Committee of the Forum was to be re-constituted and this was done at the Meeting of the Forum – Sixth Annual General Body Meeting – held on 16th April 2009. Shri P K Mittal had kindly agreed to be the Returning Officer for conducting elections of the various office bearers of the Management Committee. The constitution of the New Management Committee appears this Issue of the Newsletter.

Another special feature of this meeting was the appointment of M/s N Sharma and Associates, V-6, First Floor, Green Park Extension, New Delhi – 110 016, who had also been auditing the Accounts of the Metrology Society of India, as the Chartered Accountant for auditing the accounts of the Forum for the years 2008-2009 and 2009-2010. However, pending the preparation of the Audited Report by this Firm, the Internally Audited Report prepared by Shri P K Mittal for the year 2008-2009 was approved. The Accounts for the year 2008-2009, Audited by M/s N Sharma and Associates, are also published in this Issue.

The first meeting of the Re-constituted Management Committee of the Forum was held on 30th April 2009. At this meeting it was noted that the functioning of some of the committees was handicapped as the Chairmen of various Area Committees were unable to hold the meetings of their Committees on dates suggested by the conveners on account of their other commitments. To ensure flexibility of operation Co-Chairmen of the various Area Committees were also appointed, and it was left to the Chairman, the Co-Chairman and the Convener to add the other members of their Area Committees from not only the Members of the Management Committee, but also from the other members of the Forum.

Another highlight of this meeting of the Management Committee was the Audited Statement of Accounts for 2008-2009 prepared by M/s N Sharma and Associates was accepted subject to the condition that the same was also accepted by Shri V P Wasan, the Treasurer, who had expressed his inability to attend that meeting, and the same may be adopted and reported at the next meeting of the Forum. This Audited Statement is published in this Issue of the Newsletter.

This Meeting of the Management Committee had been preceded earlier on the same day by a joint meeting of the Scientific Affairs Committee and its Sub-Committee on Superstition under the Chairmanship of Dr. Kailash Chandra, the highlights of which were also presented at the meeting of the Management Committee, informing about the status of the Revised Chart on S I Units of Measurement and constitution of separate Committees for (1) Initiation of a Dialogue with NCERT for incorporation of the correct definitions of the Base & Derived Units in their Text Books (2) Popularization of Science, and (3) Superstitions & Myths. As a follow-up of this meeting, the Committee on Superstition with active involvement of Dr. V N Bindal and the Secretary, has drawn up a Questionnaire for a "Self Assessment Survey on Superstitions and Myths", as finalized at the subsequent meeting of the Management Committee held on 12th August 2009 has been circulated to the Members of the Forum for eliciting their response at the meeting of the Forum on 09. 10. 2009; and it has also been published in this Issue of the Newsletter.

2. Revision of the Memorandum of Association of the Forum: As had been reported in the earlier issue of this Newsletter the need for Reformulation of the Aims and Objects of the Forum had been felt because the Income Tax Authorities had rejected our application for exemption from payment of Income Tax as the existing Aims and Objects of the Forum did not justify this exemption. Dr. V N Bindal, the President of the Forum, had played a very effective role in this exercise and also obtained advice of an Income Tax Advisor in this regard. The Resolution passed by the Forum regarding the Re-formulated Aims & Objects of the Forum at the General Body Meeting held on 30. 04. 2008, was sent to the Registrar of Societies through the Income Tax Advisor, for record and endorsement. However, the Registrar of Societies had desired some additional information before taking any action on our request. This had been furnished vide a Registered Letter dated 7th April, 2009, followed by a reminder dated 6th July, 2009 sent by Speed Post, but there has been no response so far. Till such time that we receive a copy of the authenticated copy of the Memorandum of Association of the Forum incorporating the Re-formulated Aims & Objects of the Forum the issue of Income Tax Exemption cannot be taken up.

3. Area Committees: The composition of the Re-constituted Area Committees is as under:

| Composition | Publication Committee (Pub-C) | Welfare Committee (Wel-C) | Programme Committee (Prog-C) | Scientific Affairs Committee (SAC) | Sub-Committee of SAC on Superstition (SAC-Super) |
|-------------|-------------------------------|---------------------------|------------------------------|------------------------------------|--|
| Chairman | Dr. R Bhattacharyya | Dr. B N Srivastava | Dr. Surjeet K Sharma | Dr. K Chandra | Dr. K Chandra |
| Co-Chairman | Dr. Shiv Nath Singh | Dr. S P Varma | Dr. Ved Ram Singh | Dr. S V Gupta | Dr. A P Jain |
| Convener | Shri G K Arora | Dr. V S Panwar | Shri Promod K Mittal | Shri G K Arora | Shri G K Arora |
| Member | Dr. P C Jain | Dr. A P Jain | Mrs. Shasikala Shastri | Prof. S S Mathur | Dr. R Bhattacharyya |
| Member | Dr. V S Panwar | Shri P K Mittal | Dr. Ashok Kmnar Gupta | Dr. R Bhattacharyya | Dr. Prakash C Jain |
| Member | Shri V P Wasan | Shri G L Malhotra | Shri Nohd. Izhar Alam | Dr. Prakash C Jain | Shri R C Dhawan |
| Member | Dr. (Mrs.) NKundu | Mrs. Santosh Manrai | Shri Sudarshan Kumar | Dr. (Mrs.) NKundu | Shri S G Tewari |
| Member | Dr. S C Garg | Shri V P Wasan | | Dr. A P Jain | |
| Member | Dr. S K Gupta | | | Dr. Ran Gopal Sharma | |
| Member | Shri K N Bhatnagar | | | Dr. Sohan Lal Jain | |

| Composition | Medical Facilities Committee (Med-C) | Scholarship Committee (Sch-C) |
|-------------|---|---|
| Chairman | Dr. A P Jain | Director, NPL or his Nominee |
| Co-Chairman | Shri Akhilesh Chandra Gupta | Dr. V N Bindal, President, NPL-FSF (Ex-Officio) |
| Convener | Dr. V S Panwar | Shri V P Wasan, Treasurer, NPL-FSF (Ex-Officio) |
| Member | Dr. O P Bahl | Shri Balraj Singh S O, NPL, Representing COA, NPL |
| Member | Shri F C Khullar | Shri Dev Kumar (Or his Nominee) |
| Member | Mrs. Urmil Dhawan | Prof. S C Jain or his Nominee |
| Member | Dr. Prasan Kumar Banerjee | Shri G K Arora, Secretary, NPL-FSF (Ex-Officio) |
| Member | Shri R C Dhawan | |

The Scholarship Committee met on 18th September 2009, under the Chairmanship of Dr. P Banerjee, Acting Director, to decide about the Awardees of Scholarships & Awards to be given on the Open Day of the Laboratory on 24th September 2009.

Interaction with NPL and other Associations: A revised Cart on S.I. Units of Measurement has been finalized as a joint effort between NPL and our Forum at the initiative of the Forum and the same is expected to be published shortly by NPL. It is hoped to have other collaborative programmes with NPL. Members have also been receiving "Sameeksa".

Already the Forum and the CSIR Pensioners Welfare Association, Lucknow have been benefiting mutually through exchange of the Newsletter. The last issue received from them is No. 16, December 2008

The Forum recently received an invitation from CSIR Pensioners Welfare association, Kolkata, and as per the recommendations of the Programme Committee and approval of the Management Committee at its meeting held on 12th August, 2009, Dr. J N Som who was planning to be in Kolkata, was requested to represent our Forum at their Meeting on 12th September 2009. A brief report on it also appears elsewhere in this issue.

Invitations from Dr. Vikram Kumar in his capacity as President of NPL Research Foundation for Dr. B S Mathur Memorial Lecture by Leut. Gen. H Lal, Director General, FICCI Quality Forum on 16th June 2009, presided over by Prof. S K Joshi, and from the Rashtriya Sevak Sangh, Delhi, for the lecture by Shri Suresh Soni on "Global Warming – Challenges and Solutions" on 26th August 2009, were circulated to the members who could be contacted by e-mail at their contact addresses given in the Membership List of the Members of the Forum up-dated as on 03. 09. 2009 and published in this issue also

About this Issue of the Newsletter: This special issue 'ON BEING EIGHTY' carries the citations of the members of the 80-Plus Club, inaugurated by Dr. Vikram Kumar on 16th March 2009. In addition to a tribute to Dr. A R Verma by Dr. Krishan Lal, the issue also carries an invited article from Dr. S R Das – a member of the 80-Plus Club – on "Re-treading the footprints left behind". Some other information of special relevance to old age has also been incorporated, in addition to what has been mentioned above and also the other features appearing in the Newsletter.

Up-to-date information about the new 'Medical Related Office Memoranda' has also been provided in a chronological sequence, as also a table showing the Additions, Deletions, and Changes in the list of CGHS Empanelled Hospitals & Diagnostic Centres, arranged in an alphabetical order, to facilitate reference vis-à-vis the Alphabetical list of the CGHS Empanelled Hospitals & Diagnostic Centres, published in the last issue of the Newsletter.

Relevant up-to-date information about Pension & Family Pension entitlement as per the recommendations of the Sixth Central Pay Commission has also been culled out for the benefits of the Members of the Forum..

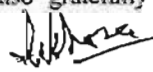
Dr. Vikram Kumar, who laid down his office as Director NPL, on 31st July 2009, has been specially remembered in "Dr. Vikram Kumar and NPL-FSF".

Acknowledgement. I would like to thank all the members of the Publication Committee, and in particular, Dr. P. Bhattacharyya, for his guidance at every stage and Dr. Shri Nath Singh and Dr. P. C. Singh, for the compilation and presentation of the matter for this issue. In addition inputs received from Dr. V N Bindal Dr. R P Wadhwa and Dr. P C Kothari and Shri M. K. Balchandani, has also been drawn upon..

The support received from the NPL, in addition to the financial support by way of Advertisement and making the infrastructural facilities available for holding the various meetings of the Forum and its various committees etc. is gratefully acknowledged. In particular, I would like to mention the names of, Dr. Anil Kumar Gupta, Shri R B Saxena, Shri N K Babbar, Dr. (Mrs.) Jyoti Lata Pandey, Shri Mahavir Singh, Shri Subhash Chandra and Dr. J C Sharma, and Shri Balraj Singh.

Financial support by way of advertisements released by the Council of Scientific & Industrial Research, Advanced Materials and Processes Research, Institute, Bhopal, and S V Engineering Centre, Faridabad, is also gratefully acknowledged.

Dated: September 30, 2009


(G K Arora)

Re-constituted Management Committee
at the
Sixth Annual General Body Meeting held on 16th April 2009.



Seated (From Left to Right): Shri G K Arora (Secretary); Dr. V N Bindal (President);
Dr. Kailash Chandra (Member of the Management Committee); Dr. A P Jain (Vice President)

Back Row (Centre) Shri P K Mittal (Returning Officer), flanked on his right (From Left to Right)
by Shri V P Wasan (Treasurer), Dr. Shiv Nath Singh, Dr. V R Singh, Shri R C Dhawan and
Dr. R Bhattacharyya, (All Members of the Management Committee); **and to his left**
by Dr. S P Varma and Shri K N Bhatnagar, (Members of the Management Committee);
Dr. V S Panwar (Joint Secretary); Mrs. Santosh Manrai and Dr. (Mrs.) Namita Kundu
(Members of the Management Committee) & Mrs Urmil Dhawan (Member of the Forum)

NPL FORMER SCIENTISTS FORUM

Constitution of the Management Committee

| Office | Name | Residential Address & E-mail Address, if any | Residential Phone Number/ Contact Number |
|-----------------|-------------------------------|---|--|
| President | Dr. Vishwa Nath Bindal | F-139, Mansarovar Garden, New Delhi – 110 015. vnbindal@yahoo.co.in | 25192397 ; 41001400 |
| Vice President | Dr. Adeshwar Preshad Jain | U-10, Green Park Extension, New Delhi – 110 016. jain_ap@rediffmail.com | 26191367; 26165790 (Contact) |
| Secretary | Shri Gyanendra Kumar Arora | 180, Mandakini Enclave, Alaknanda Complex, New Delhi – 110 019. gyanarora35@hotmail.com | 26275334; 9891025362 (Mobile) |
| Joint Secretary | Dr. Vinay Singh Panwar | Flat No. 21-B, B-B Block, Janak Puri, New Delhi – 110 058. panwarmani@yahoo.com | 25543467 ; 9899995021 (Mobile) |
| Treasurer | Shri Ved Parkash Wasan | EC-198, Maya Enclave, New Delhi – 110 064. ved_wasan@rediffmail.com | 45530317; 9213388671 (Mobile) |
| Member | Shri Kameshwer Nath Bhatnagar | H-322, Naraina Vihar, New Delhi – 110 028. | 25792881; 9868084026 (Mobile Contact) |
| Member | Dr. Raghunath Bhattacharyya | Flat 235, Dakshinayam CGHS, Dwarka Sector 4, New Delhi – 110 075. Also: A/S 75, Ageya, Bilaspur, Chhatisgarh – 495 001. raghubhatin@yahoo.com | 9313418406 (Mobile); (07752) - 224431 (Bilaspur) |
| Member | Dr. Kailash Chandra | E-46, Greenwood City, Near South City I, Gurgaon, Haryana – 122 001. kchandra100@hotmail.com | 95124-2582165; 9910939287- (Mobile) |
| Member | Shri Ramesh Chandra Dhawan | 144, Ambica Vihar, Paschim Vihar, New Delhi – 110 087. | 25253655; 9810435238 (Mobile) |
| Member | Dr. Prakash Chandra Jain : | 112, Old MIG Flats, Prasad Nagar, New Delhi – 110 005. jainpc2@yahoo.com | 25711192; 9871215124 (Mobile) |
| Member | Dr. (Mrs.) Namita Kundu | A-56, SFS (DDA) Flats, Mount Kailash, New Delhi – 110 065. drnkundu@yahoo.co.uk | 26210109; 65186695; 9811378183 (Mobile) |
| Member | Mrs. Santosh Manrai | A-204, Krishan Kunj, Plot No. 19, Nasirpur Road, Dwarka Phase I, New Delhi – 110 045. santoshmanrai@yahoo.co.in | 25053140 |
| Member | Shri Pramod Kumar Mittal | C-212, Sector, 20, Noida – 201 301, Uttar Pradesh. | 95120-4349864; 95120-2533968 |
| Member | Dr. Surjeet Kumar Sharma | C-921, Sushant Lok Phase I, Gurgaon, Haryana, 122 009. surjeetshashi@gmail.com | 95124-4043689; 95124-4104825; 9313806405 (Mobile) |
| Member | Mrs. Shashikala Shastri | 96, Anandvan, A6 - Pashchim Vihar, New Delhi – 110 063. shashikala_shastri@yahoo.com | 25273658; 9818328073 (Mobile) |
| Member | Dr. Shiv Nath Singh | House No. 154, Pocket -2, Sector – 11, Dwarka, New Delhi – 110 075 snsingh47@gmail.com | 28041044; 9811825071 (Mobile) |
| Member | Dr. Ved Ram Singh | Flat No 57, Pocket C, Siddhartha Extension, New Delhi – 110 014. vrsingh@yahoo.com | 26346505; 9811574636 (Mobile) |
| Member | Dr. Satya Prakash Varma | 81, NPL Apartments, Vikas Puri, New Delhi – 110 018. varmaspv@rediffmail.com | 28547699; 9910344555 (Mobile) |

80-Plus Club Citations

[Presented at the Inauguration of the 80-Plus Club on March 16, 2009]

Shri Dev Kumar

Shri Dev Kumar had been associated with the CSIR before the establishment of the National Physical Laboratory, and was also associated with the arrangements for the Inauguration of the Main Building of the Laboratory by Sardar Vallabhbhai Patel on January 21, 1950.

He was associated with NPL from June 1970 to October 1977 as the Section Officer In-Charge of the Establishment Section of the Laboratory and retired from the CSIR as Under Secretary in April 1980.

Shri Dev Kumar has instituted the Astronaut Kalpana Chawla Samman Chhatravritti (Scholarship) in the memory of his parents Shri Khushi Ramji and Shrimati Radhabaiji and his brother Shaheed Deena Nath. This Scholarship is awarded every year to children of the NPL Employees for encouraging study of science after passing the Class X CBSE Examination.

Dr. (Mrs.) Sultana Zulfiqar Ali

Dr (Mrs) S Z Ali remained associated with the National Physical Laboratory from April 1964. Though she retired from the Laboratory on attaining the age of superannuation in August 1982, she continued her association with the Laboratory as an Emeritus Scientist till June 1086.

Dr. Ali headed the Group on X-Ray Fluorescence and Diffraction and has a number of publications to her credit. Besides her own Research & Development activities, Dr. Ali had been guiding others in their research work both from within the Laboratory and from other institutions.

Three scientists viz. Drs. Krishan Dev Kundra, Kailash Chandra Nagpal, and M. Younis Khan obtained their Ph. D. degrees from the University of Delhi under her guidance.

The team of dedicated scientists, under her leadership, made very useful contributions for characterization of a number of materials for other groups engaged in the development of materials – carbon, electronic materials, liquid crystals, materials for solar energy conversion etc – besides undertaking investigations of fundamental nature.

Dr. Ali's publications appear in *Acta Cryst A*; *Bull Mater Sci*; *Curr Sci*; *Indian J Pure Appl Phys*; *Indian J Med Res*; *Indian J Technol*; *J Phys D : Appl Phys*; *Phys Status Solidi (a)*; *Phys Status Solidi (b)*; and *Res & Ind.* - thus covering a variety of journals, both Indian and Foreign..

Though Senior members above the age of 75 years were exempt from paying any membership fee when she enrolled herself as a member of the NPL Former Scientists Forum in January 2004, she insisted on paying the full membership fee, and has been taking keen interest in the activities of the Forum

Shri Swami Nath Segal

Shri Swami Nath Segal was born on 6th March 1923. He Graduated in Arts from the St. Stephens College, Delhi, in 1944. He joined the National Physical Laboratory in 1948 as Assistant in the Administrative Cadre of CSIR, when NPL was still housed in the Physics Department of the University of Delhi, He witnessed the inauguration of the Main Building of the Laboratory by Sardar Vallabhbhai Patel on January 21, 1950.

Shri Segal had played Tennis with Sir K S Krishnan, and had also bagged a number of prizes. Another interest that he had was in Photography. He had taken pictures relating of the visits of a number of dignitaries to the Laboratory during his stay at NPL till 1962 when he was transferred on promotion as Section Officer to the CSIR Head Qrs.

Having been associated with NPL during the stewardship of the Laboratory by Sir K S Krishnan, he is one of the main sources of information relating to the persons who had been associated with the Laboratory during that period.

Shri Segal was transferred to the Central Food & Technology Research Institute (CFTRI), Mysore, in 1969 where he also got promoted as Administrative Officer. Before reverting to NPL again in December 1980 as Administrative Officer, he also served in this capacity first at the National Institute of Oceanography(NIO), Goa, and then at the Regional Research Laboratory (RRL-Bhu), Bhubaneswar. He retired from NPL on attaining the age of superannuation in March 1981. ..

Shri Segal has keen interest in Numerology as a tool for Manpower Management, with special reference to the Indian scene. – an interest which he had developed during his service in CSIR.. He delivered a talk on this subject while serving at NIO, and it

found coverage by the national press also. He has delivered invited talks on this subject at Vigyan Bhawan, New Delhi, in Bombay, and also abroad in London, Paris, Rome and a series in Baltimore, USA.

Use of Numerology as a cure of diseases has also been of interest to him after his retirement...

Dr. Kanwar Bahadur

Dr. Kanwar Bahadur joined NPL as Junior Scientific Assistant prior to the inauguration of the Main Building of the National Physical Laboratory by Sardar Vallabhbhai Patel on January 21, 1950, and has the rare distinction of having witnessed that ceremony. He was holding the post of Jr. Scientific Officer in February 1962, when he joined the Defence Science Centre, Delhi, on Deputation. He had thus, the opportunity to witness the developments in the various activities of the Laboratory during the life-time of Sir K S Krishnan.

Dr. Bahadur's personal field of interest at NPL was Electron Microscopy. While working for his Doctorate at Penn State Physics Department under the guidance of Prof. Erwin W Muller – the inventor of Field Ion Microscope – Dr. Bahadur had achieved the first direct imaging of atoms using that microscope. This path breaking achievement was not only a land mark event, it also ushered an era of nano-technology, having wide ranging and critical applications in various branches of science and technology, from cell phones to modern computer to drugs. Within 30 years of the first atom sighting, there were three distinct techniques of resolving atoms – the field ion microscope, the transmission electron microscope and the scanning tunneling microscope.

Though Dr. Bahadur had made this achievement way back in 1955, it got highlighted for the first time in a review paper presented at an International Field Ion Microscopy Symposium and was published subsequently in *Applied Surface Science*

The Penn State Physics Department, in association with the International Field Emission Society, invited Dr Kanwar Bahadur in June 2005, to be the key speaker at the Fiftieth Anniversary of Atomic Resolution Microscopy to celebrate this seminal event in the history of science, and to share his & Prof. Muller's original reactions at that achievement. Later in the same year the Microscopy Society of America, conferred the same recognition on him at the Presidential Symposium and presented him with a scientific achievement award by way of a plaque

Dr. Bahadur is a founder member and one of the past presidents of the Electron Microscopy Society of India.

Shri Shiv Nath

Shri Shiv Nath started his career in National Physical Laboratory as Ser. Electrician in May 1951, after obtaining his Bachelor's Degree in Science from the Agra University in 1948. Having joined the Laboratory shortly after its being housed in its Main Building in January 1950, he constitutes one of the earliest sources of information relating to the developments that had taken place in the Laboratory under the stewardship of Sir K S Krishnan, the first Director of the Laboratory, and subsequently also till his retirement on superannuation in April 1985.

Through his dedication and hard work he received gradual promotions at regular intervals and retired as Technical Officer 'C' in-charge of the Air-conditioning & Refrigeration Facility of the Laboratory.

Shri Shiv Nath was a Founder Member of the Forum when it came into existence on January 7, 2003, and volunteered himself to serve as a Coordinator, by virtue of which he was also a member of the First Management Committee of the Forum.

Dr. Satya Ranjan Das

Dr. S R Das Obtained his Master's Degree in Applied Physics from the Calcutta University in 1949, and obtained his Doctorate Degree also from the same university in 1960 He joined the National Physical Laboratory as Sr Scientific Officer Gr I in October 1962, as the Scientist-in-charge of the Optical Standards Group of the Laboratory. His areas of specialization include Measurement & Standards – Optics, Opto-electronics & Electro-optics; Photometry; Colorimetry and Radiometry.

Dr. Das was awarded Fulbright Scholarship (Research) for one year in 1965-66 and joined the University of Rochester as a Research Associate. He was also invited to work in the National Bureau of Standards, USA, under the CSIR-NBS Scientific Co-operation Scheme in 1973-74, which work resulted in a Lamp Standard for Spectral Irradiance.

The Journal of the Optical Society of America was his most favourite journal for publication of his research contributions at NPL, and carried his contributions during 1964 - 1968. In addition, his research papers were also published in *Eastern Archives Ophthalmology*; *Indian J Pure Appl Phys*; *Indian J Phys B*; *Journal of Optics (India)*; *J Sci Instrum*; *Nature*; and *Science*. He had also been guiding others in their research and development activities.

Dr. Das had been an elected Fellow of the Institute of Physics, London. During 1979 to 1983, he had also worked as Director General of the National Test House, Ministry of Supply, for 3-1/2 years. He retired from the service of NPL in the post of Scientist 'F' on attaining the age of superannuation in May 1986. but continued to remain associated with the Laboratory as Emeritus Scientist up to June 1991.

His tenure at NPL witnessed the growth of the indigenous lamp and luminaires industry in particular.

Shri Kuchibhatla Subrahmanya Sarma

Shri K S Sarma, obtained his MSc. Degree in Mathematical Physics from the Andhra in October 1949. He had the rare privilege of witnessing the construction phase of the Main Building of the National Physical Laboratory and its inauguration by Sardar Vallabhbhai Patel on January 21, 1950. He constitutes one of the earliest sources of information relating to the developments that had taken place in the Laboratory under the stewardship of Sir K S Krishnan, the first Director of the Laboratory, and subsequently also till his retirement on superannuation in 1986.

Shri Sarma received gradual promotions and retired as Scientist 'E-1' as the Scientist-in-Charge of the Optical Standards Group of the Laboratory. He specialized in Photometry, Colorimetry and Illumination Technology. Under his leadership the Laboratory witness the growth of indigenous lamp manufacturing capability in particular.

He has settled in the United States of America, but retains his association with NPL through the NPL Former Scientists Forum as a Member.

Shri Satish Chandra Vashisbh

Shri S C Vashisbh got his MSc. (Hons.) Degree in Physics from the Punjab University in 1948 and the most coveted Diploma in Electrical Technology from the Indian Institute of Science, Bangalore in 1952. He then joined the Indian Navy as a Direct Entry Officer with a permanent commission as a sub-lieutenant at INS Valsura. After the training there he was appointed as Electrical Officer on INS Delhi – India's Flag Ship – and in this capacity, he took active part in the very first War Exercise between India, Great Britain and Pakistan, held in the Far East. After his return from there he joined the Punjab Electricity Board as Sub-Divisional Officer in 1955 and worked there till he joined the CSIR.

He started his career under the CSIR by joining the National Aeronautical Laboratory in Bangalore in 1961, from where he migrated to the National Physical Laboratory in 1964 as Senior Technical Officer Gr (II).

In NPL Shri Vashisbh worked first with the Electrical Standards and Electronic Testing activity, but chose to switch over to the Cryogenics Group. He also developed expertise in Vacuum Techniques.

After his retirement from NPL on attaining the age of superannuation in October 1986, Shri Vashisbh chose to settle in Shimla and have an orchard to enjoy his retired life. in an agricultural atmosphere. However, he took upon himself to make most effective use of his knowledge and experience in promoting the development of Science & Technology in Himachal Pradesh through his active involvement in the various programmes of the State. He has been a Judge and Resource Person with the HP Council of Science, Technology & Environment for the Annual Science Fair held in Different Districts of Himachal Pradesh every November.

He is also remembered by his love from Vintage cars as he owned a 1936 Hill Man and a 1937 Rolls-Royce and participated in the Statesman Vintage Car Rally every January for thirteen years.

He is also remembered through the Speed Breakers on the inner roads of NPL, which were conceived and installed under his directions.

Prof. Suresh Chand Jain

Prof. S C Jain's association with the National Physical Laboratory dates back to August 1949 - the year in which he obtained his M.Sc. Degree in Physics (Electronics) from Allahabad University. He is perhaps the only NPL Scientist having had the maximum collaboration with Sir K S Krishnan in doing pioneering and very widely cited research work. He got his Ph.D. Degree from the Delhi University under his guidance in his 1955 for his thesis on 'High Temperature Properties of Metals & Alloys', where after he went to Leeds University, UK as Post Doctoral I.C.I. Research Fellow (1959-63). He reverted to NPL as Assistant Director and Head of the Solid State Physics Division in 1969, and got elevated as Deputy Director before leaving NPL in 1969, to join IIT, Delhi as Head of the Physics Department and Dean of Faculty of Science. In 1969 he took over as Director, Solid State Physics Laboratory (SSPL), and of the Planning Unit for Research and Training, Ministry of Defence, Govt. of India, and served in this capacity (except for periods spent as Visiting Professor in USA and UK) till his retirement on attaining the age of superannuation in December 1984

Prof Jain has taught and guided research in India, Germany, USA and England and has been thesis advisor of some 30 graduate students. He has done research on defects in crystals, growth of epitaxial layers, theory and characterization of p.n. junction devices and short channel MOSFETs, solar cells, semiconductor lasers, Gunn diodes, disorder in Si (heavy doping effects and Poly-Si), IR and Raman spectra and transport properties of semiconductors and ionic crystals and has authored over 290 papers on several different aspects of solid state physics and semiconductor electronics.

'Jain and Krishnan' method for determining high temperature thermal conductivity of metals and semiconductors developed by him has been used extensively world wide in 1960s. His theoretical work on heat transfer and diffusion has been extensively quoted in text books and his experimental work on colour centers and defects in crystals has also been used and cited extensively. He has extended the theory of Ostwald ripening to take into account migration through dislocations and non-uniform distribution of precipitates. He developed the know how of space quality solar cells in India. He also developed a new theory of Si PIN diode neutron dosimeters and designed the personal dosimeters which are 100 times more sensitive than the existing dosimeters.

He has contributed extensively to the equilibrium theory of critical layer thickness and strain relaxation in strained layers. His finite element calculations have provided explanation of the observed stresses in stripes and substrates in heterostructures. He has also explained why band-gap of strained layers determined by transistor measurements is smaller than that determined by optical measurements. He provided a first explanation as to why the observed barrier height in an internal photoemission photo-detector is smaller than that expected from a simple theory.

During his tenure as the Head of the Solid State Physics Group at NPL, he also guided a number of his colleagues in their research work leading to award of Doctorate Degrees to them. The beneficiaries of this guidance include Dr. Sapan Laxman Dahake, Dr. Partap Chander Mehendru, Dr. Ganesh Datt Sootha, Dr. Krishan Lal, Dr. Tara Chand Goel, Dr. S Radhakrishnan, Dr. Viney Kumar Jain, Dr. Rajendra Kumar Jain, Dr. Dinesh Chandra Parashar and Dr. Ved Mitra.

As Dean of the Science Faculty at IIT, Delhi, he established a graduate school with over 100 students. As Director, SSPL, Prof. Jain established advanced research laboratories in semiconductor electronics. These facilities include $\frac{1}{2}$ micron mask making facility, GaAs MBE, and a pilot line for developing and fabricating professional grade devices. He started the MBE research in India in 1980 when first Ribber machine was commissioned by him at the SSPL. The first III-V super-lattices were fabricated in India using this machine.

Prof. Jain has also authored 6 books besides editing several other books. His book on Germanium-Silicon strained layers and hetero-structures has been published by Academic Press in 1994. In addition he has to his credit one patent based on his work on diodes done at Harwell, UK.

Prof S C Jain received Sir Shanti Swarup Bhatnagar Award for outstanding research in Physical Sciences in 1966. His contributions to research have also been recognized by his being elected as a Fellow of Indian National Science Academy in 1974 and also as the Fellow of the National Academy of Sciences, Allahabad in 1979. He was also an elected fellow of American Physical Society and is Fellow of Institute of Physics, London and of Institution of Electronics & Telecommunication Engineers (India). He was a Senior Member of IEEE, and also a Member of Solid State Commission of IUPAP for 12 years. He was also a Member of the International Advisory Committee of the IEEE Photovoltaics Conference, USA for several years.

Prof Jain had also been Director of Advanced Indo-French summer School on Semiconductors, New Delhi in 1968, Chairmen of IUPAP sponsored International Conference on Non-Metallic crystal at Delhi in 1969, and was Founder and General Chairmen of 6 International Workshops on Physics of Semiconductor Devices held every two years in India during 1981 and 1991.

He has traveled extensively and delivered lectures at Universities, Govt. Laboratories, and Industrial R & D Laboratories in USA, Japan, USSR, Hungary, West Germany, France, Belgium, UK and other countries and has presided over sessions in numerous International Conferences. Since 1985, Prof. Jain has conducted and supervised research in IMEC, Belgium and Oxford University as a Visiting Professor and has also spent one year each as Visiting Professor at TU, Aachen and TU, Delft in Germany, and at the University of Tucson, AZ, USA.

He continues to do research after his retirement. His present interests include strained semiconductor layers and heterostructure devices and conducting polymers. His most recent important work is on Strained Layer Devices of GeSi and III-V compounds.

Prof. Jain has also initiated the Sudha Jain Memorial Scholarship in the memory of his wife. This scholarship is awarded by the NPL Former Scientists Forum to children of NPL Staff members for pursuing a 4-year Science-based Engineering Degree Course in a recognized institution of learning after 10+2 stage of CBSE Examination.

Shri Sital Kumar Suri

Shri S K Suri obtained his M.Sc. Degree in Physics from the Punjab University in 1948, and joined the National Physical Laboratory in 1949 as Junior Scientific Assistant. He is one of the few members of the Forum to have witnessed the inauguration of the Main Building of the Laboratory by Sardar Vallabhai Patel on January 21, 1950.

Shri S K Suri passed the Graduateship examination of the British Institute of Radio Engineers in 1952. He also took study leave to go to U.S.A. to further improve his educational qualification, and obtained M.S. Degree in Nuclear Physics from the Indiana University, in the year 1956.

Shri Suri's main contribution at NPL was in the maintenance of instruments and in inspection of faulty instruments for their repair and re-commissioning. This included all types of measuring and control instruments – mechanical, electrical, electronic, optical and medical. With the vast experience that he had, he also got teaching and training UN assignments in instrumentation at South Korea, Tanzania, Ghana, Iraq and Nepal. He was also referred to as "*Bigdi Banane Wala*".

Through his valuable contributions resulting in substantial saving of Laboratory's expenditure through re-commissioning of costly instruments and equipment – a number of which were very costly and imported, Shri S K Suri got promotions at regular intervals and held the post of Scientist 'E-II' when he opted to take voluntary retirement in May 1985.

After leaving NPL, Shri Suri organized a full-fledged Instrumentation Centre in Hanoi, Vietnam, on behalf of UINDO, including the hiring of consultants and getting the local staff trained in other countries.

Shri Mulchand Kewalram Balchandani

Shri M K Balchandani was the first person to be selected and sponsored by the University of Bombay in 1951 to pursue a course of training at the M.S.S. Recording Company, Bucks, England. During the two-year training period which he completed in 1953, he specialized in the manipulation of various types of standard test equipment as applied to audio circuits, universal meters, signal generators etc. and also assumed considerable experience in the operation of disk and table recording equipment. The same year he also passed the City & Guilds Examination of the London Institute, and got a Diploma in Radio Technology (First Division).

Shri Balchandani's association with the National Physical Laboratory started from August 1955 when he joined the Laboratory as Sr. Electrician. For about 25 years he worked with the Length Metrology Group and it was during this period that he passed the M.A. examination in Economics from the Meerut University in 1971, with statistics as the main paper. His major contribution was on alignment of end-standards of length on a single coordinate measuring machine using an auto-collimator.

For some time prior to his retirement on superannuation as Technical Officer 'C' he was associated also with the Planning Monitoring & Evaluation Group where he worked on the liaison of this Group with the Purchase Branch regarding monitoring of the procurement of various supplies for the R & D activities of the Laboratory.

Shri Balchandani had published a book on Statistics (over 1000 pages) for the benefit of College students. Very recently he has also published a booklet "*Wisdom Evergreen*" carrying thoughts for each day of the year, other than for 29th February, which comes only once in four years.

Shri Balchandani had taken active part in the Freedom Movement of the country and spends part of his time in the Freedom Fighters' Home in Delhi, with his permanent residence in Pune.

Dr. Thirumalai Srinivasa Srinivasan

Dr. T M Srinivasan joined NPL in 1950 as Laboratory Assistant in the Heat & Power Division and was associated with the design of equipment for measuring physical properties such as thermal expansion, thermal conductivity and weathering tests for standardizing building insulating materials. He also worked on harnessing of solar energy, measurement of horse power of tractor engines and development of composite materials for super-insulation.

In 1953 he got transferred to the Low Temperature Division where he was associated with the work on establishing the Nation's First Cryogenic Laboratory and collaborated in development of a New Vacuum Calorimeter for measurement of specific heats at liquid helium temperatures – a widely quoted work – and used this calorimeter for investigating specific heats of a few pure metals which resulted in the award to him of M.Sc. Degree from Madras University in the year 1956 (Thesis title: *Specific Heats of Metals at Low Temperatures*), and his Ph.D. (Physics) degree from the same University in the year 1960 (Thesis title: *Thermal Energies of Metals at Low Temperatures*).

During 1960 he left NPL (he was a CSIR Sr. Research Fellow), to join the Physics Department of the University of Illinois (Champaign-Urbana) and subsequently worked in the Department of Metallurgy where he worked on specific heats and electrical resistivity of binary and ternary transition metal alloys.

In 1965 he returned back to join the Indian Institute of Technology, Kanpur, with which he remained associated till his retirement in 1988.

Dr. Srinivasan establishes the link of the National Physical Laboratory with Sir K S Krishnan, the first Director of the Laboratory, as he had married one of his daughters.

After retirement, he has settled in Chennai.

Shri Niranjan Nath Kaul

Shri N N Kaul had started his career in the National Physical Laboratory as a Mechanic in 1964, and had been associated with the Radio Science Division. His main contribution was in the fabrication of Space- quality payloads for the outer space experiments conducted by NPL for study of the upper atmosphere. He also contributed in the SROSS Aeronomy Satellite Programme of NPL/ ISRO, under which the NPL's contribution was the Retarding Potential Analyzer (RPA) Payload in the SROSS series of Indian Satellites launched by ISRO.

Shri N N Kaul was the co-author of a number of publications based on his contributions which were published in a number of research journals viz. *Journal of the Aeronautical Society of India*; *Journal of the Institution of Engineers (India)*; and *Journal of Scientific & Industrial Research*.

Through his dedication and hard work, Shri Kaul received promotions at regular intervals and retired as Technical Officer (A) on attaining the age of superannuation in June 1988.

Shri Jai Narain Ojha

Shri Jai Narain Ojha has been associated with the National Physical Laboratory from the time it was housed in the Physics Department of the University of Delhi, before moving to the main Building of the Laboratory, inaugurated by Sardar Vallabhbhai Patel on January 21, 1950.

During his association with the Central Mechanical Workshop of the Laboratory he put to most effective use his specialization in Fitting, Turning & Welding and in Preventive Maintenance of Equipment.

Though Shri Ojha remained associated primarily with the Central Mechanical Workshop from where he eventually retired, he also served as Head Laboratory Supervisor, and also as In-charge of the Transport Facility of the Laboratory. Besides his Official duties, he as Secretary of the NPL Club, arranged a number of cultural programmes, dramas, and film shows in the NPL Auditorium, and also arranged sports for the members of the club and their children.

Starting his career in the Laboratory in the post of Mistry, through his contributions and hard work, and successful completion of the duties assigned to him to the entire satisfaction of his superiors, he got regular promotions and retired from the Laboratory as Technical Officer B on attaining the age of Superannuation in July 1988.

Shri Kali Kirshan Datta

Shri K K Datta joined the National Physical Laboratory as Jr Laboratory Assistant in June 1951, after obtaining his Bachelor's Degree in Science from the University of Delhi in 1948. During his stay at the Laboratory, he obtained master's Degree in mathematics from the Punjab University in 1956. In his quest for knowledge he also did M.Phil in Physics from Aston University, U K in 1983.

Shri Datta's main field of interest at NPL had been development of Carbon Products and tribology of carbons. And as a member of the team he was one of the recipients of the NPL award in 1976 for developments in this field.

Shri Datta's research publications were published in a number of journals which include - *Bull Electrochem*; *Bull Mater Sci*; *Carbon*; *Chem Age India*; *ISI Bull*; *Indian J Technol*; *J Sci Ind Res*; *Res & Ind*; and *Trans SAEST*.

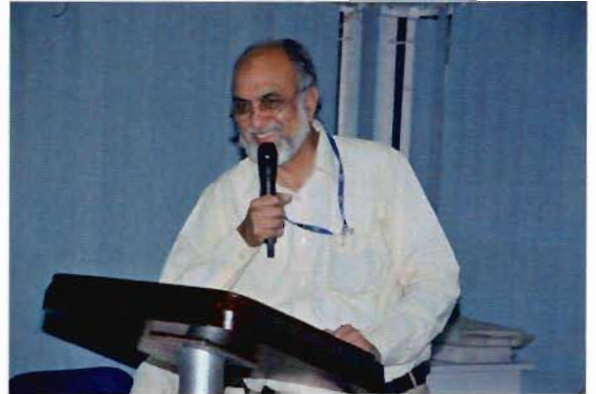
Shri Datta, on account of his dedication and hard work, received promotions at regular intervals and retired as Scientist 'E-1' on attaining the age of superannuation in November 1988.

Inauguration of the 80-Plus Club

by Dr. Vikram Kumar, Director, NPL,
on March 16, 2009 in the TEC Conference Room, NPL



Members of the Forum attending the Meeting of the Forum at the inauguration of the 80 Plus club



Dr. Vikram Kumar addressing the Meeting of the Forum at the inauguration of the 80 Plus club



Sh. Dev Kumar (db: 25.04.1922)



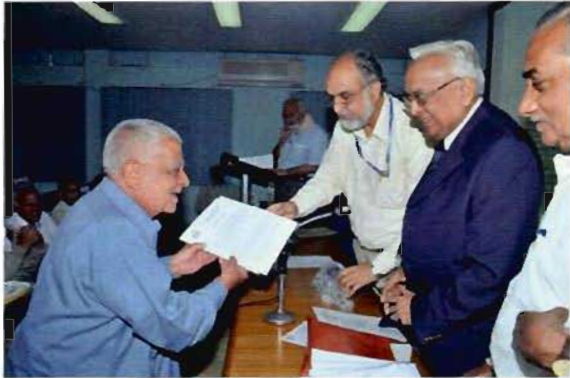
Sh. Swami Nath Segal (db: 06.03.1923)



Sh. Shiv Nath (db: 14.04.1925)



Dr. Satya Ranjan Das (db: 01.06.1926)



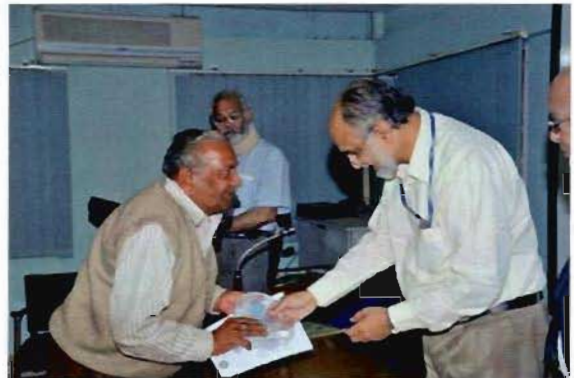
Sh. Satish Chandra Vasishth (db: 21.10.1926)



Sh. Sital Kumar Suri (db: 24.03.1927)



Sh. Mulchand Kewalram Balchandani (db: 07.04.1928)



Sh. Jai Narain Ojha (db: 16.07.1928)

Release of the Forum's Newsletter No.5, dated September 2008,
by Dr. Anil Kumar Gupta, Scientist G, NPL
on 27th October 2008, in the TEC Conference Room



From left to right: Sh. G.K. Arora, Dr. Anil Kumar Gupta, Dr. V.N. Bindal and Dr. R. Bhattacharyya



Dr Anil Kumar Gupta being presented the Forum's memento by Dr. V.N. Bindal

Professor Ajit Ram Verma: A Tribute

A Great Scientist, a Teacher Par Excellence, an Able Administrator, and a Wonderful Person

Dr. Krishan Lal

Former Director, National Physical Laboratory, New Delhi-110012

klal@mail.nplindia.org

With great pain and anguish we have to report the sad demise of Professor Ajit Ram Verma on 4 March 2009.

Professor Ajit Ram Verma was an outstanding scientist with deep knowledge of fundamentals. He would only pick-up problems with strong impact on understanding of physical phenomenon. As a teacher he was endowed with extraordinary quality of communicating very difficult concepts in an understandable simple language. He made valuable contributions in school education as well as higher education. He had inspired three generations of researchers in the three schools established by him as well as scientists in general in national laboratories and academic centres. He was a highly elevated human being with deep spiritual base. His humility and understanding of human nature and treating even the junior most colleagues with respect and dignity endeared him to all. His administrative capability was of immense value to the growth of NPL as an internationally reputed centre. His experience wise counsel benefitted numerous national organizations, institutions and universities with which he had been associated as Chairperson or member of their Governing or Advisory bodies.

Professor Ajit Ram Verma was born on 20 September 1921 at Dalmau near Lucknow. His father Shri Hans Raj Verma was a Railway official and his mother Smt Devi Rani was a pious lady which left a great lifelong influence on him. After early education at several places including Allahabad and Meerut he enrolled in Allahabad University and passed his B.Sc. (1940) and M.Sc. (1942, Gold Medalist) from there. Even though he was a topper in M.Sc. (Physics) he opted to pursue career in research rather than going for administrative services. After a short period as Research Scholar at Allahabad, he was appointed as Lecturer in Physics at University of Delhi in 1947. During 1950-55, he worked at University of London and made well known contributions on the observation and study of unimolecular growth spirals on the surfaces of silicon carbide crystals. He was awarded Ph.D. in 1952, D.Sc. in 1969 (University of London). After serving as Reader in Physics for four years (1955-1959) at University of Delhi, he moved to BHU, Varanasi as Professor and Head of Department in 1959. In 1965, he was appointed as Director, NPL which he served till 1982. Thereafter, for three years, he served as Visiting Professor, IIT, Delhi and as Jawaharlal Nehru Fellow. Later, he was Emeritus Scientist of CSIR and INSA Sr. Scientist at NPL.

Academic and Research Contributions

Dr. Verma established three very active Schools of research in Crystallography, one each at University of Delhi, BHU, Varanasi and NPL, New Delhi. In 1951, using Phase Contrast Microscopy, the first unequivocal experimental evidence in support of screw dislocation theory of crystal growth of millimetric sizes was provided by Dr. Verma. He used phase contrast microscopy to study the crystal surfaces of SiC and photographed these "nearly invisible" molecular growth spirals. By using multiple-beam interferometric technique, these molecular growth spirals were shown to be growth hills. The step height for 6H, SiC crystal was measured to be $15 \pm 1 \text{ \AA}$, which still stands in scientific literature. The lattice c-parameter for type 6H SiC as measured by X-rays is 15.079 \AA , which shows that the measured step-height is equal to the relevant unit cell dimension. Hence, these spirals were shown to be unimolecular growth spirals originating from screw dislocations. Further, the shapes of these spirals were shown to be completely in accordance with the theory. This work showed the power of phase contrast microscopy and Professor Zernicke, who had developed this technique nearly twenty years before these studies, was awarded the Nobel Prize in Physics in 1953. The Nobel Presentation speech by Prof. E. Hulthen states: "Zernicke's phase plate serves as an indicator, which locates and measures small surface irregularities to a fraction of light wavelength. This sharpness is so great that it penetrates to the point at which atomic structure of substances begins to become manifest."

The correlation of the step heights of growth spirals with the dimensions of X-ray unit cell had helped in explaining the phenomenon of polytypism by the screw dislocation theory propounded by F.C. Frank. Professor Verma had also made valuable contributions in the pioneering work on direct measurement of metric thicknesses of Blodgett-Langmuir molecular films. At NPL, in collaboration with Dr. Krishan Lal, since 1966, several original contributions have been made in the field of crystal growth and study of lattice imperfections.

As Director, NPL from 1964-1982 Dr. Verma's efforts were focused on bringing Indian National Standards of Physical Measurement to International level. Also, in place of artefact standards, work on quantum standards was under taken. Dr. Verma laid the foundation of several new areas at. These include: Quantum Metrology; Materials Science including work on electronic materials like silicon and advanced materials like carbon fibers; high pressure and high temperature synthesis of materials, phosphorous and piezoelectric materials and consolidation of advanced materials characterization activities. Under his leadership, NPL made strong impact at the national and international level. Further, in collaboration with Dr. Krishan Lal since 1966, Verma has been working on growth of crystals and study of lattice imperfections. Some of the important results are summarized in the following.

(a) Investigation of growth and lattice imperfections in vapour grown whisker crystals

In 1960s, growth of whisker crystals was an outstanding problem. The observed rates of growth of whiskers from vapour phase at low super-saturations were found to be several orders of magnitude faster than theoretically expected rates on the basis of layer by layer growth mechanism. Also, the mechanical strengths of whisker crystals were very close to theoretically expected limits, which was not the case in most of the other materials. The growth of whiskers was thought to be either on the basis of the screw dislocation theory or the Vapour Liquid Solids (VLS) mechanism. At NPL, a number of whiskers of cadmium, copper, silver etc were prepared from the vapour phase and investigated by using a high resolution X-ray Laue technique. This technique was considerably developed at NPL and through a rigorous analysis and it was shown that there was no tilt of equatorial Laue spots showing the absence of axial screw dislocations. It may be mentioned that at this time, in these whiskers, Webb and co-workers had claimed to observe tilts of equatorial Laue spots in the case of α -Al₂O₃ whiskers.

b) Establishing X-ray diffraction topography facilities and their applications in studies related to defects in crystals

In 1970, it was decided by NPL to establish an X-ray diffraction topography system and within a year, an indigenously developed X-ray diffraction topography system similar to a Lang camera started functioning. This was first employed to investigate whisker crystals. These experiments also demonstrated the absence of axial screw dislocations in vapour grown whisker crystals. This system has been used for investigation of dislocations and other defects in α -Al₂O₃ single crystals grown by different techniques and several other crystals including garnets and semiconductors.

c) High-resolution diffuse X-ray scattering studies on understanding the origin of diffuse X-ray scattering and its application in study of crystal defects

A high-resolution three crystal X-ray diffractometer was designed, fabricated and established at NPL to investigate diffuse X-ray scattering from nearly perfect single crystals very close to reciprocal lattice points. For the first time, diffuse X-ray scattering measurements were made around diffraction peaks having half width of only ~ 5 arc sec with silicon single crystals. Detailed investigations made on crystals having different Debye temperatures as well as measurements made at different temperatures clearly established that at and near room temperature diffuse scattering is primarily due to defects and not due to thermal vibrations of the lattice as was an established concept till this work. This technique was used to investigate point defects and their clusters in a number of crystals including silicon and alkali halides and is now one of the well established techniques for this purpose. In recent times, it is widely employed as reciprocal lattice mapping.

d) High resolution X-ray diffraction investigations of natural diamond crystals

By using the high resolution X-ray diffraction techniques developed at NPL, it has been possible to directly observe and record a forward diffracted beam in the case of diamond crystals even when these were 'thin' ($\mu t \ll 1$). The degree of perfection of some of these crystals was rather low as shown by broad diffraction curves. As per conventional dynamical diffraction theory, a forward diffracted beam is expected only when the crystals are perfect and thick ($\mu t \geq 10$). Further, it has been possible to demonstrate that there is a loss in absorption at and around diffraction maxima in Laue geometry in the case of these 'thin' diamond crystals having varying degrees of perfection.

e) Investigation of zeroth order diffraction maxima in single crystals

Zeroth order diffraction in single crystals promises to reveal new interesting phenomenon. This was one of the problems in which he was deeply interested during the last phase of his life.

Professor Verma had authored 6 Books/Volumes, published more than 100 research papers in refereed journals and contributed numerous invited papers and book chapters. His two books on Crystal Growth have been translated into Russian.

Professor Verma was recipient of several honours and awards. Notable among these are:

(i) British Council Scholar (University of London) 1950-52; (ii) I.C.I. Fellowship (University of London) 1952-1955; (iii) Fellow of Indian Academy of Sciences, Bangalore; (iv) Fellow, National Academy of Sciences' India, Allahabad; (v) Member, Board of Editors - Solid State Comm., Pergamon Press (Charter Member since inception, Retd in 1990); (vi) Elected member of International Committee on Weights and Measures (CIPM) Paris 1966-1982; (vii) Formerly Member of Commission on Symbols, Units and Nomenclature of International Union of Pure & Applied Physics (IUPAP); (viii) Shanti Swarup Bhatnagar Prize in Physics 1964; (ix) Honoured by the President of India by the award of Padma Bhushan 1982; and (x) Awarded Atma Ram Puraskar in Hindi by Kendriya Sansthan Agra 1984.

Professor Verma was a person with many extraordinary qualities as mentioned above. He tried to practice what he preached. A most remarkable manifestation of this was the superb mental balance he exhibited during the last phase of his life, while battling the dreadful pancreatic cancer. He established strong human bonds with numerous persons, from the highest to the modest. As a result he headed a very big family of people. His spiritual world was strongly influenced by the teachings of Geeta, Upanishads and Sant Kabir.

Re-treading the Footprints Left Behind

Satya Ranjan Das

It was that especial day of August in 1942 that we, a batch of school students, hardly fifteen or sixteen, were called by two of our local leaders, to take part in a movement to cause disorder, as token of disobedience to the orders of the rulers of the day. Now we know that day as the *August Kranti Diwas*.

Unlike the teenagers of today, we village boys were not used to reading newspapers, nor listen to the radio which hardly existed in villages and small towns. All our information was derived from those leaders of ours who themselves were not that knowledgeable either. All we were told was that Mahatma Gandhi had asked the British rulers to quit India and leave Indians to their fate. Even as preteens we knew of the provincial self governments; elections used to take place to form provincial assemblies. Our elders used to tell us that they were sure that Mahatma Gandhi would live to bring freedom to India; he would not die until India would be free. We would take part in freedom marches and processions through small village and town roads, shout to the lead of our leaders' voices.

That day, the leaders told us that they might not be always with us as they could be taken away and interned in district prisons, as the government had already started arresting important leaders in the country. Our leaders assigned us -a small task group of half a dozen students of Class-IX and Class-X, of cutting the telephone and telegraph lines which used to run parallel to the railway lines, as a token of indiscipline. To fulfill the assignment, our small group decided to cut the telephone wire passing near our village. The railways used to run frequent shuttle trains to guard the rail lines, with guard carrying guns. Two of us climbed one telephone pole with wire cutters, but could not force a cut, when at a distance sound came of an approaching shuttle train. In the just setting darkness of evening, visibility was already poor. But it so happened that the train slowed and stopped near where we were standing. In a hurry we fled the scene, and hid ourselves behind the muddy barriers of the paddy field whose plots were full of water in August, giving full play to the creatures like snakes, frogs and leeches. We could not achieve anything but the feeling of fear and of failure exists even today.

The world war II was in full swing; we became directly involved in as much as the Indians were fleeing Burma and Singapore and taking refuge in Eastern India, sometimes crossing on foot the Assam border in the face of Japanese bombing. We became particularly aware of the refugee problem as our matriculation examination was delayed from March to April 1943. There were only a few bombing raids on Calcutta, but Calcuttans started fleeing the city to take shelter in mufussil villages and towns of Bengal. The trains leaving Calcutta were full. We were curious visitors to the railway station to see the crowded trains. (Our village was about 200 km north of Calcutta.) But one good change came to our lives; we became newspaper headline readers and listeners of all India radio news broadcast, whatever little access we had to very few homes with radio receivers.

While speaking about the reminiscences of these days of my life I must not forget to speak of the heavy upheavals in our economic and social life in Bengal because of the shamefully cruel Bengal famine of 1943. Compounded by epidemic of Malaria and starvation due to the famine, deaths were so heavy that even in villages dead bodies were lying scattered, needing volunteers to dispose them by pulling them with ropes through village habitats to be thrown as feeds for vultures, no question of cremating them for who would pay for it!

My father chose to send me for Intermediate science studies to Bankura Christian College instead of to the city of Kolkata, which was still ailing from effects of war and famine. So in August 1943, I left my village, exactly a year after my first outing to take part in the quit India movement, from the safe and quiet village home to noisy and unkind outside world.

From Village Days to College Days

Bankura College was very alive in leftist students' movement; some students were very feverishly engaged in 'Students Federation' activities. We were hearing of the C.R. Formula very strongly being debated. As I did not understand fully much of it, I avoided these debates in the face of taunts and jeers of the student activists, keeping a little time for regular gymnasium attendance.

In 1945, I left Bankura for Kolkata for undergraduate studies. The war was over and on May 31, in the European arena victory day was celebrated. Within two months' time, happened the nuclear bombing of Hiroshima and Nagasaki the eastern arena spanning both East Asia and Japan became quiet, that in effect brought the end of the world war.

But Kolkata remained very active as centre of political activity in the country. The internees of the Quit India movement after release chose to come to Kolkata for meeting the citizens to express their gratitude for the country. We young collegians got the opportunity of seeing them in person addressing us in parks and Maidans. That included almost every national leader from Nehru to Abul Kalam Azad, from Acharya Kripalani to H V Kamath; among others.

I, who went to Howrah station to get a glimpse of the leaders arrive by rail, was very lucky to stand on Howrah platform only 5-6 ft away from Pt. Nehru. I didn't want to leave that place until I was forced to leave that position, before the political receptionists whisking the leaders away to their resting place.

The years '46 and '47 were very important to us as experiences of these years had huge influence on our formative mind. The INA procession of Calcutta was a spectacle to see. The Rashid Ali Day of Hindu-Muslim Bhai Bhai procession through the city was another spectacle. This was strangely followed by the 16-17-18 August killing of Hindus in the city orchestrated by the shoutings like 'Ladke Lenge Pakistan', followed by the Hindu-Muslim riots spreading to other provinces in Bihar (Bhagalpur), and east Bengal districts. These riots led to the inevitability of the country's partition. Those were very active political days for vulnerable and sensitive college youths, as the country was preparing for freedom from the British rulers, who were designing partitioning the country on religious lines. We were blindly worshipping our political leaders. Little did we anticipate that our closest family friends from village days would be alienated from us just because we were Hindus and they were Muslims.

The die was already cast. People were waiting for the Radclife ward for the parting lines which would demarcate the boundaries between India and Pakistan, which countries were born in 1947 on 14th and 15th August midnights, respectively.

In the mean time we had appeared in the BSc examinations, 2 to 3 months later than the usual time of March-April. The examination results could be published only around the last week of August '47. In other universities that year's degree results had come out well before that. We therefore jokingly claim to be Independent India's first group of graduates; the next graduate batches would only be next year's (1948) graduates.

The painful story of partition killings and that of peoples' transfers between India and Pakistan need not be retold again. In the mean time life had to move on. Our MSc classes could not start until January 1948, what with Noakhali and Khulna (then in East Pakistan) riots regularly punctuated to forcibly drive Hindus' out at regular intervals. But hardly had we settled to the studies' routine, on January 30, 1948, our greatest leader Mahatma Gandhi had to sacrifice his life for religious amity. But has the amity still been achieved? even today, sixty years late? Today we are in our eighties, we were hardly just over twenty then; and events and experiences of those days had cast lasting impressions of remorse, sadness, frustration and disappointment, on our life and behavior.

Leaving those 1942-1947 years of turmoil and turbulence, we plunged deeply and seriously in our graduate studies which (started six months late from the usual) only in January 1948 and lasted full two years as only in January 1950 our final M. Sc. exam of 1949 could be held, because of periodic waves of Hindu expulsions from Eastern Pakistan that had be accommodated on this side of the Pakistan.

Stepping into the World as a Scientific Worker

Leaving behind the days of financial support from the parents and the restricted breadth of the guided studies designed by the teachers, we entered into an open wide and unfamiliar world, but the choice was our own. I chose to work in the area of Measurement Science and Technology, which area I have continued throughout my life.

In the war efforts, the usefulness of radio communications and radar was so profound that without a minute's thought I opted for communication engineering, as my specialized subject of study in the general field of electrical technology. I gave special emphasis on microwave, radar and television. Wartime efforts usually change the face of technology, bringing enormous benefit to the society. This was no where more appropriate than in the field of communication. Post war volumes were released from the classified literature on retrieval of signal from noise. In the process of generation, transmission and ultimate reception, signals get polluted by noise and information retrieval is imperfect.

In the fifties people were interested to study the behavior of long chain molecules. Simple atoms and molecules were by then thoroughly studied spectroscopically, their natural resonance falling in the optical region of the spectrum. For long chain and larger molecules the natural resonances would occur in the longer wavelength region of the spectrum, in the microwave and radio wave regions. These studies came to be referred to as molecular engineering.

Physicists with interest in Polymers and some of my friends working on dielectrics and insulators were very active on these studies. A natural extension was taking place towards solids, both crystalline and amorphous. Gradually this became a very active area of research resulting in a whole discipline of solid state physics. My interest was particularly in the very narrow resonance line widths available because of the crystal fields in which such a resonance took place. This made possible the use of crystals as laser materials, lasing at frequencies throughout optical spectrum. We were then engaged in laser activity from mid sixty to early seventies.

Automated Measurement System

My main interest was in measurement science, in which obviously computer aided measurements got prime importance. By then vacuum tube had given place to transistor based components. To save space and to make faster measurements it was

imperative to miniaturize the computer components. Effort at miniaturization had already started in the early sixties. In 1965-66 when I had been working as Research Associate in the Rochester University, NY, already miniaturized components were available commercially. Frontline efforts were on for integrating the components on single silicon chips. The first success was announced by the Intel in the form of four component computer chip Intel 4004. Then came the Intel 8008 with eight elements on a single silicon chip performing expanded and even quicker computer functions.

In 1973, I was working as an invitee in the CSIR-NBS (US) cooperation scheme at the Gaithersburg NBS in Washington, which was very near the Intel Enterprise, and had the opportunity of meeting some of their scientists and engineers working on the project.

The optical radiation measurement group in Washington NBS was at that time designing automated measuring systems incorporating the device named MIDAS, 'Modular Interactive Data Acquisition System' designed by the members of the group. This MIDAS became the precursor to the complete automated measurement systems which became a commercial success in the field of scientific and industrial measurement and control.

For next ten years, circumstances pushed me away from scientific to administration activity. In 1979 I left NPL on deputation to the ministry of supply to take charge of the National Test House in Calcutta for more than three years. Howsoever I was trying I was not keeping pace with advances in the field of automated measurements. Minicomputers were being replaced by microcomputers with even larger measurement capability. Softwares were being developed to give better and more convenient and appropriate measurement capability. So much so that, when ten years later in 1984 I visited the experimental setup in Washington NBS, they had taken such a leap forward in both scale and size, that I felt myself a fish out of water.

Two names in the software technology, the "Apple" and "Microsoft" transformed the computer from hardware device to integrated computer systems. Networking these systems with the worldwide web of telephone lines worked the wonder of the Internet as we know it today. It is an open world of Information made available to mankind by brilliant software engineers with their endless brilliant inventions. Even on our side of the world, away from this feast of technological activity, everybody is enjoying the benefit of what they know as their precious possession, the mobile telephone; with a mobile in hand, one has the feeling as if the whole world is in one's grasp.

Sixty years after that August night, running through noise in search of a signal, through the tumult of the disorderly world, one has the feeling of tiredness, of a frantic looking for a resting halt, when one could pray for an ultimate order in perfect coherence with the heart beat of that supreme regulator, the Master-Driver.

Formula for Success

A small truth to make our Life's 100% successful.....

If A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
 Is equal to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
 Then $H + A + R + D + W + O + R + K = 8 + 1 + 18 + 4 + 23 + 15 + 18 + 11 = 98\%$
 $K + N + O + W + L + E + D + G + E = 11 + 14 + 15 + 23 + 12 + 5 + 4 + 7 + 5 = 96\%$
 $L + O + V + E = 12 + 15 + 22 + 5 = 54\%$
 $L + U + C + K = 12 + 21 + 3 + 11 = 47\%$

(None of them makes 100%)

.....
 Then what makes 100%
 Is it Money? No!!!!
 Leadership? NO!!!!

Every problem has a solution, only if we perhaps

change our "ATTITUDE".

It is OUR ATTITUDE towards Life and Work that makes

OUR Life 100% Successful..

$A + T + T + I + T + U + D + E = 1 + 20 + 20 + 9 + 20 + 21 + 4 + 5 = 100\%$

Dr. Vikram Kumar & NPL-FSF

Dr. Vikram Kumar took over as Director, National Physical Laboratory on 2nd June 2003, after having served as Director, Solid State Physics Laboratory, Delhi for 11 years from 1992. Prior to that, he was associated with the Indian Institute of Science, Bangalore from 1977 as Lecturer (1977-82), Assistant Professor (1982-87) and Associate Professor (1987-92). He had a good idea about the activities of NPL, as a member of its Research Council also.

Dr. Vikram Kumar obtained his B.Sc. and M.Sc. (Physics) Degrees from the Allahabad University in 1965 and 1967 respectively, and went to USA to continue his further studies at the Lehigh University from where he obtained his MS Degree and his Ph.D. Degrees in Electrical Engineering in 1971 and 1975 respectively. Though his field of specialization before joining NPL was Semiconductor Physics & Technology, he acquired very good knowledge in the three prime areas of R & D activities of NPL viz. Materials Development & Characterization; Measurement Standards and Metrology; Radio, Atmospheric and Environmental Physics, adding newer and newer dimensions in all the fields of activities of the Laboratory – be it research or the various services. He laid emphasis on developing the Infrastructural Facilities in particular, and was instrumental in induction of a large number of young persons to carry forward the torch. His tenure at NPL witnessed the remarkable change from an ageing Laboratory to a younger laboratory, and increased research tempo resulting in the publication of increasing number of papers in journals of repute and patenting of a number of process and their commercial exploitation.

He has more than 160 research papers to his credit. And more than 250 research papers presented at various Seminars & Conferences. He has guided more than 15 students for their Ph.D. Theses and more than 11 M. Tech. students for their Theses as well.

He received the coveted S S Bhatnagar Prize and the Material Research Society (MRSI) Medal in 1992, for his outstanding personal contributions and was also elected as Fellow of the National Academy of Science in 1993 and also Fellow of the Institution of Electronics & Telecommunications Engineers. **He has been elected Fellow of the Indian National Academy of Engineering in 2009.** He has been associated with Semiconductor Society (India), Institute of Smart Structures and Systems, Instrument Society of India, Electronic Materials Group of MRSI, IPWSD, SSD and Metrology Society of India as President, and has also been associated with the Indian Physics Association and Asia Pacific Academy of Materials as Member.

He has served as a Member of the Board of Directors of SCL, Chandigarh; CEL, Sahibabad; and Governing Council of Centre for Materials for Electronics Technology (C-MET), Pune. He has also been on the Editorial Board of *Bulletin of Materials Science*; *Journal of IETE*; *IETE Tech Reviews*, and *Indian Journal of Engineering and Materials Sciences*. He also served as Visiting Professor at the Department of Physics, Indian Institute of Technology during 1998 to 2000, and will now be again joining that Institute after his completion of the extended period of two years as Director, NPL, on his retirement from this position on 31st July, 2009.

Dr. Vikram Kumar & the NPL Former Scientists Forum: The First Interaction that the NPL Former Scientists Forum had with Dr. Vikram Kumar was at the special meeting of the Management Committee of the Forum held with him on July 22, 2003. At that meeting Dr. Vikram Kumar assured that the Members of the Forum will receive invitations for various functions organized by the Laboratory and they will also be put on the mailing list for "Sameeksha". He said that the Forum will get full support from Administration in getting copies of Office Memoranda and Circulars of relevance to its Members, and also ensure issue of better Identity Cards, indicating the Residential Addresses of the persons on their retirement from the Laboratory. He also assured the Forum for a place in the premises of the Laboratory, though it may take some time. The issues regarding provision of Telephone, Computer, Internet Connection and Xeroxing facilities could be considered after the allocation of the Room. He said that he would ensure speedy disposal of the reimbursement of Medical Claims of the Pensioners, and also agreed to provide some space to the Forum on NPL's Website.

In his message published in the First Issue of the Forum's Newsletter dated January 2004, (to mark the completion of one year of its formation) Dr. Vikram Kumar wrote, "*The Forum has been serving a useful purpose of bringing together the superannuated scientists of NPL and looking after their welfare. It is indeed an important task. I assure you that my administration will do whatever is possible within the rules of CSIR to make life easier for our senior colleagues*".

True to his words and promises, he had been providing financial support to the Forum by release of advertisement for publication of the Forum's Newsletter. The Forum has been permitted to hold its various meetings in NPL and also utilize its audio-visual facilities. A room has also been provided to the Forum in the Force Standard Building Annex which he inaugurated on 14th August 2007, when he said that the NPL Former Scientists Forum is only an extended arm of NPL, and he expressed the hope that the Members of the Forum shall also be able to participate in the scientific activities of NPL. Dr. Vikram Kumar had been taking very keen interest in the various activities of NPL Former Scientists Forum and was the Chairman of the Scholarship Committee of the Forum. He also inaugurated the 80-Plus Club of the Forum on 16th March 2009. The Forum wishes Dr. Vikram Kumar a very long, happy and purposeful active life, and also looks forward to joining the Forum as a Member and continue giving his suggestions and advice for achieving the various aims and objects of the Forum which also figure on the reverse of its Membership Form.

ADVICE FROM A 90 YEAR OLD

Regina Brett

1. Life isn't fair, but it's still good.
2. When in doubt, just take the next small step.
3. Life is too short to waste time hating anyone...
4. Your job won't take care of you when you are sick. Your friends and parents will. Stay in touch
5. Pay off your credit cards every month.
6. You don't have to win every argument. Agree to disagree.
7. Cry with someone. It's more healing than crying alone.
8. It's OK to get angry with God. He can take it.
9. Save for retirement starting with your first paycheck.
10. When it comes to chocolate, resistance is futile.
11. Make peace with your past so it won't screw up the present.
12. It's OK to let your children see you cry.
13. Don't compare your life to others. You have no idea what their journey is all about.
14. If a relationship has to be a secret, you shouldn't be in it.
15. Everything can change in the blink of an eye. But don't worry; God never blinks.
16. Take a deep breath. It calms the mind.
17. Get rid of anything that isn't useful, beautiful or joyful.
18. Whatever doesn't kill you really does make you stronger.
19. It's never too late to have a happy childhood. But the second one is up to you and no one else.
20. When it comes to going after what you love in life, don't take no for an answer.
21. Burn the candles, use the nice sheets, wear the fancy lingerie. Don't save it for a special occasion. Today is special.
22. Over prepare, then go with the flow.
23. Be eccentric now. Don't wait for old age to wear purple.
24. The most important sex organ is the brain.
25. No one is in charge of your happiness but you.
26. Frame every so-called disaster with these words 'In five years, will this matter?'
27. Always choose life.
28. Forgive everyone everything.
29. What other people think of you is none of your business.
30. Time heals almost everything. Give time time.
31. However good or bad a situation is, it will change.
32. Don't take yourself so seriously. No one else does.
33. Believe in miracles.
34. God loves you because of who God is, not because of anything you did or didn't do.
35. Don't audit life. Show up and make the most of it now.
36. Growing old beats the alternative -- dying young.
37. Your children get only one childhood.
38. All that truly matters in the end is that you loved.
39. Get outside every day. Miracles are waiting everywhere.
40. If we all threw our problems in a pile and saw everyone else's, we'd grab ours back.
41. Envy is a waste of time. You already have all you need.
42. The best is yet to come.
43. No matter how you feel, get up, dress up and show up.
44. Yield.
45. Life isn't tied with a bow, but it's still a gift.

Effort

Effort is important, But knowing where to make an effort in your life makes all the difference.

"Even the word 'IMPOSSIBLE' says 'I M POSSIBLE' "

When you are successful, your well wishers know who you are. When you are unsuccessful, you know who your well wishers are
Ship is always safe at shore... But it is not built for it
Falling down is not defeat... Defeat is when you refuse to get up...

Know Your Mobile

Mobile Telephone has entered our lives in a very big way, so much so that today it has become a necessity of life – especially for older people – to enable to remain in touch with their family members, and to allay their worries about their welfare from time to time. It is worthwhile to know what else this instrument is capable of and also about the revolution that its invention has brought about.

Useful Information for Mobile Users

[SOURCE: CSIR Pensioners Welfare Association Newsletter No. 16, December 2008, page 53]

- 1. Emergency:** The Emergency Number worldwide for “Mobile” is 112. If you find yourself out of coverage area of your mobile network and there is an emergency, dial 112 and the mobile will search any existing network to establish the emergency number for you, and interestingly this number 112 can be dialed even if the keypad is locked.
- 2. Have you locked your keys in the car? Does your car have remote keys?:** This may come in handy someday. Good reason to own a cell phone. If you lock your keys in the car and the spare keys are at home, call someone at home on your cell phone. Hold your cell phone about a foot from your car door and have the person at your home press the unlock button, holding it near the mobile phone on their end. Your car will unlock. This will work even if you are hundreds of miles away, and if you can reach someone who has the other “remote”
- 3. Hidden Battery Power:** Imagine your cell battery is very low, you are expecting a call and you don't have the charger. Nokia instrument comes with a reserve battery. To activate, press the keys *3370#. Your cell will restart with this reserve and the instrument will show a 50% increase in battery. This reserve will get charged when you charge your cell next time.
- 4. How to disable a STOLEN mobile phone?:** To check your mobile phone's serial number, key in the following digits on your phone * 0 6 # . A 15-digit code will appear on your screen. This number is unique to your handset. Write it down and keep it safe. When your phone gets stolen, you can phone your service provider and give them this code. They will then be able to block your handset so even if the thief changes the SIM card, your phone will be totally useless. You probably won't get your phone back, but at least you know that whoever stole it can't use/ sell it.
- 5. Take Care while using your mobile phone:** When you try to call someone through mobile phone, don't put your mobile closer to your ears until the recipient answers, because directly after dialing, the mobile phone would use its maximum signaling power, which is: 2 watts = 33 db. Please use your left ear while using mobile because if you use your right one it will affect the brain directly. This is a finding from Apollo medical team.

Mobile Revolution

Dr. Satya Ranjan Das

The idea of the mobile phone first occurred to one Mr. Marty Cooper, a Motorola Engineer, in-charge of its carphone division in the early 1950, at a time when cellular technology was being used in the networks of the carphones. But the cellular phones were unwieldy devices built into car dash boards and attached to a box of equipment - a two way radio and a power supply in the car's boot. There were only a few radio channels available on which to make calls and users often had to wait a long time for one to become free. Mr. Cooper was steadfast in his opinion that a portable phone should not only be small but light enough to be carried around. At the suggestion, his colleagues sponsored a design contest in December 1972, among the Motorola Engineers including from other divisions than his own. Each contestant presented his own prototype and the simplest was chosen as the winner. That device led to the famous phone call on 23rd April, 1973 from Mr. Cooper with an engineer at AT&T's Bell Laboratories. This was the first public call on a hand held mobile phone. The hand-set, called a Dyna TAC had 35 minutes of talk time and weighed one kilogram. Four interactions later, Cooper's team had reduced the weight by half, and it was launched in April 1983 with a net price of about USD 4000.00. Today over half the world population has a mobile phone of palm size and at affordable price, but at that time, most people thought cellular phones would only ever be business tools because of their high cost and not comfortably light weight.

By that time, an emerging mobile broadband technology WIMAX was making wireless transmission more effective and user friendly. Another frontal attack came from Richard Ray, a researcher in Stanford University who had an idea to make mobile telecoms more efficient in the form of smart antennas. The idea is by precisely steering radio waves from a base station towards a mobile device, it is possible to establish a faster and more reliable link and at the same time supporting more users, by sending different beams in different directions, using the same frequencies. Mobile phones are continuously becoming more useful, convenient by the application of smart antenna technology to cellular and WIMAX networks. Continuous addition of technical features to mobile phone through the 1990's has been making this consumer product useful, wonderful and ever-efficient.

Let us go beyond the concept of the mobile phone as a cell phone only taking and listening, then new applications based on sending data to and from mobile devices take hold. The potential for the mobile data in the success of the Black Berry email service and I-phone with its vast selection of the downloadable software becomes obvious. This is again Mr. Cooper idea that such application will be more likely to flourish if the world's mobile networks, and the application that run over them, are developed and managed by different companies in an open model that mimics the internet. Mr. Cooper the son of an Ukrainian couple who migrated at the onset of the great depression, is a pioneer in this idea of mobile Internet. He is aptly called the father of the mobile telephone, and the creator of the wireless industry, remembering that the paper technology of the 1960's and the quartz clock with flowed quartz crystals are his brain children. Google, the internet search engine – Wolfram/Alpha, the computational knowledge engine.

We are familiar with the Microsoft, the Yahoo, and many smaller searches for information about data and applications posted in the internet, and download them for our needs for our computational needs when required. The most dominant search engine is, however, the Google, which accounts for 64% of all internet searches, Yahoo about 20% and Microsoft about 8%. Two scientists, one Sergey Brin, Moscow born, and the other Larry Page, born in Midwest America, conceived of the idea of bringing into operation all the computers at any time connected in the internet for collecting information and applications, systematically posting them in the website for later retrieval. They were, therefore, not restrained by the number of computers at their direct access. The responders were four billion (and counting more) mobile phones the world offered them. They could also be combined together with sensors of physical stimuli of various nature. Thus they could gather trillion data in numerous forms for documenting world wide web. Now they needed the proper equations and algorithms to link the huge data in computational form.

They used a link analysis algorithm "Page Rank" named after Lawrence Page, used by the Google internet search engine that assigns a numerical weighting to each element of a hyperlinked set of document, such as the world wide web with the purpose of measuring its relative importance within the set. It is exactly similar to the ranking of research paper in academic publishing, by the citations the paper get. For further useful information the reader is advised to refer to Page Rank – Wiki Pedia, the free encyclopedia. The google search engine was in operational from in 1998. Today the google service has been successful that it is now an every to almost every searcher from Microsoft to newcomers like Cuil all of whom want to take it down, but has not yet figured out how to conquer google. Only in March this year (2009), one London born Physicist Stephen Wolfram, a super bright Ph.D. in theoretical Physics from Caltech who won the MacArthur 'genius' grant in 1981, has written a blog post, announcing the imminent release of a new highly sophisticated search engine awkwardly named as Wolfram/Alpha. Moreover, this creation is not so much a search engine as a computational knowledge engine. It has a single input field like a search engine but users can pose complex questions like "What is the current orbital location of the international space station?" It is not trivial computation 'says Wolfram' You have to actually solve some differential equations for the motion of the aircraft in the earth gravitational field. And yet the result is returned as quickly as a google search.

In his self published 1200 pages book 'A new kind of science' he has proposed the idea that extremely complex and seemingly random events including weather patterns and the way a Zebra's Stripes form, actually stem from a few simple rules. Given the technical nature of 'Alpha', only few erudite professional scientists and engineers will use the Alpha data. But Wolfram contradicts it, he says all kinds of people will get used to the idea that this Wolfram/Alpha out there, and they can complete things and gave the first public demonstration of Alpha at Harvard Law School in late April, two references are: News week May 25, 2009 Technology pages 54-56.

This Write-up by Dr. Satya Ranjan Das also completes his article
"Re-treading the Footprints Left Behind"
which brings his story up to the stage of invention of the Mobile Telephone

Medical Issues Related

Office Memoranda & Circulars

In May 2005 Issue No. 2 of this Newsletter – the Special Medical Issue – contents of 179 Circular Letters & Office Memoranda relating to medical issues relevant to pensioners residing in Delhi, Ghaziabad, Noida, Gurgaon and Faridabad was presented indicating also the Source of the information – Original, Secondary, Supplementary. In addition information contained in 48 more New Office Memoranda and Circular Letters relating to medical issues was presented in the September 2007 Issue No. 4 of this Newsletter – Holistic Health Care Issue (Pages 15-51). Pin-pointed reference to the various documents had been provided both in the May 2005 (Number 2) and September 2007 Issue (Number 4) of the Newsletter.

Another Special Feature of the September 2007 Issue was the publication of an **Alphabetical List of all the Hospitals and Diagnostic Centres** empanelled by the CGHS Up-dated as on 29. 08. 2007, indicating also their **Telephone Numbers**, as could be ascertained from various sources (Pages 69-77). Telephone Numbers of some Hospitals not empanelled by CGHS, which could be contacted in case of emergency where the treatment could be taken as per the provisions of CGHS had also been given on **Page 78**, which also carried Telephone Numbers of Help Lines and Blood Banks.

The September 2008 Issue No. 5 of the Newsletter carried information about another 12 New Office Memoranda and Circular Letters relating to medical issues was presented. Editor's Notes appeared in various Office Memoranda and Circulars to make them more useful.

Pattern Followed in the Numbering of the Office Memoranda and Circulars: The 48 new OMs and Circulars covered in the September 2007 Issue Number 4, were numbered with the Prefix 'M'. The Office Memoranda covered in the September 2008 Issue Number 5 of the Newsletter carry the Prefix –Med'. No prefix had been used for the 179 OMs and Circular Letters published in the May 2005 Issue Number 2.

As a number of New CGHS-Empanelled Private Hospitals and Diagnostic Centres had now been notified and a **Consolidated List [as on 02. 07. 2008] of Empanelled Hospitals & Diagnostic Centres with CGHS**, appeared on the website of the Ministry of Health & Family Welfare, and some changes in the already-approved Hospitals/ Diagnostic Centres had also been notified through, a new and up-dated **Alphabetical Index of all the CGHS- Empanelled Hospitals**, as on 31. 05. 2008 had been compiled and was presented in the September 2008 Issue of the Newsletter.

In this issue of the Newsletter, information only about the additions/ changes made to the List of the Office Memoranda covered in the earlier issues of the Newsletter have been presented, instead of again publishing a consolidated alphabetical list of CGHS Empanelled Private Hospitals & Diagnostic Centres and also notified in the **Consolidated List [as on 10. 12. 2008] of Empanelled Hospitals & Diagnostic Centres with CGHS**, appeared on the website of the Ministry of Health & Family Welfare. The specific Office Memoranda relating to these Additions & Changes have also been presented in a chronological order, using the Prefix 'Medical', inviting reference to the relevant Office Memorandum or Circular through the Memorandum Number used in the earlier issues of the Newsletter.

The New Additions and Changes that have been notified are listed in the table indicated at the end

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -01 | Government of India, Office of the Addl. Director, [HQ], Central Government Health Scheme, 9, Bikaner House Hutments, Shahjahan Road, New Delhi - 110 011, OM No. F. No.2067/CGHS/Hospital Cell dated, 25. 07. 2008, signed Illegible (Dr. G S Soni), Director (CGHS) Discontinuation of empanelment of Diagnostic Labs with CGHS for non-compliance of requirement of NABL Accreditation | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

Diagnostic Laboratories empanelled under CGHS are required to obtain NABL Certification within one year of its empanelment.

However, following laboratories have not even applied for NABL certification despite repeated reminders and hence are removed from the panel of CGHS with immediate effect and referral shall be stopped.

*Sr. No. In the Empanelled List
and Remarks*

| | |
|---|---|
| 1. Dr. Mittal's Diagnostic Centre, Robini | 14 |
| 2. Dr. Nanda Diagnostic Centre, Pitampura. | 60 |
| 3. Janta X-Ray & Clinical Lab., Raja Garden. | 28 |
| 4. Chetna's Path Lab., Chitaranjan Park, New Delhi. | 2 |
| 5. Central Delhi Diagnostic & Research Centre. | 1 |
| 6. Janta Diagnostic Centre, Sunder Vihar. | 32 |
| 7. NMC Imaging Centre, Nehru Nagar. | 38 |
| 8. Path Lab., East of Kailash. | 42 |
| 9. Suvidha Diagnostic Centre, Patparganj, | 47 |
| 10. Apollo Clinic, Noida. | 49 |
| 11. Vrinda Diagnostic Centre, Patparganj. | 53 – Empanelled Centre by this Name is in Ghaziabad |
| 12. Krystal Diagnostic Centre, Ghaziabad. | 30 |
| 13. Apollo Clinic, Janakpuri. | 48 |

This issues with the approval of Department of Health.

EDITOR'S NOTE: *The Sr. No. at which the name of the Listed Diagnostic Centre has been indicated above in the list of De-recognized Diagnostic Centres in the above Office Memorandum. The Remarks in respect of the Centre listed at Sr. No 10 may be seen. This is a misprint in the OM. All the above Thirteen Diagnostic Centres have been De-recognized w.e.f. 24. 09. 2008. as indicated in the Consolidated List of CGHS Empanelled Hospitals and Diagnostic Centres Up-dated as on 10. 12. 2008, appearing on the Website of the Ministry of Health & Family Welfare.*

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|--|
| Medical -02 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare Nirman Bhawan, New Delhi – 110 108, OM No., 1-13/Hospital Cell/R&H/ CGHS/ (Pt.A), dated September 2, 2008, signed by R Ravi, Deputy Secretary to the Government of India [Tel; 23063483] Treatment of Cancer Patients (Both Old and New) under CGHS / CS (MA) Rules, 2008 – Adhoc Arrangement | SOURCE: Downloaded from the Website of Ministry of Health & Family Welfare |

The process of empanelment of private hospitals and diagnostic centres in Delhi, on the basis of quotations received during 2004 has been completed. The list of empanelled hospitals, however, does not include a single hospital for treatment of cancer patients. Earlier there were four hospitals, viz. Rajiv Gandhi Cancer & Research Institute, Dharmashila Cancer Hospital and Research Centre, Batra Hospital and Medical Research Centre, and Indraprastha Apollo Hospital. The situation in other CGHS cities is almost the same.

2. As the list of empanelled hospitals under CGHS, Delhi, did not have any hospital providing treatment for cancer patient, it was decided as an-hoc measure, to permit CGHS beneficiaries to get themselves treated at these four hospitals subject to the condition that they would have to initially pay for the treatment and claim reimbursement later. The reimbursement will be limited to the rates notified in 2001. The ad-hoc arrangement is currently valid up to 31st December 2008.

3. The undersigned is directed to invite reference to the Office Memorandum No. S.11011/31/2007-CGHS – D.II dated the 5th May, 2008 [NA], vide which the decision of the Ministry of Health & Family Welfare was conveyed for permitting the beneficiaries under CGHS/ CS (MA) Rules, 1944, to get themselves treated at any of the under-mentioned 25 (twenty five) Regional Cancer Centres recognized by the Ministry of Health and Family Welfare under the national Cancer Control Programme that are funded by the Government of India, subject to the condition that the reimbursement will be as per the rules fixed in regional cancer centres under Central Government or actual, whichever is less:

1. Kamla Nehru Memorial Hospital, Allahabad, Uttar Pradesh (NGO).
2. Chittaranjan National Cancer Institute, Kolkata, West Bengal (State Govt. Institute).
3. Kidwai Memorial Institute of Oncology, Bangalore, Karnataka (State Govt. Institute).
4. Regional Cancer Institute (WIA), Adyar, Chennai, Tamil Nadu (NGO).
5. Acharya Harihar Regional Cancer Centre for Cancer Research & Treatment, Cuttack, Orissa (State Govt. Institute).
6. Regional Cancer Centre, Thiruvananthapuram (State Govt. Institute).
7. Gujarat Cancer Research Institute, Ahmedabad, Gujarat (NGO).
8. M.N.J. Institute of Oncology, Hyderabad, Andhra Pradesh (State Govt. Institute).
9. Pondicherry Regional Cancer Society, IPMER, Pondicherry (Central Govt. Institute).

10. Dr. B.B. Cancer Institute, Guwahati, Assam (State Govt. Institute).
11. Regional Cancer Control Society, Shimla, Himachal Pradesh (State Govt. Institute).
12. Cancer Hospital & Research Centre, Gwalior, Madhya Pradesh (NGO).
13. Indian Rotary Cancer Institute, AIIMS, New Delhi (Central Govt. Institute).
14. R.S.T. Hospital & Research Centre, Nagpur, Maharashtra (NGO).
15. Pt. J.N.M. Medical College, Raipur, Chhatisgarh (State Govt. Institute).
16. Tata Memorial Hospital, Mumbai, Maharashtra (NGO).
17. Indira Gandhi Institute of Medical Sciences, Patna, Bihar (State Govt. Institute).
18. Acharya Tulsi, Regional Cancer Trust & Research Institute (RCC), Bikaner, Rajasthan (State Govt. Institute).
19. Regional Cancer Centre, Pt. B.D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana (State Govt. Institute).
20. Post Graduate Institute of Medical Education & Research (PGIMER), Chandigarh (Central Govt. Institute).
21. Sher-e-Kashmir Institute of Medical Sciences, Soura, Srinagar (State Govt. Institute).
22. Regional Institute of Medical Sciences, Manipur, Imphal (State Govt. Institute).
23. Civil Hospital, Aizawal, Mizoram (State Govt. Institute).
24. Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, Uttar Pradesh (State Govt. Institute) and
25. Government Arignar Anna Memorial Cancer Hospital, Kancheepuram, Tamil Nadu (State Govt. Institute).

EDITORS NOTE: The above decision of the Government of India was reported on page 26 of the September 2008 Issue No. 5 of the Newsletter at the end of the New Alphabetical Index to CGHS Empanelled Private Hospitals & Diagnostic Centres (Up-dated as on 02. 07. 2008).

4. The Ministry of Health & Family Welfare has been receiving representations about non-availability of adequate hospital providing treatment to beneficiaries under CGHS/ CS (MA) Rules, 1944, who are cancer patients, as the list of hospitals where the treatment can be taken is limited to around thirty hospitals in the country. After careful examination of the representations received, it has been decided with the approval of the competent authority that CGHS/ CS (MA) Rules, 1944, beneficiaries who are cancer patients (both old and new) may be permitted to take treatment in any multi-speciality general purpose hospital that provides treatment to cancer patients, subject to the condition that reimbursement will be limited to actual expenditure or the rates notified in 2001, whichever is lower.

5. As the private hospitals are not on the list of CGHS empanelled hospitals, these hospitals will not extend credit facilities to pensioners and hence the beneficiaries under CGHS will have to claim reimbursement, at the rates notified in 2001 or actual whichever is lower, after getting themselves treated at the hospitals. Similarly, serving employees and their family members, who are beneficiaries under CGHS/ CS(MA) Rules, 1944, may be reimbursed as per the rate in 2001 or actual whichever is lower.

6. In so far as treatment in Regional Cancer Centres is concerned, the position will remain the same in so far as reimbursement is concerned, as has been mentioned in Para 3 of this Office Memorandum.

7. These orders will be in force until further orders.

8. This issues with the concurrence of Integrated Finance Division in the Ministry of Health & Family Welfare, vide Dy. No. 5034-IFD/08 dated the 14th August, 2008.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|--|
| Medical -03 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi, O M No. F No. Rec 1-2004/JD/(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 04. 09. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment and diagnostic procedures and fixation of package rates – Modification to the procedure approved for Focus Imaging & Research Centre Pvt. Ltd. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31] and 15th July, 2008 [NA] of the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that in partial modification of the above referred Office Memorandum of 15th July, 2008, the additions to the procedures for which the following diagnostic centre was empanelled are being modified as indicated against its name under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

The existing entry at S. No. 21 of Annexure B of Office Memorandum dated 7th December, 2006

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|--|--|
| 21 | Focus Imaging and Research Centre, C-10, Green Park Extn., New Delhi | USG/ Colour Doppler, CT, Mammography, Bone Densitometry, X-Ray, MRI, EEG, EMG, and NCV |

May be substituted with the entry

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|--|--|
| 21 | Focus Imaging and Research Centre, C-10, Green Park Extn., New Delhi | USG/ Colour Doppler, CT, Mammography, Bone Densitometry, X-Ray |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -04 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi – 100 108, O M No. F No. Rec 1-2004/JD(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 04. 09. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment and diagnostic procedures and fixation of package rates – Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], and 16th July 2008 [NA], issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the names of some more private hospitals and diagnostic centres are added to the list of hospitals and diagnostic centres empanelled under CGHS, Delhi as in **Annexures A & B**, under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

ANNEXURE – A

The following hospitals are empanelled under CGHS, Delhi, for the purpose specified against their names with effect from the date of issue of Office Memorandum No. Rec 1-2004/JD/(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 4th September, 2008

The existing entry No. 89, in the list of hospitals, names of the following hospitals may be added in the list of hospitals empanelled under CGHS.

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|---|
| 90 | Tirupati Stone Centre & Hospital, 6 Ganga Vihar, [Near Karkadi Mor Flyover], Delhi – 110 051 [Tel: 22461691] | Superspeciality in Urology including Lithiotripsy |
| 91 | Singh's Dental Hospital, 30 – 34, Sewak Park, Dwarka Mor Metro Station, Uttam Nagar, Delhi – 110 059 | General Dentistry |

Annexure B

The following diagnostic centre is empanelled under CGHS, Delhi for the purpose specified against the name with effect from the date of issue of Office Memorandum : No. Rec 1-2004/JD/(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 4th September, 2008

After the existing entry No. 64 in the list of diagnostic centres the name of the following diagnostic centre may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|---|
| 65 | Focus Imaging & Research Centre Pvt. Ltd., H-10, Green Park Extension, New Delhi – 110 016 [Tel: 42199993] | Diagnostic purpose [MRI, CT, EEG, EMG, and NCV] |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -05 | Government of India, Office of the Addl. Director, [HQ], Central Government Health Scheme, 9, Bikaner House, New Delhi, Letter No. F. No. 6-12/2008-CGHS/Gr. Cell/1309-17, dated 14. 10. 2008 addressed to All Ministries/ Departments of Government of India, signed by Dr. G S Soni, Director (CGHS) Referral to private recognized hospitals/ diagnostic centres under CGHS Delhi, including Gurgaon, Faridabad, Ghaziabad, and NOIDA for specialized and general purpose treatment and diagnostics - Regarding | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

In view of certain irregularities in management of cardiology patients, it has been decided by the competent authority that, with immediate effect, no CGHS beneficiaries shall be referred to Narendra Mohan Hospital, Mohan Nagar, Ghaziabad – 201-007 (UP), till further notice.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -06 | Government of India, Ministry of Health & Family Welfare, Nirman Bhawan, New Delhi, OM No. F. No. 37-6/02-03/ CGHS/MSD/ MISC/, dated 22. 10. 2008, signed by R Ravi, Deputy Secretary to the Government of India [Tel; 23063483] Issue of Analogue Insulin (Vial/Cartridge) to CGHS beneficiaries. | SOURCE: Downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to this Ministry's OM of even number dated 22. 04. 08 on the subject mentioned above, and to state that in partial modification of the above referred Office Memorandum, the Ministry of Health & Family Welfare has decided to permit Insulin (analogue) penfil/ vial/ cartridges to the CGHS beneficiaries on valid prescription of a specialist.

2. Following types of Inj. Insulin (Analogue) will be procured centrally and supplied to CGHS dispensaries for issue to the beneficiaries:

1. Inj. Novomix 30
2. Inj. Levenir
3. Inj. Novorapid
4. Inj. Lantus Vial/ Solostar

CMO I/C will keep the record of such beneficiaries at dispensary level.

3. Other types of Insulin (Analogue) Injections could be issued to CGHS beneficiaries only after obtaining permission from the Additional Director (MSD), CGHS on the specific recommendation of specialist on a case to case basis.

4. As a policy, CGHS does not provide disposable syringes & needles to the beneficiaries. Similarly, the beneficiaries will bear the cost of the pen from their own sources for utilizing the Inj. Insulin (Analogue) in cartridge form.

5. These orders will come into effect from the date of issue of this Office Memorandum

EDITOR'S NOTE 1. : The OM Dated 22. 04. 2008 referred to above was not reproduced in the September 2008 Issue No. 5 of the Forum for the reason that the Last Paragraph of the OM dated 24. 04. 2008 issued subsequently incorporated the substance of that OM as indicated in the EDITOR'S NOTE appearing on page 12 of that Newsletter [Ref: Med-08]. That OM provided for the interim arrangement for supply of the vial/ cartridge through authorized local chemists for a period of three months.

EDITOR'S NOTE 2. : Please see also the subsequent OM dated 13th May 2009 [Medical -23]

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -07 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi, O M No. F No. Rec 1-2004/JD/(Gr.) / CGHS/ Delhi/ CGHS (P), dated 17. 11. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi - Decision to stop referrals to Narinder Mohan Hospital, Mohan Nagar, Ghaziabad | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], vide which private hospitals and diagnostic centres were empanelled under CGHS, Delhi, to cover Delhi, NOIDA, Ghaziabad, Faridabad and Gurgaon, and to state that the name of Narinder Mohan Hospital, Mohan Nagar, Ghaziabad, was mentioned at S. No. 30 of Annexure A (list of private hospitals empanelled under CGHS, Delhi).

2. Central Government Health Scheme, vide its communication No. H.6-12/2006-CGHS/Gr. Cell/ 1309-17, dated the 14th October, 2008 [Medical - 05], has decided to stop referrals to Narinder Mohan Hospital, Mohan Nagar, Ghaziabad, with immediate effect, i.e. from the date of issue of the Communication on 14th October, 2008. All Ministries/ Departments are requested to note the decision of the central Government Health Scheme, and stop referrals to Narinder Mohan Hospital, till further orders.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -08 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi - 100 108, O M No. F No. Rec 1-2004/ JD(Gr.) / CGHS/ Delhi/ CGHS (P), dated 01. 12. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment- Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June, 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], and 4th September 2008 [Medical-04], issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the names of six more private hospitals are added to the list of hospitals empanelled under CGHS, Delhi as in Annexures A, under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

ANNEXURE - A

The following hospitals are empanelled under CGHS, Delhi, for the purpose specified against their names with effect from the date of issue of Office Memorandum : No. Rec 1-2004/JD/(Gr.) / CGHS/ Delhi/ CGHS (P), dated 1st December, 2008

The existing entry No. 94, in the list of hospitals, names of the following hospitals may be added in the list of hospitals empanelled under CGHS.

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|--|
| 95 | Swastik Maternity & Medical Centre, 78H, Vijay Park, Main Madanpuri Road, Gurgaon | Super-speciality eye care [Cataract/ Glaucoma, Strabismus and Occuloplasty & Adnexa] |
| 96 | Visitech Eye Centre, R 13, Greater Kailash I, New Delhi | Super-speciality eye care [Cataract/ Glaucoma, Retinal - Medical and Vitreo - Retinal Surgery, Strabismus and Occuloplasty & Adnexa (except Corneal Transplant)] |
| 97 | Sunder Lal Jain Charitable Hospital, Ashok Vihar, Phase III, Delhi | Multi-speciality General Purpose and Specialised Purpose in Neurology and Neurosurgery, Urology including Dialysis, Orthopaedic Surgery including Joint Replacement and Arthroscopic Surgery, Gastroenterology and GI Surgery, Paediatrics and Padeiatrics Surgery, Endoscopic Surgery and ENT |
| 98 | Vision Eye Centre, 12/77, West Patel Nagar, Near Arya Samaj Mandir, New Delhi | Super-speciality eye care [Cataract/ Glaucoma, Retinal - Medical and Vitreo - Retinal Surgery, Strabismus and Occuloplasty & Adnexa (except Corneal Transplant)] |

| | | |
|-----|---|---|
| 99 | Brij Medical Centre, K. K. 5Nagar, Ghaziabad | Super-speciality in Orthopaedic Surgery including Arthroscopic Surgery and Joint Replacement |
| 100 | Khanna Eye Centre, E 368, Nirman Vihar, Vikas Marg, Delhi – 110 092 | Super-speciality eye care [Cataract/ Glaucoma, Retinal – Medical and Vitreo – Retinal Surgery, Strabismus and Oculoplasty & Adnexa] |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|--|
| Medical -09 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi, OM No. Misc. 12014/2005/CGHS(R&H)/CGHS(P), dated 04. 12. 2008, signed by R Ravi, Deputy Secretary to the Government of India [Tel; 23063483] Extension of permission/ approval for reimbursement of cost of Neuro-implants viz., Deep Brain Stimulation implants, intra-theccal Bectofen Pump, intra-theccal Morphine Pump, Spinal Cord Stimulators for CGHS beneficiaries / beneficiaries covered under CS (MA) Rules | SOURCE: Downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memorandum of even number dated the 23rd Jun, 2006 [NA], on the above subject, vide which rules for reimbursement towards the cost of neuro-implants were intimated and to state that it has now been decided to continue to allow the reimbursement of the cost of Neuro-implants viz. Deep Brain Stimulation implants, intra-theccal Bectofen Pump, intra-theccal Morphine Pump, Spinal Cord Stimulators for CGHS beneficiaries / beneficiaries covered under CS (MA) Rules. It has now been decided to allow reimbursement of the cost of Neuro-implants viz. Deep Brain Stimulation implants, intra-theccal Bectofen Pump, intra-theccal Morphine Pump, Spinal Cord Stimulators for CGHS beneficiaries / beneficiaries covered under CS (MA) Rules, under the same terms and conditions, as was mentioned in the above referred Office Memorandum of 23rd June 2006, viz.

The Prescribing Authority

DBS Implants

Neurologist of a Government Hospital

Intra-theccal Beclofen Pump,
Intra-theccal Morphine Pump,
Spinal Cord Stimulator

Any two Govt. specialist of concerned Speciality/
and Head of Department of Neurology/ Veuro-Surgery/
Anesthesiology

Approving Authority

- CGHS – Additional Director of the concerned CGHS city
- CS(MA)Rules – DDG(M) or equivalent level officer of Directorate General of Health Services

Ceiling Rates

DBS Implant: including MER

Rs. 3,46,153/- +VAT Rs. 13,847 – i.e. Total of Rs. 3,60,000/- (or actual, whichever is less)

Intra-theccal Beclofen Pump, Intra-theccal Morphine Pump

Rs. 2,51,923/- + VAT Rs. 10,077 – i.e. Total of Rs. 2,82,000/-

Spinal Cord Stimulator

Rs. 2,51,923/- + VAT Rs. 10,077 – i.e. Total of Rs. 2,82,000/-

Recurring expenditure on Beclofen/ Morphine as per rules applicable for OPD medicines

Life of battery

Life of battery is 3-5 years in case of DBS implants and stimulator depending on parameters selected for stimulation and usage and up to 7 years in case of intra-theccal infusion pumps

Cost of battery for

DBS implants

Rs. 2,40,385 +VAT Rs 9,615 i.e. Rs. 2,50,000/- (or actual whichever is less)

Intra-theccal Infusion Pump

Rs. 2,16,346 + Vat Rs. 8, 654 i.e. 2,25,000/- (or actual whichever is less)

Spinal Cord Stimulator

Rs. 1,92,346 + VAT Rs. 7,692 i.e. Rs. 2,00,000/- (or actual whichever is less)

Replacement of battery before 4 years may be permitted in exceptional cases on the basis of justification by the treating specialist and shall be considered on a case to case basis by the Department of health & Family Welfare

Guidelines

1, DBS Implant :

* The patient should be a case of idiopathic Parkinsonium resistant to conservative treatment.

* The patient shall be informed in writing by treating specialist of the cost of implant and the efficacy of the treatment

2. Intra-theccal Pumps/ Spinal Cord Stimulators

- * All conservative treatment procedures have failed and the diagnosis was confirmed
- * Treating specialist shall certify that there is reasonable chance of survival of terminally ill patients.
- * Therapeutic trials shall be conducted and recommendation should be based on positive therapeutic trials The treating specialist shall certify as such in writing.
- * The patient shall be informed in writing by treating specialist of the cost of implants and the efficacy of the treatment.

Warranty

- The company offers limited warranty of two years from date of implantation to provide free replacement in the case of battery failure or if malfunctioning of the device is reported by the concerned Physician.
- The company shall also supply all the implants with not more than 1/6 of the life of battery exhausted

Validity period of the Ceiling Rates

- These prices shall remain in force for a period of one year from the date of issue of this Office memorandum subject to the condition that any fall in prices in future in these products, the company would pass on the benefit to the CGHS beneficiary/ CS (MA) Rules beneficiary and the company shall charge the CGHS beneficiaries/ beneficiaries covered under CS (MA) Rules at lower rates.
- The company M/s India Meditronic has claimed that the DBS implant, SynchroMed intrathecal pump and Spinal Cord Stimulator are proprietary items and has certified that the rates offered to CGHS are lowest and the company has not supplied to any other individual or organization at price lower than those quoted to CGHS. In case of any change in the status of the ceiling rate, conditions and proprietary status of the firm will then be reviewed by CGHS.

The Office Memorandum is issued with the concurrence of Finance Division vide Dy. No. 3001 dated the 21st November 2008.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -10 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi - 100 108, O M No. F No. Rec 1-2004/JD(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 10. 12. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment- Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], 4th September 2008 [Medical-04], and 1st December 2008 [Medical-08], issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the name of one more private diagnostic centre is added to the list of diagnostic centres empanelled under CGHS, Delhi as in **Annexure B**, under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

ANNEXURE - B

After the existing entry No. 65, in the list of diagnostic centres empanelled under CGHS Delhi, the name of the following diagnostic centre may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|--|
| 66 | Clinical Diagnostic Centre, 69, Hargovind Enclave, Karkardooma, Delhi - 110 092 | Diagnostic Purposes [Laboratory, CT, USG/ Colour Doppler. And X-Ray] |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -11 | Government of India, Ministry of Health & Family Welfare, Nirman Bhawan, New Delhi, O M No. S.11012/1/98-CGHS (P) dated 10. 12. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Revision of income limit for dependency for the purpose of providing Central Government Health Scheme (CGHS) coverage to family members of the CGHS covered employees subsequent to implementation of recommendations of Sixth Central Pay Commission - regarding | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to say that subsequent to the implementation of the recommendations of the 5th CPC the income limit for dependency for the purpose of extending CGHS coverage to "family" members of the CGHS covered Central Government employees was enhanced to Rs. 1500/- per month.

2. With the implementation of the recommendations of the 6th Central Pay Commission, the issue of revision of income limit for dependency for the purpose of extending CGHS coverage to family members of the CGHS covered Central Government employees and pensioner CGHS beneficiaries was under consideration keeping in view the amount of minimum pension/ family pension fixed by the 6th Central Pay Commission.

3. On the basis of the recommendations of the 6th CPC, the Department of Pension and Pensioners' Welfare under para 5.5 of their Om No. 38/37/08-P&PW (A) dated 2.9. 2008, has fixed the amount of minimum pension as Rs. 3,500/- per month and under para 8.1 of this OM the amount of family pension has been fixed as 30% of the basic pay in all cases shall be subject to a minimum of Rs. 3500/- per month and maximum of 30% of the highest pay in the Government. The DoP& PW at para 8.5 of the same OM has decided that dependency criteria for the purpose of family pension shall be the minimum family pension along with dearness relief thereon.

4. It has been decided in consultation with the Department of Expenditure, to revise the income limit for the purpose of providing coverage to family members of the CGHS covered Central Government employees to Rs. 3500/- plus the amount of dearness relief on basic pension of Rs. 3500/- as on the date of consideration.

5. As such, all the orders relating to the CGHS Rules stand amended to the extent that the income limit for Rs. 1500/- per month from all sources including pension/ and family pension stands amended to an income limit of Rs. 3500/- plus amount of the dearness relief on the basic pension of Rs. 3500/- as on the date of consideration. The amount of dearness relief, as indicated in the income limit stands for the amount of dearness relief drawn by a pensioner/ family pensioner on the date of consideration and not the amount of dearness relief due on the date of consideration.

6. The income limit for dependency of "Rs. 3500/- plus amount of the dearness relief on the basic pension of Rs. 3500/- as on the date of consideration", shall also be applicable for the cases covered under CS (MA) Rules, 1944, for the purpose of examining eligibility of family members of the Central Government employee for medical facilities under the Rules.

7. The order shall be effective from 1st January 2009.

8. This issues with the concurrence of the Department of Expenditure vide their Dy. No. 566/EV/2008 dated 4. 11. 2008.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -12 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi - 100 108, O M No. F No. Rec 1-2004/ JD(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 12. 12. 2008, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment- Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], 4th September 2008 [Medical-04], 1st December 2008 [Medical-08], and 10th December 2008 [Medical-10], issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the name of one more private hospital is added to the list of hospitals empanelled under CGHS, Delhi under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

After the existing entry No.100, in the list of hospitals empanelled under CGHS Delhi, the name of the following hospital may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|----------------------------------|
| 101 | Sharda Hospital, Plot No. 32,-34, Knowledge Park III, Greater NOIDA | Multi-speciality General Purpose |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -13 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi – 100 108, O M No. F No. Rec 1-2004/ JD(Gr.)/ CGHS/ Delhi/ CGHS (P)(2), dated 05. 01. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment– Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], 4th September 2008 [Medical-04], 1st December 2008 [Medical-08], 10th December 2008 [Medical-10], and 12th December 2008 [Medical-12], issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the name of two more private hospitals are added to the list of hospitals empanelled under CGHS, Delhi under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

After the existing entry No.101, in the list of hospitals empanelled under CGHS Delhi, the names of the following hospitals may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|---|
| 102 | Yashoda Super Speciality Hospital & Heart Institute, Nehru Nagar, Ghaziabad [Tel : 95120-2750001] | Cardiology, Cardiovascular and Cardiothoracic Surgery |
| 103 | Meenakshi Hospital, B-12/13, Kausharnbhi, Ghaziabad, - 201 010 | Endoscopic/ Laproscopic Surgery |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -14 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi – 100 108, O M No. F No. Rec 1-2004/ JD(Gr.)/ CGHS/ Delhi/ CGHS (P), dated 18. 01. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment– Removal of the names of Batra Hospital & Medical Research Centre, New Delhi and Metro Multispeciality Hospital, Sector 1, NOIDA, from the list of hospitals empanelled under CGHS, Delhi. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], 4th September 2008 [Medical-03], 1st December 2008 [Medical-06], 10th December 2008 [Medical-08], and 12th December 2008 [Medical-10], and 5th January 2009 [Medical -13] issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that the names of the following two hospitals empanelled under CGHS, Delhi, are being removed from the list of hospitals empanelled under CGHS, Delhi

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|--|
| 11 | Metro Multi Speciality Hospital, Sector 11, Noida. | General purpose and Specialized purpose for Renal Transplantation, Haemodialysis, Laproscopic Surgery, IOL Implant, and Joint Replacement |
| 37 | Batra Hospital & Medical Research Centre, I Tughlakabad Institutional Area, Mehrauli Badarpur Road, New Delhi - 110 062 | General Purpose and Specialised Purpose for Cardiological Investigations, Cardio-thoracic Surgery, Renal Transplantation, Haemodialysis, IOL Implant, Laparoscopic Surgery, Joint Replacement and Radiotherapy |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -15 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi – 100 108, O M No. F No. Rec 1-2004/JD(Gr.)/ CGHS/ Delhi/ CGHS (P)(2) , dated 06. 02. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment– Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], 4th September 2008 [Medical-03], 1st December 2008 [Medical-06], 10th December 2008 [Medical-08], and 12th December 2008 [Medical-10], 5th January 2009 [Medical 13], and No. S.11011/52/2007-CGHS Desk. II, dated 23rd January, 2009 [NA] issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the name of three more private hospitals and one diagnostic centre are added to the list of hospitals and diagnostic centres empanelled under CGHS, Delhi under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

After the existing entry No.103, in the list of hospitals empanelled under CGHS Delhi, the names of the following hospitals may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|--|---|
| 104 | Malik Radix Health Care, C-218, Nirman Vihar, Vikas Marg, Delhi – 110 092. | Endoscopic/ Laproscopic Surgery |
| 105 | Surbhi Hospital, Morna, Sector 35, NOIDA 201 301 | Multi-speciality General Purpose |
| 106 | Prayag Hospital & Research Centre Pvt Ltd., Sector 41, NOLDA 201 301. | Multi-speciality General Purpose and Specialised Purpose in Neurology and Neurosurgery, Urology/ Urosurgery, Orthopaedic Surgery including Arthroscopic Surgery and Joint Replacement, Medical Oncology, Endoscopic Surgery |

After the existing entry No. 66, in the list of diagnostic centres empanelled under CGHS Delhi, the name of the following diagnostic centre may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|---------------------------------|
| 67 | Srivastava MRI & Imaging Centre, Shop Nos. 1, 2, 3 & 6, Purvanchal Plaza, Pocket B, LSC Market, Mayur Vihar Phase 2, Delhi – 110 091. | MRI and USG/ Colour Doppler |

2. The undersigned is also directed to invite reference to Office Memorandum F. No. S.11011/52/2007-CGHS Desk. II, dated 23rd January, 2009 [NA] vide which the names of the following diagnostic centres were changed as M/s Piramal Diagnostic Services Pvt. Ltd., New Delhi and that the names have officially been changed in respect of five diagnostic centres empanelled under CGHS. The changes involved two diagnostic centres empanelled under CGHS. It has been brought to the notice of the Ministry of Health & Family Welfare that some typographical error has crept into the Office Memorandum of 23rd January, 2009, referred to above. The entries mentioned in the Office Memorandum were as below:

| | | |
|----|--|--|
| 1. | Delhi MRI Scan Centre, M-2, Hauz Khas, New Delhi – 110 016. <i>[Now known as: Piramal Diagnostic Services – Delhi MRI, M2, Hauz Khas, Aurobindo Marg, Near ABN Amra Bank, New Delhi – 110 016.]</i> | MRI, X-ray, Bone Densitometry, USG/ Colour Doppler |
| 2. | Delhi MRI Scan Centre, M-2, Hauz Khas, New Delhi – 110 016. <i>[Now known as: Piramal Diagnostic Services – Delhi MRI, M2, Hauz Khas, Aurobindo Marg, Near ABN Amra Bank, New Delhi – 110 016.]</i> | MRI, X-ray, Bone Densitometry, USG/ Colour Doppler |

The two entries may be amended to read as follows:

| | | |
|----|---|--|
| 1. | Delhi MRI & CT Scan Centre, Ashlok Hospital, 25A, Block AB, Community Centre, Safdarjung Enclave, New Delhi – 110 016. [Now known as: Piramal Diagnostic Services – Delhi MRI & CT Aashlok Hospital, 25, A Block AB, Community Centre Safdarjung Enclave, New Delhi – 110 029.] | CT Scan and Ultrasonography only |
| 2. | Delhi MRI Scan Centre, M-2, Hauz Khas, New Delhi – 110 016. [Now known as: Piramal Diagnostic Services – Delhi MRI, M2, Hauz Khas, Aurobindo Marg, Near ABN Amra Bank, New Delhi – 110 016.] | MRI, X-ray, Bone Densitometry, USG/ Colour Doppler |

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -16 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi – 100 108, O M No. F No. Rec 1-2004/JD(Gr.)/ CGHS/ Delhi/ CGHS (P)(2), dated 17. 02. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment– Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38], 29th May 2007 [M-41], 30th May, 2007 [M-42], 13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November 2007 [Med-03], 9th April 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June., 2008 [NA], 1st July, 2008 [NA], 15th July 2008 [NA], 16th July 2008 [NA], 4th September 2008 [Medical-03], 1st December 2008 [Medical-06], 10th December 2008 [Medical-08], and 12th December 2008 [Medical-10], 5th January 2009 [Medical-13], and 6th February 2009 [Medical-15] issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanelment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the name of three more private hospitals and one diagnostic centre are added to the list of hospitals and diagnostic centres empanelled under CGHS, Delhi under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

After the existing entry No. 106, in the list of hospitals empanelled under CGHS Delhi, the names of the following hospitals may be added:

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|--|
| 107 | SMH Curie Cancer Centre [Shanti Mukund Hospital], Vikas Marg, Karkardooma, Delhi. | Comprehensive Oncology including Surgery, Chemotherapy and Radiotherapy. |
| 108 | Max Hospital, HBT Twin Tower, Wazirpur Institutional Area, Pitam Pura, New Delhi | Orthopaedic Surgery including Arthroscopic Surgery and Joint Replacement |
| 109 | Brahm Shakti Hospital & Research Centre, Budh Vihar, Delhi. | Multi-speciality General Purpose |

After the existing entry No. 67, in the list of diagnostic centres empanelled under CGHS, Delhi, the name of the following diagnostic centre may be added:

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|--|---|
| 68 | Dr. P Bhasin Pathlabs Pvt Ltd, S-13, Greater Kailash Part 1, New Delhi | Diagnostic Centre [USG/ Colour Doppler, Bone Densitometry, Echocardiography, TMT, PFT and Uroflowmetry] |

EDITOR'S NOTE: This Diagnostic Centre numbered 68 was also listed at Sr. No. 15 of Diagnostic Centres empanelled by the CGHS vide Office Memorandum of 7th December, 2006 [M-31], but there it was shown as approved only for "Diagnostic Procedures in Laboratory Services"

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -17 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, Maulana Azad Road, New Delhi – 100 108, O M No. S.11011/4/2003-CGHS(P) dated 19. 02. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Payment/ Repayment of medical expenses to beneficiaries under CGHS and Central Services (Medical Attendance) Rules, 1944, from two sources – From insurance agencies and from the CGHS or from the Ministry/ Department | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memorandum of even number dated the 8th January, 2004 [61], and 27th February, 2004 [62], vide which beneficiaries under CGHS and Central Services (Medical Attendance) Rules, 1944 (who have subscribed to mediclaim policy from an insurance agency) were permitted to claim reimbursement of the medical expenditure from both the sources viz. the Insurance agency and CGHS and Ministries/ Departments (as the case may be). This benefit was subject to the condition that the beneficiary will first claim reimbursement from the insurance agency and then from the CGHS or Ministry/ Department concerned. The reimbursement from the two sources was, however, not to exceed the package rates prescribed under the CGHS for the particular treatment.

2. This Ministry had received representations from beneficiaries requesting for the removal of the monetary 'cap' mentioned above. The main argument advanced in these representations was that this offered the beneficiary an incentive to subscribe to the mediclaim policy for reimbursement only up to the package rates as it did not provide them with any additional benefit because they would in any case get the same amount from the CGHS without subscribing to the mediclaim policy. Chairman Insurance Regulatory & Development Authority (IRDA) also wrote to Secretary (H & FW) requesting appropriate revisions in CGHS Rules so that any expenditure incurred by policy holders which was inadmissible as per the CGHS rules but admissible under mediclaim insurance policy could be suitably claimed from the insurer.

3. The above have been carefully considered in this Ministry and it has been decided with the approval of the Competent Authority that beneficiaries who have subscribed to Mediclaim Insurance Policies in addition to availing CGHS facilities/ Central Services (Medical Attendance) Rule, 1944, may be allowed to claim reimbursement from both the sources subject to the condition that the reimbursement from such sources should not exceed the total expenditure incurred by the beneficiary on the treatment. The beneficiary will make the first claim to the insurance company and the second claim to the CGHS or the Ministry/ Department concerned. The mediclaim against the original vouchers/ bills would be raised by the beneficiary first on the insurance company, which would issue a certificate indicating that the amount reimbursed to the Director, CGHS or Head of the Ministry/ Department concerned. The insurance company concerned will retain the original vouchers/ bills in such cases. The beneficiary would then prefer his/ her medical claim along with the photocopies of vouchers/ bills duly certified, in ink, along with stamp of the insurance company on the reverse of the vouchers/ bills to the concerned organization. Reimbursement from CGHS or other departmental sources will be restricted only to the admissible amount as per approved package rates subject to the condition that the total amount reimbursed by the two organizations does not exceed the total expenditure incurred by the beneficiary.

4. These instructions take effect from the date of issue and past cases are not to be re-opened, and supercede earlier instructions on the subject (cited above)

5. This issues with the concurrence of IFD, Ministry of Health & Family Welfare, vide their I.D. Note. No. 542/AS&FA/2009 dated 4th February, 2009. .

| Sr. No. | Reference Number & Subject | Remarks |
|-------------|---|--|
| Medical -18 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, CGHS (P) Division, Nirman Bhawan, Maulana Azad Road, New Delhi, O M No. 4-18/2005-C&P[Vol.1 Pt (1)] dated 12.02.2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Relaxation of procedures to be followed for considering requests for medical reimbursement | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to state that under the extant instructions, a CGHS card holder, who wishes to apply for reimbursement of the expenditure incurred by him/ her on medical treatment of either self or his/ her dependent family members, the present reimbursement procedure needs verification of bills and issue of essentiality certificate by the treating doctor, and the Medical Superintendent of the hospital. The process of verification of bills and issue of essentiality certificates are time consuming with the doctor at times being busy or being away from office for whatever reason. This necessitates repeated visits to the hospital for getting the verification done and essentiality certificates obtained. Representations have been received in the Ministry of Health & Family Welfare requesting for doing away with the two requirements and for the Ministries/ Authorities concerned to verify and check the authenticity of the claims on the basis of the prescription slip and the diagnostic report submitted by the Government servant/ pensioner. In the event of any doubt, the concerned Ministry/ Authority can always get verification done from the hospital concerned.

2. The undersigned is also directed to state that CGHS guidelines currently provide for relaxation of guidelines to cover full reimbursement in individual cases depending upon merits of each case. In the case of Hon'ble Members of Parliament, the powers to relax these guidelines have been delegated to the Lok Sabha Secretariat and Rajya Sabha Secretariat respectively and

in the case of Hon'ble Chief Justice of Supreme Court and Judges of the Supreme Court to the Secretary General of the Supreme Court.

3. In order to reduce the burden on the specialists in individual cases of medical reimbursement claim, it has been decided with the approval of the competent authority as follows:

(1) It has now been decided to do away with the procedure of verification of bills and issue of essentiality certificate by the treating doctor, and the Medical Superintendent of the hospital of the hospital. Ministries/ Authorities concerned may verify and check the authenticity of the claims on the basis of the prescription slip and the diagnostic report submitted by the Government servant/ pensioner. In the event of any doubt, the concerned Ministry/ Authority can always get verification done from the hospital concerned. Modified reimbursement claim form, along with checklist is annexed.

(2) All cases involving requests for relaxation of rules for reimbursement of full expenditure will henceforth be referred to a Technical Standing Committee, to be chaired by the DGHS/ Addl. DGHS and consist of Director (CGHS) and subject matter specialists. If the Technical Standing Committee recommends the relaxation of rules for permitting full reimbursement of expenditure incurred by the beneficiary, the full reimbursement may be allowed by the Secretary (Health & Family Welfare) in consultation with IFD. A checklist for consideration of requests for reimbursement in excess of approved rates may include:

- (a) The treatment was obtained in a private non-empanelled hospital under emergency and the patient was admitted by others when the beneficiary was unconscious or severely incapacitated and was hospitalized for a prolonged period;
- (b) The treatment was obtained in a private non-empanelled hospital under emergency and was hospitalized for prolonged period for treatment of Head Injury, Coma, Septicemia, Multi-organ failure, etc.;
- (c) The treatment was obtained in a private non-empanelled hospital under emergency for treatment of advanced malignancy;
- (d) The patient was taken under emergency in higher type of accommodation as rooms as per his/ her entitlement are not available during that period;
- (e) The treatment was taken in higher type of accommodation under specific conditions for isolation of patients to avoid contacting infections;
- (f) The treatment was obtained in a private non-empanelled hospital under emergency when there is a strike in Government hospitals;
- (g) The treatment was obtained in a private non-empanelled hospital under emergency, while on official tour to non-CGHS covered area;
- (h) Approval of air-fair with or without attendant on the advice of the treating doctor for treatment in another city even though he is not eligible for air travel/ treatment facilities are available in city of residence;
- (i) Any other specific circumstances.

4. The Office memorandum is issued with the concurrence of IFD vide Dy. No. 908/AS&FA/2009 dated the 20th February, 2009.

CENTRAL GOVERNMENT HEALTH SCHEME

MODIFIED CHECKLIST FOR REIMBURSEMENT OF MEDICAL CLAIMS

1. CGHS Token No. and place of issue :
 2. Validity of CGHS Card (For pensioners) & Entitlement : from.....to.....
 Pvt. /Semi Pvt. / General
3. Full name of Card Holder (Block Letters) :
 4. Status (Govt. Servant/Pensioner/Other) :
5. The following documents are submitted [Please tick (-) the relevant column] :
- (a) Medical 2004 Form : Yes/No
 (b) Photocopy of CGHS Card : Yes/No
 (c) No. of Original Bills :
 (d) Copy of the discharge summary : Yes/No
 (e) Copy of Referral by Specialist/ CMO : Yes/No
 (f) Whether the hospital has given breakup for lab investigations : Yes/No
 (g) Original papers have been lost. The following documents are submitted -
 I. Photocopies of claim papers : Yes/No
 II. Affidavit on Stamp Paper : Yes/No
 (h) In case of death of cardholder the following documents are submitted -
 I. Affidavit on Stamp Paper by claimant : Yes/No
 II. No Objection from other Legal Heirs on Stamp Papers : Yes/No
 III. Copy of Death Certificate : Yes/No

Dated:.....

Signature of CGHS Card Holder
 Tel. No. (O)
 (R)
 e-mail address

Name of the Bank.....Branch.....SB A/C No.....

Branch MICR Code.....Tel. No. of Bank Branch.....

CENTRAL GOVERNMENT HEALTH SCHEME

MEDICAL 2004 FORM FOR REIMBURSEMENT OF
MEDICAL CLAIMS OF CGHS BENEFICIARIES

Computer No.

(To be filled by the claimant)

1. CGHS Token No. and Place of issue :
2. Validity of CGHS Token Card & Entitlement : from.....to.....
Pvt. /Semi Pvt. / General
3. Full name of Card Holder (Block Letters) :
4. Full Address:
5. Telephone No. (O).....(R).....
6. E-mail Address, if any
7. Name of the Bank.....Branch.....SB A/C No.
Branch MICR CODE.....Tel. No. of Bank Branch
8. Name of the Patient & Relationship with the cardholder
9. Status tick (-/) (Govt. Servant/ Pensioner/ Serving employee or pensioner of Autonomous Body/ Member of Parliament/ Ex- M.P./ Ex Governor/ Former Judge of Supreme Court/ Former Judge of High Court/ Freedom Fighter/ Legal Heirs/ Others)
10. Basic Pay/ Basic Pension
11. Name of the Hospital with Address:
(a) OPD treatment and investigations.
(b) Indoor Treatment.
12. Date of admission.....Date of discharge.....(In case of Indoor Treatment only)
13. Total amount claimed
(a) OPD treatment.
(b) Indoor Treatment.
14. Details of Referral
15. Details of Medical advance, if any

DECLARATION

I hereby declare that the statements made in the application are true to the best of my knowledge and belief and the person for whom medical expenses were incurred is wholly dependent on me. I am a CGHS beneficiary and the CGHS Card was valid at the time of treatment. I agree for the reimbursement as is admissible under the rules.

Dated:.....

Signature of the CGHS Card Holder

NOTE: Misuse of CGHS Facilities is a criminal offence Suitable action including cancellation of CGHS Card shall be taken in case of willful suppression of facts or submission of false statements. Suitable disciplinary action shall be taken in case of serving employees.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -19 | Copy of Government of India, Ministry of Health & Family Welfare, O M No. 5-6/2007/CGHS /C&P/ CGHS(P) dated 24. 02. 2009. Laboratory facilities set up by M/s Hindustan Latex Limited at CGHS Dispensary , Ramakrishna Puram (No: 57) located at Ramakrishna Puram Sector XII, New Delhi – Referral to the | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to this Ministry's Office Memoranda of even number dated the 7th February, 2008 [NA] and 27th March, 2008 [NA], on the above subject vide which the setting up of Hindlabs, a state of the art diagnostic laboratory by M/s Hindustan Latex Limited was conveyed. The decision of the Ministry of Health & Family Welfare was also conveyed that all CGHS beneficiaries (registered with CGHS dispensaries in Ramakrishna Puram Sectors II, III, IV, VI, VII and XII; Jawaharlal Nehru University; Moti Bagh; Nanak Pura; three dispensaries in Sarojini Nagar; Netaji Nagar; Nauroji Nagar and Laxmibai Nagar) shall have to be referred only to that laboratory. As there were some initial teething problems in the Hindlabs, it was decided to keep in abeyance the implementation of the instructions contained in the Office Memorandum of 7th February, 2008 [NA], referred to above until further orders.

2. It has been brought to the notice of the Ministry of Health & Family Welfare that Hindlabs has now overcome the problems faced by it initially and is in a position to provide one window quality diagnostic services to the beneficiaries. The undersigned is, therefore, directed to convey the following decisions of the Ministry of Health & Family Welfare:

(i) As Hindlabs has been set up by the CGHS in collaboration with M/s. Hindustan Latex Limited, it will be deemed to be empanelled under CGHS, and beneficiaries from any dispensary in Delhi may also get tests done at Hindlabs for diagnostic purposes;

(ii) Hindlabs will not charge any money from pensioner CGHS beneficiaries for the diagnostic tests to be carried out by it and raise bills on Additional Director (Hqrs), CGHS, Bikaner House, Shahjahan Road, New Delhi 110 011, in a periodical cycle; and

(iii) A CGHS beneficiary can directly go to Hindlabs for diagnostic tests, if he / she has been prescribed the same by a Government specialist. For this, the beneficiary has to submit a copy of the prescription by the specialist and a copy of his / her valid CGHS card.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -20 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi, O M No-4-24/96-C&P/CGHS/CGHS(P) dated 25. 02. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Age limit for dependant children of Government servants and pensioners for availing medical facilities under CGHS and Central Services (MA) Rules, 1944- Regarding | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to refer to this Ministry's OM of even number dated 31. 05. 2007 [M-43] on the subject noted above and to say that the issue of inclusion of name of married son, aged below 25 years, in the CGHS Card of CGHS beneficiaries and beneficiaries under CS (MA) Rules, 1944, came up for consideration of this Ministry. The matter has been examined in consultation with the Department of Personnel & Training and it is clarified that the definition of "family" for the purpose of extending medical facilities under CGHS/ CS (MA) Rules is primarily based on the definition of "family" as indicated in the CCS (Pension) Rules, 1972, CCS (LIC) Rules etc., which does not include a married son even when below 25 years of age in the definition of "family" of the Central Government employee/ pensioner.

It is therefore, clarified that, son of the Central Government employee who is a (beneficiary under either CGHS or CS (MA) Rules, 1944) / pensioner CGHS beneficiaries who is married, cannot be included in the definition of "family" for the purpose of extending medical facilities under CGHS/ CS (MA) Rules, even when he is below 25 years of age and dependent upon the Central Government employee/ pensioner.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -21 | Government of India, Office of the Addl. Director, [HQ], Central Government Health Scheme, 9, Bikaner House, New Delhi, Letter No. F. No. 6-12/2008-CGHS/Gr. Cell/617, dated 08. 04. 2009, addressed to The Medical Superintendent, Narendra Mohan Hospital, Mohan Nagar, Ghaziabad (UP), signed by Dr. S Bhattacharjee , Additional Director (CGHS HQ) Referral of CGHS beneficiaries to Narendra Mohan Hospital, Ghaziabad – reg. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

Reference is invited to this Office letter of even number dated 14th October, 2008 [Medical – 05], by which referred of CGHS beneficiaries to Narendra Mohan Hospital, Ghaziabad, was stopped.

After examining of the representation of the hospital and other records, it has now been decided by the Competent Authority to revoke the stoppage of referral to Narendra Mohan Hospital, Ghaziabad, with immediate effect.

In other words, CGHS beneficiaries can now be referred to Narendra Mohan Hospital, Ghaziabad, for treatment as earlier.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -22 | Office of the Director, C.G.H.S., Directorate General of Health Services, 545-A, Nirman Bhawan, Maulana Azad Road, New Delhi – 11. Order No Misc. 4006 2009/ CGHS/ Comp. Cell, dated 12. 05. 2009, signed by Dr. D K Bohra, Addl. DDG (HQ) NABL Certification of Diagnostic Centres empanelled under C.G.H.S. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

With reference to the above, the undersigned is directed to state that it has now been decided that NABL Certification would be mandatory eligibility condition for Diagnostic Centres for empanelment under CGHS. The Diagnostic Centres already empanelled under CGHS and which do not have NABL Certification shall apply for such Certification within two months of receipt of this communication, if they have not applied for the same till date.

- *In Delhi Diagnostic Centres empanelled under CGHS are either NABL Certified or applied for such certification.
- *Any Diagnostic Centre, which has not applied for NABL Accreditation shall be de-empanelled under CGHS.
- *Empanelled Hospitals having inhouse Laboratories shall also apply for NABL Certification.
- *Those Diagnostic Centres which have already applied for NABL Certification shall inform the office of the undersigned.
- *The Diagnostic Centres having applied for Certification should qualify and obtain certificate from NABL within a period of one year, failing which they shall be de-empanelled under CGHS.

This issues with the approval of the competent authority.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|---|
| Medical -23 | Government of India, Ministry of Health & Family Welfare, Nirman Bhawan, New Delhi, OM No. F. No. 37-6/02-03/ CGHS/MSD, dated 123. 05. 2009, signed by Jai Prakash, Under Secretary to the Government of India Issue of Analogue Insulin (Vial/Cartridge) to CGHS beneficiaries. | SOURCE: Downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to this Ministry's OM of even number dated 22. 10. 2008 on the subject mentioned above, and to state that in partial modification of the above referred Office Memorandum, the Ministry of Health & Family Welfare has decided that the following types of Inj. Insulin (Analogue) will be procured centrally and supplied to CGHS dispensaries for issue to the beneficiaries:

1. Inj. Hualog cartridges
2. Inj. Humalgmix 25/75 cartridges
3. Inj. Humalgmix 50/50 cartridges

CMO I/C will keep the record of such beneficiaries at dispensary level.

2. As a policy, CGHS does not provide disposable syringes & needles to the beneficiaries. Similarly, the beneficiaries will bear the cost of the pen from their own sources for utilizing the Inj. Insulin (Analogue) in cartridge form.

These orders will come into effect from the date of issue of this Office Memorandum.

This issues with IFD concurrence No. 4251 dated 27/3/09.

| Sr. No. | Reference Number & Subject | Remarks |
|-------------|---|--|
| Medical -24 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, New Delhi – 100 011, O M No. 11-1/2004-C & P/Pt.-XII, dated 15. 05. 2009, signed by Jai Prakash Under Secretary to the Govt. of India (Tel: 23061881). Clarification regarding Plastic Cards for Individual CGHS Beneficiaries . | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

With reference to the above referred matter, the undersigned is directed to state that Individual Plastic Cards are being issued to all CGHS Beneficiaries in Delhi and NCRT in place of Family Cards. In this regard, this office has been receiving several queries seeking clarification and therefore, this Ministry has decided to issue an Office Memorandum clarifying the issues.

It is clarified that:

- 1). Data of CGHS beneficiaries is available on Data base or Serves located at NIC Headquarters.
- 2). The Individual Plastic Cards are only Identity Cards bearing a unique number for each beneficiary. It is only an identity card for accessing the Data on Computer Data Base. Address of beneficiary, validity of CGHS facilities, name of Wellness Centre are available in Data Base.
- 3). The Plastic Cards are issued for a maximum period of Five Years or till entitled for CGHS facilities, whichever may be earlier. In case of CGHS pensioners who have paid for 'Rest of Life' facilities, a new Plastic Card shall be issued after 'Five Years' without any additional contribution. Similarly, New Plastic Cards shall be issued to serving employees after 'Five Years'.
- 4). The Plastic Cards bear a colour strip on the top side of the Card. The colour of the strip is Blue in case of Serving employees, Green in case of Pensioner Beneficiaries, Freedom Fighters etc., Yellow in case of Autonomous Bodies and others and Red in case of Members of Parliament.
- 5). As of now, computerization is in process in cities other than Delhi. After computerization of all CGHS-covered Cities, the Plastic Card will be valid all over India and there is no need for obtaining temporary attachment while on visit to any other CGHS City.
- 6). In case of Pensioners applying for CGHS Cards for the first time in Delhi, an acknowledgement slip is issued immediately on submission of complete Set of Documents and prescribed subscription fee. The Print-out Slip is valid for availing CGHS facilities till Plastic Cards are issued. Individual Plastic Cards are issued within '7' Days after receiving the same from agency appointed for preparation of Plastic Cards. The acknowledgement slips are valid for availing treatment from empanelled hospitals with permission/ under emergency.
- 7). Beneficiaries/ Empanelled Hospitals/Diagnostic Centres can verify the Data at <http://cghs.nic.in/welcome.jsp>.
- 8). Permission for treatment shall be granted on the basis of Ben ID (Beneficiary Identity Number) printed on Plastic Cards. While granting permission, Data like the name of the serving employee/ Pensioner and the relationship of individual family member etc., can be verified at <http://cghs.nic.in/welcome.jsp>. Similarly, Hospitals/ Diagnostic Centres can verify Data at <http://cghs.nic.in/welcome.jsp> in case a beneficiary is admitted under emergency.
- 9). At the time of submission of Medical Claim, the Ben ID Number of Serving employee or Pensioner shall be entered on Modified Medical 2004 form as he/ she shall be the claimant. Copy of Plastic Card of Patient shall be enclosed along with the Medical Reimbursement Claim.
- 10). In case of loss of Plastic Card, Serving employee/ Pensioner shall apply to CGHS(HQ) for Duplicate Plastic Card along with IPO for Rs. 50/-, a copy of the FIR lodged with police, a copy of the old card. A 'Print-out Slip' shall be issued immediately for availing CGHS facilities and CGHS Card after '7 Days'. In case of serving employees, the application shall be forwarded by his or her department.
- 11). In case of change in residential address and shifting from one dispensary to another, CMO I/C of Dispensary shall make modifications in Data Base and transfer the cards to the new Dispensary. CMO I/c of new dispensary shall accept transfer of Card and Data shall be transferred to new dispensary.
- 12). In case of superannuation/ transfer to another city, serving employees get the card deleted from Data Base at Dispensary and obtain a certificate from CMO I/C and surrender the card to his/ her department. Department shall issue a surrender certificate to the employee for getting a new Card at another city (if covered under CGHS) or for obtaining a pensioner CGHS Card in case of superannuation.
- 13). It is compulsory to bring original Plastic Card every time for availing CGHS benefits.
- 14). All beneficiaries entitled for semi-private ward in empanelled private hospitals are eligible for Nursing Home facilities in Govt. Hospitals and those entitled for Private Ward are eligible for Direct Consultation with specialists in Govt. Hospitals. Similarly beneficiaries entitled for Private Ward in empanelled private hospitals are also eligible for Private ward facilities at A.L.I.M.S., New Delhi No separate endorsement is required for these criteria.

| Sr. No. | Reference Number & Subject | Remarks |
|-------------|---|--|
| Medical -25 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, CGHS (P) Division, Nirman Bhawan, Maulana Azad Road, New Delhi O M No. F No.4-29/CGHS/C&P, dated 18. 05. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India Emergency services of CGHS Wellness Centres (Previously known as CGHS Dispensaries). | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to state that CGHS has been providing emergency medical services to its beneficiaries by operating afternoon and night shifts at selected wellness centres, beyond the normal working hours of the wellness centres. It has been observed that attendance in the emergency shifts in the afternoon and night shifts has been very low. Additionally, CGHS is faced with shortage of manpower for running its welfare centres during normal shift/ working hours.

2. The question as to whether the emergency medical services should be continued by the CGHS has been under consideration of the Ministry of Health & Family Welfare, especially in view of the fact that in emergency, CGHS beneficiaries can reach any hospital for treatment. It was felt that there was no apparent justification for the continuation of emergency services in the afternoon and night shifts at the cost of OPD services during normal working hours. In supersession of all existing instructions in the matter, it has been decided to discontinue emergency services in the afternoon and night shifts at all CGHS welfare centres with immediate effect in all CGHS covered cities.
3. All additional Directors/ Joint Directors are requested to utilize the manpower that will become available as a result of stoppage of emergency services, in wellness centres etc. wherever shortage exists.
4. The emergency services being provided at the following wellness centres in Delhi will, however, continue to function till further orders:
 1. North Avenue, New Delhi
 2. South Avenue, New Delhi
 3. Telegraph Lane, New Delhi
 4. Dr. Zakir Husain Road, New Delhi
 5. Timarpur Hospital cum Welfare Centre, New Delhi
 6. Kingsway Camp Hospital cum Welfare Centre, New Delhi

| Sr. No. | Reference Number & Subject | Remarks |
|-------------|---|---|
| Medical -26 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, Maulana Azad Road, New Delhi - 110 108, O M No.S.11011/2/2008-CGHS (P), dated 20. 05. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Revision of rates of subscription under CGHS due to revision of Pay and Allowances of Central Government employees and revision of pension/ family pension on account of implementation of the Sixth Central Pay Commission | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare. CSIR Endorsement:: Letter No. 5-1(66/2009-PD, dated 31. 07. 2009, signed by O P Dhawan, Under Secretary. |

The undersigned is directed to invite reference to the Office Memorandum No. S-11011/18/99-Desk.1/CGHS(P) dated 3rd July 2000 [29], and S-11011/6/98-CGS (P) dated 27th May 1998 [NR - Superseded by 29], 20th September 2008 [38] and 28th October 2005 [M-21 - in supersession of 38] issued by the Ministry of Health & Family Welfare, vide which orders were issued revising the rates of monthly subscription for availing CGHS facility, as also the entitlement for free diet, entitlement of accommodation in private empanelled hospitals under CGHS, etc. On the basis of the recommendations of the Sixth Central Pay Commission, pay and allowances of serving employees and pension of civil pensioners. family pensioners have been revised by the concerned authorities.

2. The upward revision of pay/ pension of doctors and other staff in the CGHS has increased the cost of operating Central Government Health Scheme. *It has therefore been decided to revise the rates of subscriptions, to be made by employees/ pensioners, for availing benefits under the CGHS, with effect from 1st June, 2009.* It has also been decided to revise the monetary ceiling limits for various entitlements of the beneficiaries for availing CGHS facilities.
3. In supersession of all earlier instructions, the following revisions are being made, in so far as it relates to the facilities mentioned below:

(A) Monthly Contributions for availing CGHS facility:

| S. No. | Grade pay drawn by the officer | Contribution (Rupees per month) |
|--------|--|---------------------------------|
| 1. | Upto Rs. 1,650 per month | 50/- |
| 2. | Rs. 1,800/-; Rs. 1,900/-; Rs. 2,000/-;Rs. 2,400/-; and Rs. 2,800/- per month | 125 |
| 3. | Rs. 4,200/- per month | 225/- |
| 4. | Rs. 4,600/-; Rs. 4,800/-; Rs. 5,400/-; and Rs. 6,600/- per month | 325/- |
| 5. | Rs. 7,600/- and above per month | 500/- |

(B) Entitlement of wards in private hospitals empanelled under CGHS:

| S. No. | Ward Entitlement | Pay drawn in pay band |
|--------|-------------------|------------------------------|
| 1. | General Ward | Upto Rs. 13,950/- |
| 2. | Semi-Private Ward | Rs. 13,600/- to Rs. 19,530/- |
| 3. | Private Ward | Rs. 19,540/- and above |

(C) Monetary Ceiling for Free Diet:

The monetary ceiling for free diet for CGHS beneficiaries is revised to pay/ pension/ family pension of Rs. 7,450/- per month

(D) Monetary Ceiling for Free Diet for beneficiaries suffering from TB or mental disease:

The monetary ceiling for free diet for in case of beneficiaries suffering from TB or Mental disease is revised to pay/ pension/ family pension of Rs. 11,160/- per month

(E) Pay slab for determining the entitlement of Nursing Home facilities in Government/ State Government/ Municipal Hospitals:

The monetary ceiling for determining the entitlement of nursing home facilities in Central Government/ State Government/ Municipal Hospitals is revised to pay/ pension/ family pension of Rs. 13,950/- per month and above

(F) Monetary Ceiling for direct consultation with Specialists in Central Government/ State Government/ Municipal Hospitals:

The monetary ceiling for determining the entitlement for direct consultation with Specialists in Central Government/ State Government/ Municipal Hospitals is revised to pay/ pension/ family pension of Rs. 33,480/- per month and above

(G) Pay Slab for determining the entitlement of accommodation in AIIMS, New Delhi:

The revised entitlement, be revised as per the pay drawn by the officials, as given below:

| S. No. | Pay (in the pay band)/ Pension/ Family Pension drawn per month | Ward Entitlement |
|--------|--|--------------------------|
| 1. | Upto Rs. 19,530/- | General Ward |
| 2. | From Rs. 19,540/- to Rs. 25,110/- | Semi-Private Ward |
| 3. | Rs. 24,120/- and above | Private Ward/ Delux Ward |

4. It is clarified that the reference to pay in this order relates to the pay drawn in the pay band.
5. Pensioners have the option to get their CGHS pensioner card made by either making CGHS contribution on an annual basis (twelve months) or by making contribution for 10 (ten) years [120 (one hundred and twenty) months] for getting a pensioner CGHS card with life-time validity. It is certified that
 - (i) Contributions to be made by pensioners/ family pensioners would be the amount that they were subscribing at the time of retirement or at the time of death of the Government servant;
 - (ii) Pensioner beneficiaries, who have already obtained CGHS card with life-time validity by paying a lump sum amount equivalent to 10 years' contribution, will not be required to pay any additional amount as a result of the revision of the rates of contribution for availing CGHS facility;
 - (iii) Entitlement of pensioners/ family pensioners who have already deposited their contribution for life time CGHS facility, will not be changed;
 - (iv) Pensioners/ family pensioners who are contributing to the CGHS on an annual basis and wish to continue to avail CGHS benefits will have to contribute at the revised rates up to the time contribution needed to cover a period of a total of ten years from the time pensioner CGHS card was issued for the first time to them. The revised rate of contribution for the remaining period would be with reference to the grade pay that he/ she would have drawn in the post held by him/ her (at the time of his/ her retirement/ death) had he/ she continued to be in the service now but for his/ her retirement/ death; and
 - (v) Any pensioner/ family pensioner who is entitled to avail CGHS facility has not so far got his/ her pensioner CGHS card made, the rate of contribution in such cases will be with reference to the grade pay that he/ she would have drawn in the post held by him / her (at the time of his/ her retirement/ death) had he/ she continued to be in the service now but for his/ her retirement/ death.

6. This issues with the concurrence of the Department of Expenditure vide its Office Memorandum No. 18(1)/EV/2009 dated 17th April, 2009,
7. Hindi version will follow.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -27 | Ministry of Health & Family Welfare, Directorate General of Health Services, (CGHS Dsk II), Nirman Bhawan, New Delhi, O M No. S.11011/62/2006 Desk II/ (Policy File)/ CGHS (P) dated 20. 05. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India Discontinuation of the Continuous Empanelment Scheme | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

Central Government Health Scheme have been empanelling private hospitals and diagnostic centres, both in Delhi and outside, under Continuous Empanelment Scheme for quite some time. The Scheme has been under consideration for revision of guidelines. Now it has been decided to discontinue continuous empanelment scheme with immediate effect, both in Delhi and outside Delhi, till further orders

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|--|
| Medical -28 | Government of India, Office of the Director, C.G.H.S., Directorate General of Health Services, 545-A, Nirman Bhawan, Maulana Azad Road, New Delhi – 11., Order No. Misc. 4006/2009/CGHS/Comp.Cell., dated 12. 05. 2009, signed by Dr. D K Bohra, Addl. DDG (HQ) NABH Accreditation of Hospitals empanelled under CSHS | SOURCE: Copy of the original order downloaded from the Website of Ministry of Health & Family Welfare |

With reference to the above mentioned matter the undersigned is directed to state that it has now been decided that Accreditation is necessary for hospitals for empanelment under CGHS. Henceforth, only such private hospitals that have obtained entry level pre-accreditation from NABH would be eligible for empanelment under CGHS. Further, the hospitals would have to obtain full accreditation from NABH, failing which, they would be de-empanelled. The hospitals which have already empanelled under CGHS, and which are not accredited by NABH shall apply for NABH accreditation within two months of receipt of this communication, if they have not applied for the same till date. In addition, the empanelled hospitals having in-house laboratories shall also apply for NABL Certification of the Laboratory.

Any Hospital which has not applied for NABH Accreditation shall be de-empanelled under CGHS.

Those Diagnostic Centres, which have already applied for NABL Certification shall inform the office of the undersigned with supportive documents.

The Hospitals having applied for accreditation should qualify and obtain certificate of accreditation from NABH within eighteen months, failing which they shall be de-empanelled under CGHS.

This issues with the approval of competent authority.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|--|--|
| Medical -29 | Government of India, Office of the Director, C.G.H.S., Directorate General of Health Services, 545-A, Nirman Bhawan, Maulana Azad Road, New Delhi – 11., Order No. Misc. 4006/2009/CGHS/Comp.Cell., dated 12. 05. 2009, signed by Dr. D K Bohra, Addl. DDG (HQ) NABL Certification of Diagnostic Centres empanelled under CSHS | SOURCE: Copy of the original order downloaded from the Website of Ministry of Health & Family Welfare |

With reference to the above the undersigned is directed to state that it has now been decided that NABL Certification would be mandatory eligibility condition for Diagnostic Centres for empanelment under CGHS. The Diagnostic Centres already empanelled under CGHS and which do not have NABL Certification shall apply for such certification within two months of receipt of this communication, if they have not applied for the same till date.

In Delhi Diagnostic Centres, empanelled under CGHS, are either NABL Certified or applied for such certification.

Any Diagnostic Centre which has not applied for NABL Accreditation shall be de-empanelled under CGHS.

Empanelled hospitals having in-house laboratories shall also apply for NABL Certification..

Those Diagnostic Centres, having applied for certification from Certification should qualify and obtain certificate from NABL within a period of one year, failing which they shall be de-empanelled under CGHS.

This issues with the approval of competent authority.

| Sr. No. | Reference Number & Subject | Remarks |
|--------------------|---|---|
| Medical -30 | Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare, Nirman Bhawan, Maulana Azad Road, New Delhi – 100 108, O M No. F No. Rec 1-2004/ JD(Gr.)/ CGHS/ Delhi/ CGHS (P)(2) , dated 17. 06. 2009, signed by R. Ravi, Deputy Secretary to the Govt. of India (Tel: 23063483). Empanelment of Hospitals and Diagnostic Centres under CGHS, Delhi for treatment– Addition to the lists already circulated. | SOURCE: Copy of the original letter downloaded from the Website of Ministry of Health & Family Welfare |

The undersigned is directed to invite reference to the Office Memoranda of even number, dated the 7th December, 2006 [M-31], 4th January, 2007 [M-33], 22nd January, 2007 [M-36], 20th March, 2007 [M-38] , 29th May, 2007 [M-41], 30th May, 2007 [M-42] ,13th July, 2007 [NA], 19th July, 2007 [M-45], and 1st October, 2007 [Med-01], 7th November, 2007 [Med-03], 9th April, 2008 [NA], 7th May, 2008 [NA], 3rd June, 2008 [NA], 10th June, 2008 [NA], 1st July, 2008 [NA], 15th July, 2008 [NA], 16th July, 2008 [NA], 4th September, 2008 [Medical-03], 1st December, 2008 [Medical-06], 10th December, 2008 [Medical-08], and 12th December, 2008 [Medical-10], 5th January, 2009 [Medical-13], 6th February, 2009 [Medical-15], 17th February, 2009 [NA] and 20th April, 2009 [NA] issued by the Ministry of Health & Family Welfare, with which names and addresses of hospitals and diagnostic centres empanelled under CGHS from November 2006 onwards were circulated and to state that under process of continuous empanellment of hospitals and diagnostic centres now being followed by the Ministry of Health & Family Welfare, the names of three more private hospitals and one more diagnostic centre are added to the list of hospitals and diagnostic centres empanelled under CGHS, Delhi, under the same terms and conditions as have been outlined in the Office Memorandum of 7th December, 2006 [M-31], referred to above.

After the existing entry No.110, in the list of hospitals empanelled under CGHS Delhi, the names of the following hospitals may be added

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|--|--|
| 111 | Sardana Eye Institute, A 2/19, Rajouri Garden, New Delhi – 110 027 | Super-speciality Eye Care [Cataract/ Glaucoma, Retinal – Medical Strabismus and Oculoplasty & Adnexa and other specialized treatment <i>[except Surgical Retina]</i> |
| 112 | Sarvodaya Hospital, Sector 19, Gopi Colony, Faridabad | Multi-speciality General Purpose and Specialised treatment in Neurology and Neurosurgery, Orthopaedic Surgery including Arthroscopic Surgery and Hip Replacement and Laproscopic Surgery, [Surgery, Gynaecology, Obstetrics, ENT, Urology and Orthopaedics] |
| 113 | NOIDA Medicare Centre, 16-C, Block F, Sector 30, NOIDA | General and Specialised Purposes for Cardiological Investigations, Renal Transplantation, Haemodialysis, Laparoscopic Surgery, IOL Implant and Joint Replacement Diagnostic Services [Laboratory, X-ray, ECG, USG, ECHO, Colour Doppler & CT] <i>For Retinal Transplantation, the hospital has to obtain the necessary approval from the competent authority, if not obtained already, before Transplantation activity is carried out in the hospital.</i> |

After the existing entry No. 69, in the list of diagnostic centres empanelled under CGHS, Delhi, the name of the following diagnostic centre may be added:

| S. No. | Name of the Hospital | Procedures for which empanelled |
|--------|---|--|
| 70 | Ganesh MRI Centre Pvt Ltd, CS/OCF 7, Sector 8, Rohini, Delhi – 110 085 | Diagnostic Centre [Pathology (<i>except Histopathology</i>), Clinical Biochemistry, Microbiology, USG/ Colour Doppler, Bone Densitometry, ECHO, TMT, ECG, EEG, EMG, PFT, CT, Spect CT, NCV, Baera, Nuclear Medicines and Uroflowmetry] |

Additions & Changes in the List of CGHS Empanelled Hospitals & Diagnostic Centres

[Status as on 28. 09. 2009]

The September 2008 Issue of the Forum's Newsletter No. 5, carried an Alphabetical Index to the CGHS-Empanelled Private Hospitals & Diagnostic Centres up-dated as on 02. 07. 2008 which appeared on pages 15-25. Subsequently, while **addition of some New Hospitals and Diagnostic Centres** have been notified by the Ministry of Health & Family Welfare on its Website, some others have been **de-recognized and some changes have been made** in that list as notified in a new list up-dated as on **28. 09. 2009**. These additions and changes are indicated in the Tables below. The Sr. Nos. indicated in these Tables refer to the Sr. Nos. at which they appear in the Annexure "A" – Hospitals and Annexure "B"- Diagnostic Centres".

To facilitate reference, the various Hospitals & Diagnostic Centres are arranged alphabetically in both the Tables.

A – HOSPITALS

| Name of the Hospital | Empanelled for | Sr. No. | OM Reference | Remarks |
|--|--|---------|---|--|
| Batra Hospital & Medical Research Centre, 1 Tughlakabad Institutional Area, Mehrauli Badarpur Road, New Delhi - 110 062. | General Purpose and Specialised Purpose for Cardiological Investigations, Cardio-thoracic Surgery, Renal Transplantation, Haemodialysis, IOL Implant, Laparoscopic Surgery, Joint Replacement and Radiotherapy | 37 | Consolidated List up to 25. 02. 2009 | Empanelment cancelled w.e.f.16. 01. 2009 |
| Brahm Shakti Hospital & Research Centre, Budh Vihar, Delhi. | Multi-speciality General Purpose | 109 | Consolidated List up to 25. 02. 2009 | New Addition |
| Dr. Bhim Sen's Family Dental Clinic, Qutab Plaza, DLF City, Phase – I, Gurgaon. | General Dentistry, Special Dental Procedure [Prosthodontics, Endodontics, Implantology, and Dental Radiology] and Diagnostic Procedures/ Investigations | 89 | Consolidated List up to 25. 02. 2009 | New Addition |
| Brij Medical Centre, K. K. 54, Kavi Nagar, Ghaziabad | Super-speciality in Orthopaedic Surgery including Arthroscopic Surgery and Joint Replacement | 99 | OM Dated 01. 12. 2008 (Medical – 08) & Consolidated List up to 25. 02. 2009 | New Addition |
| Goyal Eye Institute, 1/10 East Patel Nagar, New Delhi – 110 008. | Super Speciality Eye Care [Cataract/ Glaucoma, Retinal-Medical & Vitreo-Retinal Surgery, Strabismus, Occuloplasty and Adnexa and other specialized treatment] | 88 | Consolidated List up to 25. 02. 2009 | New Addition |
| Khanna Eye Centre, E 368, Nirman Vihar, Vikas Marg, Delhi – 110 092 | Super-speciality Eye Care [Cataract/ Glaucoma, Retinal – Medical and Vitreo – Retinal Surgery, Strabismus and Occuloplasty & Adnexa] | 100 | OM Dated 01. 12. 2008 (Medical – 08) & Consolidated List up to 25. 02. 2009 | New Addition |
| Lions Kidney Hospital & Urology Research Institute, New Friends Colony, New Delhi | Super-speciality in Urology including dialysis and Lithotripsy | 93 | Consolidated List up to 25. 02. 2009 | New Addition |
| Malik Radix Health Care, C-218, Nirman Vihar, Vikas Marg, Delhi – 110 092. | Endoscopic/ Laproscopic Surgery | 104 | Consolidated List up to 25. 02. 2009 | New Addition |
| Max Hospital, HBT Twin Tower, Wazirpur Institutional Area, Pitam Pura, New Delhi | Orthopaedic Surgery including Arthroscopic Surgery and Joint Replacement | 108 | Consolidated List up to 25. 02. 2009 | New Addition |
| Max Hospital (A Unit of ALPS Hospital Pvt Ltd.), Block B, Sushant Lok, Phase I, Gurgaon, 122 001 | Super-speciality in Orthopaedic Surgery including Joint Replacement and Arthroscopic Surgery | 94 | Consolidated List up to 25. 02. 2009 | New Addition |
| Meenakshi Hospital, B-12/13, Kaushambhi, Ghaziabad, - 201 010 | Endoscopic/ Laproscopic Surgery | 103 | OM Dated 05. 01. 2009 (Medical – 13) & Consolidated List up to 25. 02. 2009 | New Addition |
| Metro Multi Speciality Hospital, Sector 11, Noida. | General purpose and Specialized purpose for Renal Transplantation, Haemodialysis, Laproscopic Surgery, IOL Implant, and Joint Replacement | 11 | Consolidated List up to 25. 02. 2009 | Empanelment cancelled w.e.f.16. 01. 2009 |

| | | | | |
|---|--|-----|---|--|
| NOIDA Medicare Centre, 16-C, Block F, Sector 30, NOIDA | General and Specialised Purposes for Cardiological Investigations, Renal Transplantation, Haemodialysis, Laparoscopic Surgery, IOL Implant and Joint Replacement Diagnostic Services [Laboratory, X-ray, ECG, USG, ECHO, Colour Doppler & CT] <i>For Retinal Transplantation, the hospital has to obtain the necessary approval from the competent authority, if not obtained already, before Transplantation activity is carried out in the hospital.</i> | 113 | OM Dated 17. 06. 2009 (Medical – 30) | New Addition |
| Narendra Mohan Hospital & Heart Centre, Mohan Nagar, Ghaziabad- 201 007 | General and Specialized Purpose for Cardiological Investigations , Cardio-thoracic Surgery, Renal Transplantation, Hemodialysis, Lithotripsy and TURP, Laparoscopic Surgery, IOL Implant and Joint Replacement. | 30 | O.M. dated 14. 10. 2008 (Medical – 05) | Referrals stopped w.e.f. 14. 10. 2008 The earlier Order revoked w.e.f. 08. 04. 2009 vide (Medical – 18) |
| Prayag Hospital & Research Centre Pvt Ltd., Sector 41, NOIDA 201 301. | Multi-speciality General Purpose and Specialised Purpose in Neurology and Neurosurgery, Urology/ Urosurgery, Orthopaedic Surgery including Arthroscopic Surgery and Joint Replacement, Medical Oncology, Endoscopic Surgery | 106 | Consolidated List up to 25. 02. 2009 | New Addition |
| SMH Curie Cancer Centre [Shanti Mukund Hospital], Vikas Marg, Karkardooma, Delhi. | Comprehensive Oncology including Surgery, Chemotherapy and Radiotherapy. | 107 | Consolidated List up to 25. 02. 2009 | New Addition |
| Sanjeevan Medical Research Centre (P) Ltd., 4869/24, Ansari Road, Darya Ganj, Delhi – 110 002 | Super-speciality in Urology including dialysis and lithotripsy | 92 | Consolidated List up to 25. 02. 2009 | New Addition |
| Sardana Eye Institute, A 2/19, Rajouri Garden, New Delhi – 110 027 | Super-speciality Eye Care [Cataract/ Glaucoma, Retinal – Medical Strabismus and Occuloplasty & Adnexa and other specialized treatment [except <i>Surgical Retina</i>] | 111 | OM Dated 17. 06. 2009 (Medical – 30) | New Addition |
| Sarvodaya Hospital, Sector 19, Gopi Colony, Faridabad | Multi-speciality General Purpose and Specialised treatment in Neurology and Neurosurgery, Orthopaedic Surgery including Arthroscopic Surgery and Hip Replacement and Laproscopic Surgery, [Surgery, Gynaecology, Obstetrics, ENT, Urology and Orthopaedics] | 112 | OM Dated 17. 06. 2009 (Medical – 30) | New Addition |
| Sharda Hospital, Plot No. 32 -34, Knowledge Park III, Greater NOIDA | Multi-speciality General Purpose | 101 | OM Dated 12. 12. 2008 (Medical – 12) & Consolidated List up to 25. 02. 2009 | New Addition |
| Singh's Dental Hospital, 30-34, Sewak Park, Dwarka Mor Metro Station, Uttam Nagar, Delhi – 110 059 | General Dentistry | 91 | OM Dated 04. 09. 2008 (Medical – 04) & Consolidated List up to 25. 02. 2009 | New Addition |
| Sunder Lal Jain Charitable Hospital, Ashok Vihar, Phase III, Delhi | Multi-speciality General Purpose and Specialised Purpose in Neurology and Neurosurgery, Urology including Dialysis, Orthopaedic Surgery including Joint Replaxement and Arthroscopic Surgery, Gastroenterology and GI Surgery, Paediatrics and Padeiatrics Surgery, Endoscopic Surgery and ENT | 97 | OM Dated 01. 12. 2008 (Medical – 08) & Consolidated List up to 25. 02. 2009 | New Addition |
| Surbhi Hospital, Moma, Sector 35, NOIDA 201 301 | Multi-speciality General Purpose | 105 | Consolidated List up to 25. 02. 2009 | New Addition |
| Swastik Maternity & Medical Centre, 78H, Vijay Park, Main Madanpuri Road, Gurgaon | Super-speciality Eye Care [Cataract/ Glaucoma, Strabismus and Occuloplasty & Adnexa] | 95 | OM Dated 01. 12. 2008 (Medical – 08) & Consolidated List up to 25. 02. 2009 | New Addition |
| Tirupati Stone Centre & Hospital, 6, Gagan Vihar, [Near Karkadi Flyover), Delhi 110 051 | Superspeciality in Urology including Lithotripsy | 90 | OM Dated 04. 09. 2008 (Medical – 04) & Consolidated List up to 25. 02. 2009 | New Addition |

| | | | | |
|---|---|-----|---|---------------------|
| Vision Eye Centre, 12/27, West Patel Nagar, Near Arya Samaj Mandir, New Delhi | Super-speciality Eye Care [Cataract/ Glaucoma, Retinal – Medical and Vitreo – Retinal Surgery, Strabismus and Occuloplasty & Adnexa (<i>except Corneal Transplant</i>)] | 98 | OM Dated 01. 12. 2008 (Medical – 08) & Consolidated List up to 25. 02. 2009 | New Addition |
| Visitech Eye Centre, R 13, Greater Kailash I, New Delhi | Super-speciality Eye Care [Cataract/ Glaucoma, Retinal – Medical and Vitreo – Retinal Surgery, Strabismus and Occuloplasty & Adnexa (<i>except Corneal Transplant</i>)] | 96 | OM Dated 01. 12. 2008 (Medical – 08) & Consolidated List up to 25. 02. 2009 | New Addition |
| Yashoda Super Speciality Hospital & Heart Institute, Nehru Nagar, Ghaziabad | Cardiology, Cardiovascular and Cardiothoracic Surgery | 102 | OM Dated 05. 01. 2009 (Medical – 13) & Consolidated List up to 25. 02. 2009 | New Addition |

B – DIAGNOSTIC CENTRES

| Name of the Diagnostic Centre | Originally Empanelled for | Sr. No. | OM Reference | Remarks |
|--|--|---------|---|---|
| Batra Hospital & Medical Research Centre, 1 Tughlakabad Institutional Area, Mehrauli Badarpur Road, New Delhi - 110 062. | Diagnostic Services (Laboratory, X-Ray, CT Scan, USG, Colour Doppler, MRI). | 56 | Consolidated List up to 25. 02. 2009 | Empanelment of the Hospital cancelled w.e.f. 16. 01. 2009 |
| Central-Delhi Diagnostic & Research Centre, New Delhi. | Laboratory Services | 1 | Consolidated List up to 25. 02. 2009 | Laboratory Services Depanelled w.e.f. 24. 09. 2008 |
| Chetna's Pathlab, M-26, Basement, Chitaranjan Park, New Delhi – 110 019 | Laboratory Services | 2. | Consolidated List up to 25. 02. 2009 | Laboratory Services Depanelled w.e.f. 24. 09. 2008 |
| Clinical Diagnostic Centre, 69, Hargovind Enclave, Karkardooma, Delhi – 110 092. | Diagnostic Purposes (Laboratory, CT, USG/ Colour Doppler and X- Ray | 66 | OM Dated 10. 12. 2008. (Medical – 10) & Consolidated List up to 25. 02. 2009 | New Addition |
| Delhi MRI & CT Scan Centre, Ashlok Hospital, 25A, Block AB, Community Centre, Safdarjung Enclave, New Delhi -- 110 016. | CT Scan and Ultrasonography only | 7 | Consolidated List up to 25. 02. 2009 | Now known as: Piramal Diagnostic Services – Delhi MRI & CT Aashlok Hospital, 25, A Block AB, Community Centre Safdarjung Enclave, New Delhi – 110 029. |
| Delhi MRI Scan Centre, M-2, Hauz Khas, New Delhi – 110 016. | MRI, X-ray, Bone Densitometry, USG/ Colour Doppler | 8 | Consolidated List up to 25. 02. 2009 | Now known as: Piramal Diagnostic Services – Delhi MRI, M2., Hauz Khas, Aurobindo Marg, Near ABN Amra Bank, New Delhi – 110 016. |
| Dr. Mittal's Diagnostic Centre, Madhuban Chowk, Main Outer Ring Road, 611/C-8, Sector-VIII, Rohini, Delhi – 110 085. | Laboratory Services, USG/ Colour Doppler and X-Ray | 14 | Consolidated List up to 25. 02. 2009 | Laboratory Services Depanelled w.e.f. 24. 09. 2008 |
| Dr. P Bhasin Path Lab (P) Ltd., S-13, Greater Kailash, Part – I, New Delhi – 110 048. | Diagnostic Centre [USG/ Colour Doppler, Bone Densitometry, Echocardiography, TMT, PFT, and Uroflowmetry] | 68 | Consolidated List up to 25. 02. 2009 | New Addition This Centre had earlier been Impanneled at Sr. No. 15 for "Diagnostic Procedures in Laboratory Services" |
| Focus Imaging and Research Centre, C-10, Green Park Extn., New Delhi – 110 016 | USG/ Colour Doppler, CT Scan, Mammography, Bone Densitometry and X-Ray NOTE: See the Last Column for the new procedures for which the Centre is now recognized. | 21. | OM Dated 04. 09. 2008 (Medical – 03) & Consolidated List up to 25. 02. 2009 | The Centre is now empanelled for the following procedures: "USG/ Colour Doppler, CT, Mammography, Bone Densitometry, X-Ray" |
| Focus Imaging and Research Centre, H-10, Green Park Extension New Delhi – 110 016. | Diagnostic purpose [MRI, CT, EEG, EMG, and NCV] | 65 | OM Dated 04. 09. 2008 (Medical – 04) & | New Addition. |

| | | | Consolidated List up to 25.02.2009 | |
|---|--|----|---------------------------------------|---|
| G.M.R. Institute of Imaging Research, A-13, Green Park Main, Aurobindo Marg, New Delhi – 110 016. | MRI, CT Scan, USG/ Colour Doppler, X-Ray, Bone Densitometry and Mammography | 24 | Consolidated List up to 25.02.2009 | Referral had been stopped vide O M Dated 30.07.2007 Listed at M-46, of issue No. 4 – "Holistic Health Care Issue" dated September 2007 on page 49. |
| Ganesh MRI Centre Pvt Ltd., CS/OCF 7, Sector 8, Rohini, Delhi – 110 085 | Diagnostic Centre [Pathology (<i>except Histopathology</i>), Clinical Biochemistry, Microbiology, USG/ Colour Doppler, Bone Densitometry, ECHO, TMT, ECG, EEG, EMG, PFT, CT, Spect CT, NCV, Baera, Nuclear Medicines and Uroflowmetry] | 70 | OM Dated 17.06.2009 (Medical – 30) | New Addition |
| Janta Diagnostic Centre, 12/404, Sunder Vihar, Paschim Vihar, New Delhi. | Laboratory Services, CT, Mammography, USG/ Colour Doppler, ECG, ECHO | 32 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| Janta X-Ray and Clinical Lab., WZ-4, Raja Garden, Delhi – 110 015. | Laboratory Services and Imaging viz. CT Scan, Mammography, USG/ Colour Doppler | 28 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| Krystal Scan and Diagnostic Centre, 1, Paschim Enclave, Rohtak Road, Peeragarhi Crossing, New Delhi. | Laboratory Services, MRI, CT Scan, USG and X-Ray | 30 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| N.M.C. Imaging Centre (VIMHANS), 1, Institutional Area, Nehru Nagar, New Delhi – 110 065. | Laboratory Services, MRI, CT Scan and X-Ray | 38 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| Nanda Diagnostic Centre, ED 9 th , Madhuban Chowk, Pitampura, Delhi. | Laboratory (Clinical Pathology and Biochemistry), USG/ Colour Doppler, X-Ray, Bone Densitometry | 60 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| Path Lab., D-87-A, East of Kailash, New Delhi. | Laboratory Services | 42 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| Piramal Diagnostic Services – Delhi MRI & CT Aashlok Hospital, 25, A Block AB, Community Centre Safdarjung Enclave, New Delhi – 110 029 | CT Scan and Ultrasonography only | 7 | Consolidated List up to 25.02.2009 | Earlier known as: Delhi MRI & CT Scan Centre, Ashlok Hospital, 25A, Block AB, Community Centre, Safdarjung Enclave, New Delhi – 110 016. |
| Piramal Diagnostic Services – Delhi MRI, M2, Hauz Khas, Aurobindo Marg, Near ABN Amra Bank, New Delhi – 110 016. | MRI, X-ray, Bone Densitometry, USG/ Colour Doppler | 8 | Consolidated List up to 25.02.2009 | Earlier known as: Delhi MRI Scan Centre, M-2, Hauz Khas, New Delhi – 110 016. |
| Srivastava MRI & Imaging Centre, Shop Nos. 1, 2, 3 & 6, Purvanchal Plaza, Pocket B, LSC Market, Mayur Vihar Phase 2, Delhi – 110 091. | MRI and USG/ Colour Doppler | 67 | Consolidated List up to 25.02.2009 | New Addition |
| Suvidha Diagnostic Centre, C-105, Mandwali, Patpar Ganj Society Complex, Opp I.P. Extn., Delhi. | Laboratory Services, X-ray and USG/ Colour Doppler | 47 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| The Apollo Clinic, Krishna Bhawan, 7-8, A-3, Shopping Center, Near St. Mary School, Janakpuri, New Delhi. | Laboratory Services (in Clinical Pathology and Clinical Biochemistry) and Ultrasonography | 48 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |
| The Apollo Clinic, B-4, Sector-16, Noida. | Laboratory Services, USG/ Colour Doppler | 49 | Consolidated List up to 25.02.2009 | Empanellment cancelled w.e.f. 24.09.2008 |
| Vrinda Diagnostic Centre, Illrd, 3-9, Nehru Nagar, Ghaziabad. | Laboratory Services, CT, USG/ Colour Doppler, Bone Densitometry and X-Ray (<i>Not recognized for MRI w.e.f. 29.05.2007</i>) | 53 | Consolidated List up to 25.02.2009 | Laboratory Services Depanelled w.e.f. 24.09.2008 |

EDITOR'S NOTE: An up-dated list of 158 CGHS Empanelled Private Hospitals & Diagnostic Centres for Delhi (as on 28.09.2009) appears on the website of the Ministry of Health & Family Welfare. This lists 106 hospitals [Excluding the three hospitals earlier listed at Sr. Nos. 11, 30 and 37], and 52 Diagnostic Centres [Excluding the 15 Diagnostic Centres earlier listed at Sr. Nos. 1, 2, 14, 22, 24, 28, 30, 32, 38, 42, 47, 48, 49, 53, 56, and 68]. Reference may kindly be made to the Remarks Column in respect of the 3 Hospitals and 15 diagnostic Centres in the two separate Tables for Hospitals and Diagnostic Centres given above.

A scrutiny of this list reveals the deletion of two more Diagnostic Centres which had been earlier numbered as 22 and 61 and addition of one more Private Hospital and one more diagnostic centre as under.

| Name of the Hospital | Empanelled for | Sr. No. | Remarks |
|---|--|----------------------------|--|
| New Deletions of Diagnostic Centres | | | |
| Focus Imaging and Research Centre 47/1-2, Main Yusuf Sarai Market, Aurebindo Marg, New Delhi. - 110 016. | Diagnostic Services in MRI | Annexure B - Sr. No. 22 | No Office Memorandum Available |
| Dr. S B Gandhi Diagnostic Centre, A2/152, Janak Puri, New Delhi - 110 058. | Diagnostic Services (Laboratory, X-Ray, CT Scan, USG, Colour Doppler, MRI) | Annexure B - Sr. No. 61 | No Office Memorandum Available |
| New Addition of Private Hospital | | | |
| Gayatri Infertility Clinic & Eye Foundation, A-762, Sector 19, NOIDA. | Super Speciality Eye Care [Cataract/ Glaucoma, Retinal-Medical & Vitreo-Retinal Surgery, Strabismus, Oculoplasty and Adnexa and other specialized treatment] | NOT INDICATED | No Office Memorandum Available This hospital could perhaps be assigned Annexure - A - Sr. No. 110 |
| New Addition of Diagnostic Centre | | | |
| Orbit Imaging & Pathlab Pvt. Ltd., 35-B, Pusa Road, New Delhi | Diagnostic Centre [Clinical Pathology and Biochemistry, Laboratory, MRI, CT, USG/ Colour Doppler, X-Ray] | NOT INDICATED | No Office Memorandum Available This Diagnostic Centre could perhaps be assigned Annexure - B - Sr. No. 69 |

S. V. Engineering Centre

Plot No. E-3, Sanjay Colony, Friends Industrial Complex Street, Sector - 23, Faridabad - 121 005.

S.V. ENGINEERING CENTRE

N.A.B.L. Accredited Calibration Laboratory

(Mechanical Pressure, Force and Hardness Parameters)

Such as

Calibration of Slip Gauges, C.M.M. M/C, Surface Plate, Profile Projector, Floating Carriage, Dial Calibration Tester, Caliper Checker, Angle Gauges, Radius Gauges, Thread Gauges, Plain and Taper Gauges, Sieve, Coat meter, Optical Flat, Electronic and Spirit Level Combination Set, Master Cylinder, Bench Centres, Height Master, Machine Tools, Hardness Tester, Pressure Gauges, Torque wrench and other general purpose instruments.

Contact Persons - M L Mangal, Chief Executive
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Nilesh Mangal, Commercial Executive
Mobile No. 9811177048

Telephone - 0129, 2230242

Tele Fax - 0129-2232748

E-Mail - nileshmangal@sify.com

Address - Plot No. E-3, Friends Industrial Complex, Sanjay Colony, Sector - 23, Faridabad - 121 005 (Haryana)

Watch that Neck

[Source: Article by Shibani Khungar, WELLNESS – Greater Kailash Connect, Friday, July 31, 2009, Page 11]

Exercising your neck helps strengthening it. Your neck is a strong source of support to head and upper body. Exercising your neck also increases flexibility and greatly reduces many neck problems. Fatigue, stress or bad posture may cause pain in the neck muscles and lead to neck problems Neck exercises take away loose skin hanging around the neck and leave it with no excess skin around it.

Before starting with the exercises, warm up first. Always keep in mind that your neck is one of the most sensitive parts of your body that is vulnerable to physical pain. Hence it is imperative that you exercise correctly. If you experience any pain while exercising, stop immediately and consult your doctor.

Routine Exercises

- Tuck your chin towards your chest. Bend head backwards looking at the sky.
- Bend your head to the right towards the shoulder. Then bend it to the left.
- With shoulders straight, turn your head to the right as much as you can. Repeat on the left side.
- Stand with your feet apart. Put your hands behind. Bend your upper back towards the right, holding the position for 3-5 seconds. Then bend to the left again holding for 3-5 seconds. Take care not to bend your waist or hips.
- Stand with your feet apart (hip-width). Clasp your hands behind your back. Now pull yourself downwards towards the floor, inhaling deeply. Stand on your toes looking towards the sky and exhale. Return to the starting position.
- Push your right hand against your forehead. Then push your head against the hand to resist this., holding for 3-5 seconds. Repeat with the left hand.
- Follow a steady routine that is consistent, devoting about 20 minutes, three times a week.

7 Don'ts After a Meal

- * **Don't smoke** - Experiment from experts proves that smoking a cigarette after meal is comparable to smoking 10 cigarettes (chances of cancer is higher).
- * **Don't eat fruits immediately** - Immediately eating fruits after meals will cause stomach to be bloated with air. Therefore take fruit 1-2 hr after meal or 1hr before meal.
- * **Don't drink tea** - Because tea leaves contain a high content of acid. This substance will cause the Protein content in the food we consume to be hardened thus difficult to digest.
- * **Don't loosen your belt** - Loosening the belt after a meal will easily cause the intestine to be twisted & blocked.
- * **Don't bathe** - Bathing will cause the increase of blood flow to the hands, legs & body thus the amount of blood around the stomach will therefore decrease. This will weaken the digestive system in our stomach.
- * **Don't walk about** - People always say that after a meal walk a hundred steps and you will live till 99. In actual fact this is not true. Walking will cause the digestive system to be unable to absorb the nutrition from the food we intake.
- * **Don't sleep immediately** - The food we intake will not be able to digest properly. Thus will lead to gastric & infection in our intestine.

Green Tea may protect against Blood Cell Cancer

Drinking five or more cups of green tea per day may reduce the risk of blood- and lymph- based cancers by about 50 per cent as per a study conducted at Tohoku University School of Medicine in Japan and published online in the American Journal of Epidemiology ahead of print. Compared to persons who drank only one cup per day, five cups of green tea a day were associated with 42 per cent reduction in hematologic malignancies, and a 48 per cent risk reduction in lymphoid neoplasma

Green tea contains between 30 and 40 per cent of water-extractable polyphenols, while black tea (green tea that has been oxidized by fermentation) contains between 3 and 10 per cent. While the study does not prove causality, it does support other studies which reported a protective effect of green tea and its constituents. Consumer awareness of the benefits of green tea extracts continues to rise with growing numbers of studies, from 430 in 2000 to almost 1500 in 2003, reporting benefits of the main compounds, catechins.

Study details: 41,761 adults participating in the Ohsaki National Health Insurance Cohort Study. A questionnaire completed at the start of the study allowed the researchers to quantify green tea consumption. During nine years of follow-up, the researchers documented 157 hematologic malignancies, including 119 cases of lymphoid neoplasms and 36 cases of myeloid neoplasms. The risk reductions observed for people who drank five or more cups a day, compared to those who drank only one cup, was not affected by the gender of the participants, or their body mass index.

Switching over from Apple to Banana

The oft-quoted medical advice is "An Apple a day keeps the doctor away". Though Banana is no longer a poor-man's fruit, yet it is still much cheaper than Apple, and keeping in view its various advantages, one could perhaps switch over from Apple to Banana.

The expression "going bananas" is from the effect of bananas on the brain, says a Professor of Physiological Psych. His advice is:

Never ever, put your bananas in the refrigerator !!!

Bananas contain three natural ingredients – sucrose, fructose and glucose, combined with fiber. A banana gives an instant, sustained and substantial boost of energy. Research has proven that just two bananas provide enough energy for a strenuous 90-minute workout. No wonder the banana is the number one fruit with the world's leading athletes.

But energy isn't the only way a banana can help us keeping fit. It can also help overcome or prevent a substantial number of illnesses and conditions, making it a must to add to your daily diet.

| | |
|--|--|
| Anemia | High in iron. Bananas can stimulate the production of haemoglobin in the blood and so help in cases of anemia. |
| Blood Pressure | This unique tropical fruit is extremely high in potassium yet low in salt, making it perfect to heal blood pressure, so much so, that the US Food and Drug Administration has just allowed the banana industry to make official claim in this regard. |
| Brain Power | 200 students of a Twickenham (Middlesex) school (England) were helped through their exams by eating bananas at breakfast and lunch, in a bid to boost their brain-power. Research has shown that the potassium-packed fruit can assist learning by making pupils more alert. |
| Constipation | High in fiber, including bananas in the diet can help restore normal bowel action, helping to overcome the problem without resorting to laxatives. |
| Depression | According to a recent survey undertaken by MIND amongst people suffering from depression, many felt much better after eating a banana. This is because bananas contain tryptophan, a type of protein that the body converts into serotonin, known to make you relax, improve your mood and generally make you feel happier. |
| Hangovers | One of the quickest ways of curing hangovers is to make a banana milkshake, sweetened with honey. The banana calms the stomach and, with the help of honey, builds up depleted blood sugar levels, while the milk soothes and re-hydrates the system. |
| Heart Burn | Bananas have a natural antacid effect in the body; so if you suffer from heartburn, try eating a banana for soothing relief. |
| Morning Sickness | Snacking on bananas between meals helps to keep blood sugar levels up and avoid morning sickness. |
| Mosquito Bites | Before reaching for the insect-bite cream, try rubbing the affected area with the inside of a banana skin. Many people find it amazingly successful at reducing swelling and irritation. |
| Overweight & at Work | Studies at the Institute of Psychology in Austria found that the pressure at work leads to gorging on comfort food like chocolate and chips. Researchers found that the most obese were more likely to be in high-pressure jobs. The report concluded, to avoid panic-induced food cravings, we need to control blood sugar levels by snacking on high carbohydrate foods every two hours to keep levels steady. |
| PMS | Forget the pills – eat a banana. The vitamin B6 it contains regulates blood glucose levels, which can affect your mood. |
| Temperature Control | Many cultures see banana as a 'cooling' fruit that can lower both the physical and emotional temperature of expectant mothers. In Thailand, for example, pregnant women eat bananas to ensure that their baby is born with a cool temperature. |
| Seasonal Affective Disorder (SAD) | Bananas can help SAD sufferers because they contain the natural mood enhancer tryptophan. |
| Smoking & Tobacco Use | Bananas can also help people trying to give up smoking. The B6 and B12 they contain, as well as potassium and magnesium found in them, help the body recover from the effects of nicotine withdrawal. |
| Stress | Potassium is a vital mineral which helps normalize the heartbeat, sends oxygen to the brain and regulate your body's balance. When we are stressed, our metabolic rises, thereby reducing our potassium levels. These can be rebalanced with the help of a high-potassium banana snack. |
| Strokes | According to research reported in the New England Journal of Medicine, eating bananas as part of a regular diet can cut the risk of death by as much as 40%. |
| Ulcers | Banana is used as the dietary food against intestinal disorders because of its soft texture and smoothness. It also neutralizes over-acidity and reduces irritation by coating the lining of the stomach. |
| Warts | Those keen on natural alternatives swear that if you want to kill off a wart, take a piece of banana skin and place it on the wart, with the yellow side out. Carefully fold the skin in place with a plaster or surgical tape. |

Banana is really a natural remedy for many ills. When you compare it to an Apple, it has four times the protein, twice the carbohydrates, three times the phosphorus, five times the Vitamin A, and iron, and twice the other vitamins and minerals. It is also rich in potassium and is one of the best value foods around.

Bananas must be the reason that monkeys are so happy all the time.

A USEFUL HOUSEHOLD TIP: If you want a shine on your shoe, take the INSIDE of the banana skin, and rub it directly on the shoe ... Polish with dry cloth.

PENSION & FAMILY PENSION

AS PER RECOMMENDATIONS OF THE SIXTH CENTRAL PAY COMMISSION

The O.M. No. F.No. 38/37/08-P&PW(A) dated 1st September, 2008, issued by Government of India, Ministry of Personnel Public Grievances & Pensions, Department of Pension & Pensioners' Welfare relates to "Implementation of Government's decision on the recommendations of the Sixth Central Pay Commission – Revision of Pre-2006 Pensioners/ Family Pensioners etc.". These recommendations have been accepted by the CSIR.

As per **Para 4.1** of this O.M. the pension/ family pension of existing pre-2006 pensioners/ family pensioners will be consolidated from 1.1.2006 by adding together :-

- i. The existing pension/ family pension.
- ii. Dearness pension, where applicable.
- iii. Dearness Relief up to AICPI (IW) average index (Base year 1982 = 100) i.e. @ 24% of Basic Pension/ Basic Family Pension plus Dearness Pension as admissible vide Ministry of Personnel Public Grievances & Pensions, Department of Pension & Pensioners' Welfare, O.M. No. 42/2/2006-P&PW(G) dated 5.4.2006.
- iv. Fitment weightage @ 40% of the existing Pension/ Family Pension.

Where the existing pension in (i) above includes the effect of merger of 50% of dearness relief w.e.f. 1.4.2004, the existing pension for the purpose of fitment weightage will be re-calculated after excluding the merged dearness relief of 40% from the pension.

The amount so arrived at will be regarded as consolidated Pension/ Family Pension w.e.f. 1.1.2006.

As per **Para 4.2** of this OM the fixation of pension will be subject to the provision that the revised pension, in no case, shall be lower than fifty percent of the minimum of the pay band plus the grade pay corresponding to the revised pay scale from which the pensioner had retired. In the case of HAG+ and above scales, this will be fifty percent of the minimum of the revised pay scale.

The Pension Payment Orders [PPOs] issued by NPL fixing the Pension/ Family Pension in implementation of the above recommendations of the Sixth Central Pay Commission in respect of the Officers who had retired from NPL indicate the Para 4.1 or 4.2 which is applicable to them.

While some of the retired officers of NPL draw their pension/ family pension from NPL, a number of others draw their pension family pension through the various branches of the State Bank of India.

For the benefit of those officers who draw their pension/ family/ pension through the SBI, the following Advertisement is brought to their specific notice.

COMPLAINT REDRESSAL MECHANISM FOR PENSIONERS DRAWING PENSION FROM SBI BRANCHES

[Press Advertisement from State Bank of India appearing in the Hindustan Times in March 2009]

For any queries/ complaints regarding your pension please contact

- Branch Manager of the Branch where your Pension Account is maintained. The Branch Manager will resolve the grievance with online help.
- In case you are not fully satisfied with the response of the Branch, you may approach the Regional Manager of the Branch.
- The General Manager of the Network is the next higher authority who may be approached in case of non-resolution of grievance at Branch/ Regional Manager Level.

OR

You may register your complaint online on our website www.sbi.co.in by filling up the Customer Complaint Form (CCF). Facility to download the CCF is also available.

OR

Send the complaint to dgm.customer@sbi.co.in

Please quote your Account No. PPO No. and the Name of the Branch from where Pension is being drawn in all your communications

ILLUSTRATION FOR FIXATION OF PENSION/ FAMILY PENSION
IN TERMS OF PARA 4.2 OF O.M. DATED 1st SEPTEMBER 2008

PENSION [Ref. Annexure – II to O.M. No. 38/37/08-P&PW(A)-Pt.1, dated 14. 10. 2008]

| S. No. | Description | No.1 | No.2 | No.3 | No.4 | No.5 | No.6 |
|--------|--|------------------------------------|----------------------------------|-----------------------------------|------------------|--------------------------------------|--------------------------------------|
| 1 | Date of Retirement | 31. 01. 1985 | 30. 09. 1984 | 31. 01. 1998 | 30. 06. 1995 | 30. 09. 2000 | 31. 01. 2005 |
| 2 | Scale of pay : From 01. 01. 1986(motional for pre-1986 retirees) (ii) at the time of retirement (actual for others) | 3000-4500 - | 4500-5700 - | - 5000-8000 | - 8000(Fixed) | - 22400-24500 | - 18400-22400 |
| 3 | Pay Band or Grade Pay or Scale of Pay (for HAG and above posts) corresponding to pre-revised pay scales mentioned in 2(i) or 2(ii) above | PB-3 - 15600-39100 GP-6600/- | PB4 - 37400-6700 GP-8700/- | PB-2 - 9300-34800 GP-4200/- | 8000(Fixed) | PB-4 - 37400 -67000 GP-12000/- | PB-4 - 37400 -67000 GP-10000/- |
| 4 | Qualifying Service at the time of retirement | 33 years | 16 ½ years | 33 years | 27 ½ years | 33 years | 22 years |
| 5 | Pension (i)As revised wef 01.01.1996 (For Pre-revised retirees) (ii) As fixed (for retirees between 01.01.1996 to 31. 03.2004) (iii) As fixed (for retirees between 01.04.2004 to 31.12.2005) | 5000 - - | 3575 - - | - 2500 - | 10834 - - | - 11200 - | - - 10200 |
| 6 | Consolidated pension as per Ready Reckoner annexed with OM dated 1.9.08 (Para 4.1) | 11300 | 8081 | 5650 | 24486 | 25312 | 15368 |
| 7 | 50% of minimum of Pay Band + Grade Pay or 50% of minimum of Pay in Pay Scale for HAG and above posts (Para 4.2) | 11100 | 23050 | 6750 | 40000 | 24700 | 23700 |
| 8 | Pension in terms of Para 4.2. of O.M.dated 01.09.2008 based on qualifying service | 11100 | 11525 | 6750 | 33334 | 24700 | 15800 |
| 9 | Pension payable (S.No. 6 or S.No. 8 whichever is higher | 11300 | 11525 | 6750 | 33334 | 25312 | 15800 |

FAMILY PENSION[Ref. Annexure – II (Cont) to O.M. No. 38/37/08-P&PW(A)-Pt.1, dated 14. 10. 2008]

| S. No. | Description | No.1 | No.2 | No.3 | No.4 | No.5 | No.6 |
|--------|---|------------------------------------|----------------------------------|-----------------------------------|------------------|-------------------------------------|--------------------------------------|
| 1 | Date of Retirement / Date of Death (in the case of death of serving employees) | 31. 01. 1985 | 30. 09. 1984 | 31. 01. 1998 | 30. 06. 1995 | 30. 09. 2000 | 31. 01. 2005 |
| 2 | Scale of pay : I)From 01. 01. 1986(motional for pre-1986 retirement/ death (ii) at the time of retirement actual for others) | 3000-4500 - | 4500-5700 - | - 5000-8000 | - 8000(Fixed) | - 22400-24500 | - 18400-22400 |
| 3 | Pay Band or Grade Pay or Scale of Pay (for HAG and above posts) corresponding to pre-revised pay scales mentioned in 2(i) or 2(ii) above | PB-3 - 15600-39100 GP-6600/- | PB4 - 37400-6700 GP-8700/- | PB-2 - 9300-34800 GP-4200/- | 8000(Fixed) | PB-4 - 37400-67000 GP-12000/- | PB-4 - 37400 -67000 GP-10000/- |
| 4 | Family Pension (i)As revised wef 01.01.1996 (For Pre-1996 retirement/ death) (ii) As fixed (for retirement/ death between 01.01.1996 to 31. 03.2004) (iii) As fixed (for retirement/ death between 01.04.2004 to 31.12.2005) | 3000 - - | 4530 - - | - 1800 - | 7800 - - | - 7350 - | - - 9180 |
| 5 | Consolidated pension as per Ready Reckoner | 6780 | 10238 | 3797 | 17628 | 16611 | 13832 |
| 6 | 30% of minimum of Pay + Grade Pay or 30% of minimum of pay scale for HAG and above posts | 6660 | 13830 | 4050 | 24000 | 14820 | 14220 |
| 7 | Pension payable (S.No. 5 or S.No.68 whichever is higher | 6780 | 13830 | 4050 | 2400 | 16611 | 14200 |

REVISED PENSION BASED ON REVISED PAY BANDS AND GRADE PAYS FOR POSTS CARRYING PRESENT SCALES OF PAY IN GROUP 'A', 'B', 'C' & 'D' PER SIXTH CENTRAL PAY COMMISSION
[BASD ON THE FIRST SCHEDULE, PART-A, SECTION-1 (Rule 3 & 5) OF THE CCS (REVISED PAY) RULES 2008]
{Refer Para 4.2 of O.M. Mo. 38/37/08-P&PW(A) dated 1.9.2008 of Department of Pension & Pensioners Welfare}

{Ref. Annexure - I to O.M. No. 38/37/08-P&PW(A)-Pt.1, dated 14. 10. 2008}

| Sl. No. | Post/ Grade | 5 th CPC Pay Esale | Name of Pay Band/ Scale | Corresponding 6 th CPC Pay Bands/ Scales | Corresponding Grade Pay | Pension* =50% of sum of minimum of PB+GP/ Scales | Family Pension ** = 30% of sum of minimum of PB+GP/ Scales |
|---------|-------------|--------------------------------|-------------------------|---|-------------------------|--|--|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1. | S-1 | 2550-55-2660-60-3200 | -1S | 4400-7440 | 1300 | 3500 | 3500 |
| 2. | S-2 | 2610-60-3160-65-3540 | -1S | 4400-7440 | 1400 | 3500 | 3500 |
| 3. | S-2A | 2610-60-2910-65-3300-70-4000 | -1S | 4400-7440 | 1600 | 3500 | 3500 |
| 4. | S-3 | 2650-65-3300-70-4000 | -1S | 4400-7440 | 1650 | 3500 | 3500 |
| 5. | S-4 | 2750-70-3800-75-4400 | PB-1 | 5200-20200 | 1800 | 3500 | 3500 |
| 6. | S-5 | 3050-85-4900 | PB-1 | 5200-20200 | 1900 | 3500 | 3500 |
| 7. | S-6 | 3200-85-4900 | PB-1 | 5200-20200 | 2000 | 3600 | 3500 |
| 8. | S-7 | 4000-100-6000 | PB-1 | 5200-20200 | 2400 | 3800 | 3500 |
| 9. | S-8 | 4500-125-7000 | PB-1 | 5200-20200 | 2800 | 4000 | 3500 |
| 10. | S-9 | 5000-150-8000 | PB-2 | 9300-34800 | 4200 | 6750 | 4050 |
| 11. | S-10 | 5500-175-9000 | PB-2 | 9300-34800 | 4200 | 6750 | 4050 |
| 12. | S-11 | 6500-200-6900 | PB-2 | 9300-34800 | 4200 | 6750 | 4050 |
| 13. | S-12 | 6500-200-10500 | PB-2 | 9300-34800 | 4200 | 6750 | 4050 |
| 14. | S-13 | 7450-225-11500 | PB-2 | 9300-34800 | 4600 | 6950 | 4170 |
| 15. | S-14 | 7500-250-12000 | PB-2 | 9300-34800 | 4800 | 7050 | 4230 |
| 16. | S-15 | 8000-275-13500 | PB-2 | 9300-34800 | 5400 | 7350 | 4410 |
| 17. | NEW SCALE | 8000-275-13500 (Group A Entry) | PB-3 | 15600-39100 | 5400 | 10500 | 6300 |
| 18. | S-16 | 9000 | PB-3 | 15600-39100 | 5400 | 10500 | 6300 |
| 19. | S-17 | 9000-275-9550 | PB-3 | 15600-39100 | 5400 | 10500 | 6300 |
| 20. | S-18 | 10325-325-10975 | PB-3 | 15600-39100 | 6600 | 11100 | 6660 |
| 21. | S-19 | 10000-325-15200 | PB-3 | 15600-39100 | 6600 | 11100 | 6660 |
| 22. | S-20 | 10650-325-15850 | PB-3 | 15600-39100 | 6600 | 11100 | 6660 |
| 23. | S-21 | 120000-375-16500 | PB-3 | 15600-39100 | 7600 | 11600 | 6960 |
| 24. | S-22 | 12750-375-16500 | PB-3 | 15600-39100 | 7600 | 11600 | 6960 |
| 25. | S-23 | 12000-375-18000 | PB-3 | 15600-39100 | 7600 | 11600 | 6960 |
| 26. | S-24 | 14300-400-18300 | PB-4 | 37400-67000 | 8700 | 23050 | 13830 |
| 27. | S-25 | 15100-400-18300 | PB-4 | 37400-67000 | 8700 | 23050 | 13830 |
| 28. | S-26 | 16400-450-20000 | PB-4 | 37400-67000 | 8900 | 23150 | 13890 |
| 29. | S-27 | 16400-450-40900 | PB-4 | 37400-67000 | 8900 | 23150 | 13890 |
| 30. | S-28 | 14300-450-22400 | PB-4 | 37400-67000 | 10000 | 23700 | 14220 |
| 31. | S-29 | 18400-500-22400 | PB-4 | 37400-67000 | 10000 | 23700 | 14220 |
| 32. | S-30 | 22400-525-24500 | PB-4 | 37400-67000 | 12000 | 24700 | 14820 |
| 33. | S-31 | 22400-26000 | HAG+Scale | 75500-80000 | Nil | 37750 | 22650 |
| 34. | S-32 | 24050-650-26000 | HAG+Scale | 75500-80000 | Nil | 37750 | 22650 |
| 35. | S-33 | 26000(Fixed) | Apex Scale | 800000 (Fixed) | Nil | 40000 | 24000 |
| 36. | S-34 | 30,000 (Fixed) | Cab. Sec. | 900000 (Fixed) | Nil | 45000 | 27000 |

***Note 1:** As per Para 4.2 of O.M. No. 38/37/08-P&PW(A) dated 1.9.2008, the revised pension of those persons who retired after completing maximum required qualifying service (i.e. 33 years) before 1.1.2006 cannot be less than the pension indicated in column 7 above (i.e. 50% of the Minimum of the Pay Band and Grade Pay/ scale corresponding to the scale of pay the pensioners held at the time of their retirement). The pension in Column 7 above will be reduced pro-rata, where the pensioner had less than the maximum required qualifying service (i.e. 33 years) for full pension as per Rule 49 of the CCS (Pension) Rules, 1972 as applicable on 1.1.2006 and in no case it will be less than 3500/- p.m. In case, the pension consolidated as per Para 4.1. of above O.M. is higher than the pension calculated in the manner above, the same (higher pension) will be treated as basic pension.

****Note 2:** The revised family pension in respect of those pensioners who retired before 1.1.2006 and the Government servants who died before 1.1.2006 cannot be less than the pension indicated in column 8 above (i.e. 30% of the sum of Minimum of Pay Band and Grade Pay/ scale corresponding to the scale of pay the pensioners held at the time of their retirement). In case, the the family pension consolidated as per Para 4.1. of above O.M. is higher than the pension calculated in the manner above, the same (higher family pension) will be treated as Basic family pension.

Subsequently, the Ministry of Finance (Department of Expenditure), vide Notification No. 01/01/2008-IC (GSR 527 E) dated 16.7.2009 has notified revised pay scale for the pre-revised S-30 scale of pay. Consequently, the entries at Sr. No. 32 of the above Table shall be substituted by the following

| Sl. No. | Pay Scale w.e.f. 1.1.86 | Post/ Grade and Pay Scale w.e.f. 1.1.1996 | Name of Pay Band/ Scale | Corresponding 6 th CPC Pay Bands/ Scales | Corresponding Grade Pay | Pension* =50% of sum of minimum of PB+GP/ Scales | Family Pension ** = 30% of sum of minimum of PB+GP/ Scales | |
|---------|-------------------------|---|-------------------------|---|-------------------------|--|--|-------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 32 | 7300-100-7600 | S-30 | 22400-525-22500 | HAG | 67000-79000 | Nil | 33500 | 20100 |

The above has been notified by the Ministry of Personnel, Public Grievances & Pensions (Department of Pension & Pensioners' Welfare) O.M. No. 38/37/08-P&PW(A).pt.1 dated 20th August 2009, signed by M P Singh, Director (PP)

ADDITIONAL QUANTUM OF PENSION/FAMILY PENSION ON ATTAINING THE AGE OF 80 AND ABOVE

Para 4.5 of the O.M. No. 38/37/08-P&PW(A) dated 01. 09. 2008 issued by the Ministry of Personnel, Public Grievances and Pensions, Department of Pension & Pensioners' Welfare, reads as under.

4.5 The quantum of pension/family pension available to the old pensioners/ family pensioners shall be increased as follows:-

| Age of Pensioner/ Family Pensioner | Additional Quantum of Pension |
|--------------------------------------|---|
| From 80 years to less than 85 years | 20% of revised basic pension/ family pension |
| From 85 years to less than 90 years | 30% of revised basic pension/ family pension |
| From 90 years to less than 95 years | 40% of revised basic pension/ family pension |
| From 95 years to less than 100 years | 50% of revised basic pension/ family pension |
| 100 years or more | 100% of revised basic pension/ family pension |

Ministry of Personnel, Public Grievances & Pensions (Department of Pension & Pensioners' Welfare) O.M. dated 21. 05. 2009 stipulated that the following documents would be accepted as proof of date of birth/ age for payment of additional pension/ family pension on completion of 80 years and above:

- (i) PAN Card
- (ii) Matriculation certificate (containing the information regarding date of birth)
- (iii) Passport
- (iv) CGHS Card
- (v) Driving licence (if it contains date of birth)

Wide their OM No. 38/37/08-P&PW(A) dated 11th August, 2009, that considering the difficulty in producing the above mentioned documents as proof of age by old pensioners, particularly those in the rural areas, it has been decided that the voters' ID Card may also be accepted as proof of date of birth/ age for payment of additional pension/ family pension on completion of 80 years and above subject to the following conditions:

- (i) The pensioner/ family pensioner certifies that he is not a matriculate. (The matriculation certificate should be insisted in the case of matriculate pensioners/ family pensioners).
- (ii) The pensioner certifies that he does not have any of the five documents mentioned above.

In regard to the implementation of the above provision, it has been clarified vide the Ministry of Personnel, Public Grievances and Pensions, Department of Pension & Pensioners' Welfare O.M. No. 38/37/08-P&PW(A)-pt.1, dated 3rd October, 2008 as under:-

- (i) *The additional quantum of pension/ family pension, on attaining the age of 80 years and above, would be admissible from the 1st day of the month in which his date of birth falls. For example, if a pensioner/ family pensioner completes age of 80 years on any date in the month of August 2008, he will be entitled to additional pension/ family pension w.e.f. 1.8.2008. Those pensioners/ family pensioners whose date of birth is 1st August, will also be entitled to additional pension/ family pension w.e.f. 1.8.2008. on attaining the age of 80 years and above.*

- (ii) *Dearness Relief will also be admissible on the additional quantum of pension available to the old pensioners, in accordance with the orders issued from time to time.*

PAYMENT OF THE SECOND INSTALLMENT (60%) OF THE ARRERS

Ministry of Personnel, Public Grievances & Pensions (Department of Pension & Pensioners' Welfare), vide their O.M. Mo. 38.37/08-P & PW(A) dated 25th August 2009 dated 21. 05. 2009, it has been decided that the first installment (40%) of arrears for 2008-2009 having been paid, the remaining 60 % may now be paid to the pensioners, and all the Pension Disbursing Authorities/ Public Sector Banks have been requested to disburse the remaining 60% of arrears of pension to the pensioners latest by 30. 09. 2009. The OM Has been signed by Rajni Razdan, Secretary to the Government of India.

Brochure on Mobility of Personnel

| Reference Number & Subject | Remarks |
|---|---|
| Government of India, Ministry of Personnel, Public Grievances & Pensions, (Department of Pension and Pensioners' Welfare), 3 rd Floor, Lok Nayak Bhawan, O M No. 4/20/2009-P & PW (D), dated 17 th April 2009, signed by Amitabh Dwivedi, Under Secretary to the Government of India. | SOURCE: Council of Scientific & Industrial Research, Anusandhan Bhawan, 2, Rafi Marg, New Delhi - 110 001 Letter No. 334-1(11)/ CSIR/ Pen/ 2009-10/ 405, dated 23. 06. 2009, from the Financial Adviser , CSIR, addressed to the Heads of all National Labs/ Instts, signed by S P Singh, Finance & Accounts Officer |
| Brochure on Mobility of personnel between Central Government and Central Autonomous Bodies, State Government and Central Autonomous Bodies, Central Government to State Autonomous Bodies and Vice- versa | |

The undersigned is directed to say that instructions have been issued from time to time on the Mobility of personnel between Central Government and Central Autonomous Bodies, State Government and Central Autonomous Bodies, Central Government to State Autonomous Bodies and Vice- versa.

2. Department of Pension & Pensioners' Welfare has compiled all instructions on the subject in a Brochure. As the instructions are not readily available in the Ministries/ Departments, this Department keeps on getting references for clarifications from them on issues covered in the instructions already issued. This Deptt. has compiled the instructions on a Brochure which, it is expected , would facilitate the Ministries/ Departments to take appropriate decision on matters confronting them on the subject.

EDITOR'S NOTE: A copy of the Brochure mentioned above has been received from the CSIR as indicated in the Remark's Column above. This Brochure has the following Contents:

| | |
|--|---------------------|
| 1. <i>Absorption in Autonomous Bodies - Counting of Past Service.</i> | <i>Pages 1-32</i> |
| 2. <i>Absorption in Public Sector Undertakings/ Autonomous Bodies – Payment of Pro-rata Pension</i> | <i>Pages 33-74</i> |
| 3. <i>Conversion of Government Department into Autonomous Body/ Public Sector</i> | <i>Pages 75-84</i> |
| 4. <i>Exemption from Rule of Immediate Absorption</i> | <i>Pages 85-98</i> |
| 5. <i>Restoration of Commuted Portion of Pension on Completion of 15 years in the Cases of Absorbed Employees.</i> | <i>Pages 99-131</i> |

A Detailed listing of the

- (1) Number of Order,
- (2) Date of Issue of the Order .
- (3) Subject and
- (4) Page No. where it appears

has also been provided for each of the above 5 Categories in a Chronological Order.

THE BROCHURE CAN BE SEEM IN

ROOM No. 103, Force Standard Annex,
National Physical Laboratory,
Dr. K S Krishnan Marg, New Delhi – 110 012

Office of the NPL Former Scientists Forum

RECOGNITIONS & HONOURS

1. Appointments as CSIR Emeritus Scientists

Dr. Suresh Kumar Gupta (db: 22. 07. 47): Dr. S K Gupta obtained his Masters Degree in Physics from the Allahabad University in 1969, and also his Ph.D. Degree from the same university in 1973 for "Study of electron spin resonance absorption spectra" under the guidance of Dr. B N Misra.

Dr. Gupta started his career in NPL as Sr. Technical Assistant in November 1974, and retired as Scientist 'G', Head of Division of Materials Characterization, on superannuation in July 2007. His areas of specialization include Materials Characterization; EPR & IR Spectroscopy and Experimental Solid State Physics.

Dr. Gupta has been appointed as CSIR Emeritus Scientist in NPL w.e.f 01. 01. 2009.

Dr. Chhatra Pal Sharma (db: 13. 10. 46): Dr. C P Sharma obtained his Masters Degree in Chemistry from the Meerut University in 1970, and his Ph.D. Degree from the University of Delhi in 1980 for his work on **Organo-metallic Chemistry**, under the guidance of Dr. V G Bhide from NPL and Dr. V K Ahluwalia from Delhi University.

Dr. Sharma started his career in NPL as Sr. Scientific Assistant in May 1976, and retired as Scientist 'F', on superannuation in October 2006. His areas of specialization include. **Organo-metallic Chemistry; Super Conductivity; Sol-Gel Technology; Polymer Chemistry; Synthetic and Organic Chemistry.**

Dr. Sharma was awarded **CSIR Emeritus Scientist** in October, 2008. He has joined the same at the Indian Institute of Technology, New Delhi w.e.f. 09. 03. 2009.

Dr. Harish Chander (db: 09. 04. 1947): Dr. Harish Chander obtained his B.E. (Chemical Engng.) Degree from the Benaras Hindu University in 1969, and Ph.D. Degree from the Indian Institute of Technology, Delhi, in 1990 for "Studies in gas liquid reaction and development of reactor" under the guidance of Dr. P K Ghosh from NPL and Dr. K K Baveja; and Dr. S C Dhingra from IIT, Delhi.

Dr. Harish Chander, started his career in NPL as Junior Research Fellow in October 1970, and retired as Scientist 'F' In-charge of Luminous Materials & Devices Group, on superannuation in April 2004. Subsequently, he also got promoted as Scientist 'G' Group IV (6) w.e.f. 01. 02. 2006. His areas of specialization include Luminescent Materials & Devices; Particle Size Analysis; Spray Reaction/Drying and Gas-Liquid Reaction. He has been a recipient of NRDC Invention Award (1989).

As reported in September 2008, Issue Number 5 of the Newsletter he was appointed as a Consultant at NPL w.e.f.. 01. 05. 2007 for a two-year CSIR-DST Project under NMIFLI scheme on "Development of Next Generation Plasma Display Panel Technology and 50" High-Definition T V Prototype".

Dr. Harish Chander has been appointed as CSIR Emeritus Scientist in NPL w.e.f. 01. 04. 2009.

Dr. Shyam Kishore Agarwal (db: 23. 11. 1948): Dr. Agarwal obtained his M.Sc. Degree in Physics from Delhi University in 1971 with first rank in Hans Raj College. He got Ph.D. from the same university in 1978 for "Low temperature solid state physics – Experimental Superconductivity" under the guidance of Professor K.D.Chaudhuri.

Dr. Agarwal started his career in NPL as Research Associate in February 1982, and retired as Scientist 'F', on superannuation in November 2008. His areas of specialization include High Temperature Superconductivity; Quantum Hall Effect; Superconducting Materials; Condensed Matter Physics; Low Temperature Techniques and Semiconductor Devices. He was the recipient of NPL's Outstanding-Scientist-of-the-Year Award (2007). He was on official deputation to France under CSIR-CNRS Exchange (1990-91) and ETL Tsukuba, Japan as INSA-JSPS Fellow (1996-97). He received the coveted Foreign Specialist Research Award from the PM office of Japan in 1997. He was also invited as Senior Researcher at AIST, ETL, Tsukuba (1998) and later as Visiting Professor at the Science University of Tokyo, Chiba, Japan (2000-01). He has supervised the research work of a number of students for M.Tech. and Ph.D. degrees. He has also been the life member of a number of academic and professional societies and has over 170 research papers to his credit.

After his retirement on superannuation, Dr. Agarwal was appointed as Consultant in the Superconductivity and Cryogenics Division at NPL, starting 12 Jan. 2009 for six months which he left on 30th April 2009 to join as CSIR Emeritus- Scientist at NPL, New Delhi to work on magnetic and bolometric sensor materials based on CMR manganites.

Dr. Agarwal has been appointed as CSIR Emeritus Scientist in NPL w.e.f. 01. 05. 2009.

2. Advisory / Consultancy Assignments

Dr. Vijay Trimbak Chitnis (db: 20. 06. 1949) & Dr. Prafulla Chandra Kothari (db: 09. 08. 1948)

Dr. V T Chitnis and Dr. P C Kothari have been appointed as advisors at NPL for one year with effect from November 1, 2008 to undertake a Study for the Impact Assessment of National Measurement System (NMS) in which the National Physical Laboratory, plays the important role of development and maintenance of National Standards for all physical parameters, and provides apex level calibration services to other measurement laboratories and to the industry. NPL has also signed Mutual Recognition Agreement (MRA) to enable national and international traceability of measurements. The other agencies involved in the NMS are – NABL which accredits the laboratories in India for rendering national level calibration and testing services, the Bureau of Indian Standards (BIS), which lays down the documented standards, and the various laboratories of the Department of Weights & Measures (DWM) responsible for implementation of Legal Metrology. In this way NPL also helps in assurance of the quality of the consumer goods as well as in implementation of legal metrology in the country. The objective of the NMS is to ensure quality and reliability of goods and utility services and to give confidence to the traders as well as to the public about the trade and domestic and international transactions.

The study aims at estimation of the economic benefits of the NMS, establish cost/benefit ratio and assess the improvement of the quality of life due to NMS. This survey is proposed to be conducted through a questionnaire for collecting views of all the stake holders including various accredited and non-accredited government, public sector and industrial laboratories, and analyzing the data gathered through this survey.

Dr. Dharam Pal Singh (db: 15. 06. 1949)

Dr. Dharam Pal Singh has been given a one-year contract assignment at NPL w.e.f. 01. 07. 2009 to install and operate the new XRF System and to provide training to the other members of the Group for characterization of samples by XRD & XRF as and when required and to help in implementation of Quality System ISO/IEC 17025:2005.

Shri Rajan Babu Saxena (db: 20. 06. 1949)

Shri R.B. Saxena has been appointed as an Advisor by NPL for one year w.e.f. 01. 07. 2009 for the CSIR XI Plan Network Project on "Advancement in Metrology" and for setting up the low temperature & high magnetic field Lab in NPL.

3. Nobel Peace Prize Certificate

Dr. Ashesh Prosad Mitra (21. 02. 1927 – 03. 09. 2007)

Dr. A P Mitra's contribution to the Nobel Peace Prize bestowed on the Intergovernmental Panel on Climate Change (IPCC) for the year 2007 has been recognized posthumously by Dr. R K Pachari, Chairman, IPCC through a certificate dated 5 September 2006, accompanied with a facsimile copy of the Award.

The certificate states that the credit for the award goes to Dr. A P Mitra and other colleagues who have contributed so admirably to the work of the IPCC, and the facsimile copy of the award has been given for his contributing substantially to the work of the IPCC over the years since the inception of the organization.

4. Invited Lectures

Dr. Ram Gopal Sharma (db: 09. 08. 1941)

Dr. Ram Gopal Sharma delivered the 8th A.S.Divatia Memorial Lecture which coincided with the VECC (India) – KEK (Japan) Joint School on Superconductivity, at Ajay Divatia Lecture Hall, Variab19th March 2009, for your approval. The Energy Cyclotron Centre, DAE (VECC), Kolkata on 17th November 2009, on invitation from the Indian Vacuum Society, Zonal Chapter, Calcutta. Dr. Divatia was the Founder Director of VECC. The title of his lecture was "Superconducting Magnet Technology and World Status".

5. International Polar Year

Dr. Sohan Lal Jain (db: 07. 06. 1946); Dr. Hirday Nath Dutta (db: 05. 01. 1947) & Dr. Surinder Dutt Sharma (db: 04. 08. 1947)

The above Members of the Forum who had been members/ leaders of the Indian expeditions to Polar Regions had been facilitated with mementoes during the function organized by the National Institute of Science Communication and Information Resources (NISCI), New Delhi on February 4, 2009 to mark the International Polar year.

POST-RETIREMENT PUBLICATIONS BY MEMBERS OF THE FORUM

Dr. Jnanendra Nath Som (31. 03. 2006 – Superannuation from NPL)

Jnanendra Nath Som: **SHABDE SMAI MON** (*As I See It*), Deepak Prakashan, C.B 385/5. Ring Road, Narayana, New Delhi – 110 028, (2008), 132 Pages, Rs. 70/- [ISBN- 978-81-906673-2-6].

This book – the first book written by Dr. J N Som – is a rare combination of literary contributions of a Scientist Poet, expressing his feelings in Bengali – his mother tongue. It is an established fact that the thoughts of a person are best expressed in the language in which the thought process takes place, and in case of Dr. Som it is Bengali.

The book contains 85 poems authored by Dr. Som and published by Gopal Chandra Paul who has also contributed one page of *Prakashaker Nibedan* to the book. The book also carries an Introduction (*Bhumika*) from Shri Dilip Kumar Bomdyopadhyay – himself a elderly poet - and Chief Editor of “Kathanjali” – a Literary Bi-Yearly Magazine in Bengali published by a registered Literary Society “Sahityan”.

In his elegantly written and superb (*Lekhaker Katha* - Foreword) Dr. Som wittingly writes about the hidden beauty of a poem which has to be perceived He writes that “If Galilio had said in verse that world moved, the Inquisition might have left him alone”. On the other extreme of the beauty of verse is “A dishonest poem is one which expresses, no matter how well, feelings or beliefs which its author never felt or entertained”.

The book carries a hard brown-coloured cover and a very attractive and elegantly matching jacket depicting the Beauty of Nature at dawn on the front, and carrying the photograph and a write-up on Dr. Som on the back. Putting aside the aesthetics of the book, the poems within reveal Dr Som’s sublime feelings, gifted in thoughts and gratulatory in poetic built-up. His poems are devoid of mere congregation of meaningless words, but most rhythmic and thought-provoking views very carefully and meticulously expressed on multifarious aspects of life. Rural serenity and abundant beauty of nature that Dr. Som had enjoyed since his childhood had left an indelible impression on his mind. Coupled with this his scientific visions have given his poetic expression a uniqueness.

Dr. Som’s love for nature like trees, flowers, blue sky, sea, river, wide open field, small creatures etc., have immensely influenced his thinking process. His concern for the vanishing creatures such as birds bees, butterflies is also reflected in his poems. Spirituality is another dimension of his inner self and he laments for the current imperfect life and prays to God for attainment of perfection and he earnestly searches for appropriate words (*Shabdo*), to express his inner feelings. He puts forth many un-answered questions of life despite the immense scientific attainments of humanity.

Some typical examples of his poems are : *Unmesh* – Blossom; *Aai Charui*, *Aai* – Come Back Sparrow, Come Back; *Abhilash* – Desire; *Gachh Hobo* – To be Born as a Tree and *Sahaj Montro* – A Simple Lesson, which Dr. Som has also translated in English, and is presently attempting translation of other poems published in this book so that a translated version of this book could also be published for the benefit of those who cannot enjoy the beauty of his poems in Bengali.

Dr. Som has been contributing articles in Bengali at regular intervals for popularization of Science through their publication in “*Kathanjali*” and “*Jnan-Bichitra*”(partially financed by the Council of Scientific & Industrial Research) after his retirement from March 2007 onwards. They are mostly in the form of News Articles numbering about 50 already. Some of these included: Nobel Prizes in Science 2006 and COPLEY Medal of 2006 to Stephen William Hawking; Sunita’s Space Victory – Worry, Success & Future; Honey Bees – Environmental, Pollution and a Chinese Story; Nobel Prizes in Science 2007; Kyoto Protocol – Carbon Credit Points and India; Isaac Newton Becoming a Billionaire by writing books – Ms John K. Rowling; Scientific & Technical Terms used in Bengali; From the Memoirs of Arthur C. Clark – one of the most famous creator of Science Fiction Stories; Max Plank – A Super-Attentive Scientist and inventor of Quantum Theory on his 150th Birth year; Civilization and Global Warming Causes and Effects; Prodigious Mathematician Ramanujan’s Childhood and Young age activities. **The Sage Scientist Jagdish Chandra Bose on the occasion of his 150th Birthday.**

Shri Moolchand Kewalram Balchandani (30. 04. 1988 – Superannuation from NPL)

M K Balchandani (*Compiler*): **WISDOM EVERGREEN**, Bookland Publishers and Book Sellers, 75, Kutchery Road, Ajmer – 305 001, 50 Pages, Rs. 20/-

This Compilation presents a thought for every day of the year – A Proverb, or a Quotation, or else some Words of Wisdom – and can be used to great advantage for starting the day. It starts on **January, 1** with the thought “*New Year reminds, // Always*

remember to forget // the one who proved untrue // But never forget to remember // the blessings that come our way.”, and ends on **December, 31** with “*I shall die unwept and unsung.*”

Shri Balchandani, in the Preface, quotes Sir Winston Churchill – “Anyone who never went to College, can make up for it by reading the proverbs”, and concludes with – “Wisdom is to the Mind what Health is to the Body”.

Dr. Prakash Chandra Jain (15. 09. 1991)– Voluntary Retirement from NPL)

Prakash Chandra Jain (Compiler): WISDOM QUOTATIONS, Bharat Bharati Prakashan & Co., Western Kutchery Road, Meerut – 250 001, (Uttar Pradesh), 2009, Rs. 30; US \$ 2 [ISBN 81-8178-121-X].

This book is a compilation of 700 wisdom quotations selected randomly from various sources.. In this booklet, words of wisdom, quotations and proverbs published in daily newspapers and elsewhere have been compiled for the benefit of readers.

This publication is sponsored by “Vina Jain Memorial Trust”, and is dedicated by Dr. Prakash Chandra Jain to the Memory of his wife Late Smt. Vina Jain.

It has been published as a pocket book (11.5 cm x 18 cm), which one can also carry along with him in his coat-pocket.

SHARING JOYS OF MEMBERS

Marriages

The marriage of Sakshi, daughter of **Shri Tribhawan Verma** and grand-daughter of (Late) **Shri Mulk Raj Verma**, with **Varun** was solemnized on November 23, 2008.

Dr. Stephen Rahul Atkinson son of Rita and Prof. Alan Atkinson and grand-son of Prof. **Sursh Chand Jain**, got married to **Dr. Karen** in England on March 15, 2009.

Shri Anurag Saksena elder son of **Dr. Rakesh Chandra Saksena**, got married to **Ruchita** on 29th December 2008. The marriage of his second son **Shri Anubhav Saksena** with **Pankhuri** was also solemnized on March 24, 2009. .

Births:

Shri Jagdish Prasad Sharma was blessed with a Grand son – **Shivank** , son of Mrs. Anita Sharma (Daughter) & **Shri Rakesh Babu** – on August 23, 2008, in Delhi. He was also blessed with a Grand daughter- **Ekisha**, daughter of **Shri Ranjan Sharma** (Son) and **Mrs. Shradha Sharma**, in Coimbatore on October 4, 2008.

Dr. Virendra Kumar Batra was blessed with the second granddaughter **Diya Sarah Gandhi**, (daughter of **Dr. Dheeraj Gandhi** and **Dr. (Mrs.) Bobby Gandhi née Batra**) on October 6, 2008 at Baltimore, Maryland, USA. His first granddaughter **Shreya Gandhi** was born on March 2, 2004 at Farmington, near Detroit, Michigan, USA’

Dr. Kundal Chandra Joshi was blessed with a Grand-son – **Tanmay Joshi**, son of **Punit & Niharika Joshi** – on October 29, 2008.

Dr. Satya Prakash Varma was blessed with a Grand daughter – **Manya Varma**, daughter of **Ritesh and Gauri Varma** – on January 15, 2009.

Post-Retirement Promotions:

Dr. Satya Prakash Varma (28. 07. 1999), **Dr. Harish Chander** (01. 02. 2006), **Dr. Suresh Kumar Gupta** (01. 04. 2006), **Dr. Prakash Narain Dixit** (06. 04. 2006), **Dr. (Mrs.) Vaasantha Raman** (01. 02. 2007), **Dr. Ram Kishore** (23. 04. 2007) and **Dr. Sujit Kumar Halder** (01. 02. 2008) got promoted as Scientist ‘G’ Group IV (6) with effect from the dates indicated against their names.

The effective dates of promotion of the following members as Scientist ‘G’ Group IV (6), which had earlier been notified as 06. 07. 2007 by the CSIR has been revised as under:

| | |
|-------------------------------|--------------|
| Dr. Shiv Nath Singh | 31. 02. 2002 |
| Dr. Sohan Lal Jain | 29. 08. 2002 |
| Dr. Kamlesh Kumar Jain | 31. 08. 2002 |
| Dr. Hirday Nath Dutta | 06. 01. 2004 |

Acharya Jagadish Chandra Bose – 150th Birth Centenary

[SOURCE: COMMUNICATOR (2008-2009), CSIR Pensioners Welfare Association, Kolkata, Page 9]

The variety of topics on which Shri JN Som has made contributions in Popular Science writings in Bengali have been mentioned in the last Paragraph of his Post-Retirement Publications appearing in this issue of the Newsletter. This includes also a write-up on “*The Sage Scientist Jagdish Chandra Bose on the occasion of his 150th Birthday*”.

Dr. J N Som had been requested to represent the NPL Former Scientists Forum during his visit to Kolokota, at the Seminar on “Magic of Music”, the Get-together on “Catch them Old”, and the “Eleventh Annual General Body Meeting of the CSIR Pensioners Welfare Association on 12th September, 2009, in response to an invitation from that Association.

For the Meet on “Catch them Old” the members and their spouses had been invited to participate in Music (Instrumental & Vocal), Recitations (Self-composed or otherwise), Shruti Natak, and Jokes etc. which gave an opportunity to them to show a glimpse of their hidden talent. Dr. Som also was invited to recite a few poems from his book, “Shabde Sajai Mon (As I See it)”, on which a brief account has been published in this Issue.

At the time of this function, the Publication “COMMUNICATOR (2008-2009)” was also released and a copy of the same which Dr. Som received, is being placed in the Forum’s Office for the benefit of the Members.

This publication carries a report on the Seminar on Acharya Jagadish Chandra Bose to pay tribute to him on his 150th Birth Anniversary, held by that Association on 14th March 2009. The following is a brief extract from that report bringing out some interesting facts of his life:

Acharya’s Moto and Purpose of Life

as recovered from the notes left behind

- Purpose of Life – Man is born for a cause and should live for a purpose.
- There will be resistances in every person’s life which have to be overcome.
- Do something which nobody has done earlier – Establish that you also have a role as a person.
- Be thoughtful – But convert your thoughts into action.
- Whatever you do, do it to the highest level.
- Wisdom is bigger than knowledge.



Dr. TRIBHUWAN KUMAR SAKSENA

Dr. Tribhuwan Kumar Saksena was born on November 1, 1934. After getting his M.Sc. Degree in Physics from the Allahabad University, in 1957, he joined NPL as Junior Scientific Assistant on 16th July, 1958. While attending to his Research & Development activities, he also worked for his Doctorate Degree under the guidance of Dr. Maganlal Pancholy, and was awarded the PhD Degree by the University of Delhi in 1966, based on his thesis - "Ultrasonic study of rates and equilibria in chemical reactions". He also went to France and USA in pursuit of his research. Through his sincere devotion to work, he received various promotions at periodic intervals and retired from the active service of the National Physical Laboratory as Scientist 'F' on superannuation on 31. 10. 1994.

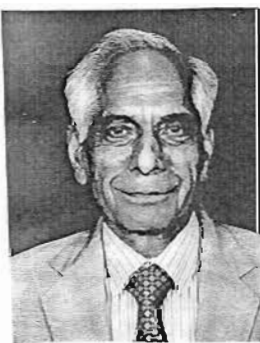
Dr. T K Saksena was the son of Dr. Bishambar Dayal Saksena, who too had contributed very significantly to the R & D Activities of NPL through his prime contributions in the field of Infrared Spectroscopy, published in *Spectrochimica Acta*; *Infrared Phys*; *Trans Faraday Soc*; *Proc Phys Chem Soc*; *J Phys Chem Sol*; *J Chem Phys*; *Z Phys*; *Current Sci*, etc during 1953-1965. His outstanding contribution was the Development of an Indigenous Infrared Spectrometer, besides guiding Dr. M M Pradhan – another member of the NPL Former Scientists Forum – in his work on theoretical and experimental studies in the far infrared, leading to the award of PhD Degree to him from the University of Delhi.

Dr. T K Saksena had imbibed in him all the good qualities of his Father, and had made very valuable contributions, first through his work on systems for guiding blind persons, and then through development of various ultrasonic transducers and devices. He also worked on Ultrasonic Standards and carried out under-water acoustics investigations. He was associated with the Acoustical Society as Life Fellow and had also served the Ultrasonic Society of India as Vice President..

Dr. Tribhuwan Kumar Saksena, took over the Leadership of the Ultrasonics Group from Dr. V N Bindal after his retirement in December 1990, and very ably carried on the activities of the team under his leadership till his retirement. He had many research publications to his credit which were published in journals like *Ultrasonics*; *J Acoust Soc Amer*; *Acustica*, *Appl Acoust*; *Archives Acoust*; *Acoust Lett*; *Indian J Technol*; *Indian J Pure Appl Phys*; *Indian J Marine Sci*; *J Acoust Soc India*; *J Phys Soc Japan*; *J Chem Phys*; *J Pure Appl Ultrason*; *Z Ange Phys*; *Nuovo Cimento* etc. in addition to a very large number of papers published in proceedings of various Conferences, Symposia and Seminars. He also guided Rupa Mitra on "Study on vibrational amplitude characteristics of ultrasonic transducers" and Mukesh Chandra on "Studies of parametric acoustic arrays in water in presence of intercepting liquid media" leading to the award of Doctorate Degrees to them.

On 8th August 1998, he had a stroke which resulted in paralysis of the right side of the body, and in spite of all treatment he was unable to write with his right hand. But his indomitable spirit and the moral and physical support from his Life Partner Mrs Kanak Saksena, he started writing poems in Hindi with his left hand.. A collection of 128 of his poems was published as a book titled - "Teri Yaad Nirvaan" – a copy of which he had also presented to the NPL Former Scientists Forum in November 2004.

He breathed his last on 23rd December 2008. He is survived by his wife, two daughters – both married and well settled - and son Skand Saksena. His two daughters are both medical doctors and his son is a PhD in Chemical Engineering, which is a fitting tribute to the high academic standards set by Dr. B D Saksena and Dr. T K Saksena.



Dr. Ajit Ram Verma

If ever the name of a person described his qualities also, it was best exemplified by 'AR', which he used as the shorter version of his signatures. As his First Name 'Ajit', supported by the Second Name 'Ram' – God incarnate – indicate, the words 'Defeat' and 'Impossible' did not appear in his dictionary.

Dr. Verma was born on 20 September 1921 at Dalmau near Lucknow. He got his M.Sc. Degree (1942 – Gold Medalist) from the University of Allahabad where he worked also for a short period as a Research Scholar before joining the University of Delhi as Lecturer in 1947. He was a recipient of British Council Scholarship (1950-1952) and of I.C.I. Fellowship (1952-1955). During 1955-56, he worked at the University of London and made well known contributions on the observation and study of unimolecular growth spirals on the surfaces of silicon carbide crystals. He was awarded PhD Degree from the London University in 1952 under the guidance of no less a person than Prof. Samuel Tolansky, and also obtained his DSc from the same University in 1969. .

Before joining NPL, Dr. Verma was on the teaching faculty of Delhi University as Reader in Physics (1955-1959), and at the Banaras Hindu University, Varanasi as Professor and Head of the Physics Department from 1959. At both these Universities he established very active schools of research in Crystallography.

He took over as Director of National Physical Laboratory in May 1965 and played the longest innings by any one in this capacity, having even had his term extended by 6 months after attaining the age of superannuation. He retired from this post in March 1982. Thereafter he had served as Visiting Professor, IIT, Delhi, as Jawaharlal Research Fellow, as Emeritus Scientist of CSIR and as INSA Sr. Scientist at NPL.

Dr. Verma's fields of specialization include Solid State Physics; Polytypism in Crystals; Diffuse X-Ray Scattering; Monomolecular Films. The first book that he published was "Crystal Growth and Dislocations" (Butterworth Scientific Publications – 1953). Another book that he had published, with Dr. O N Srivastava as the joint author, was "Crystallography for Solid State Physics" (Wiley – 1982). Dr. Verma also authored another book on "Polymorphism and Polytypism in Crystals" jointly with Prof. P Krishna (John Wiley, 1996). His two books published in 1982 and 1996 have also been translated in Russian..

Dr. Verma had published more than 100 research papers in referred journals and was also involved in the development of a number of techniques and equipment at NPL in the field of his specialization. These include: Growth of nearly perfect single crystals from the melt by Czochralski metod; X-Ray diffraction topography for characterization of crystals regarding perfection; and Study of imperfections in whisker crystals.

While Dr. Verma made very significant contributions in his own field of specialization and also guided a number of others in their research work leading to the award of doctorate degrees to them he, through his system of coordinated decentralization, ensured a very healthy growth in all the other fields of activity at NPL and shaped the careers of a large number of persons. It was during his tenure as Director, NPL that the Division of Specialized Techniques for consolidation of advanced Materials Characterization was formed and work was initiated also on Standard Reference Materials. The emphasis in the area of materials development was changed from alchemy to systematic research and development. The Electronic Components Production Unit got transformed in to the Central Electronics Ltd., as a public Sector Undertaking – the only Public Sector Undertaking established by CSIR. The activity on Solar Energy Utilization was revived. Discrete projects on Liquid Crystals, Thin Films and Electro-photography were started. Work was undertaken on Electronic Materials like Silicon, Phosphors and Piezoelectric Materials, and also on emerging areas of Carbon Fibres and High Pressure and High Temperature materials. He also laid the foundation of the field of Quantum Metrology, and under his leadership, NPL made strong impact at the national and international level.

Metrology – the main aspect of NPL – received special attention, with emphasis on traceability of accuracy of measurement at various levels to the accuracy with which the national and international standards were maintained. The period also witnessed the formation of the National Accreditation Board of Laboratories. Dr. Verma also authored the book "National Measurement and Standards" published by NPL which also gives valuable historical background about the establishment of NPL. Dr. Verma was the elected member of the International Committee on Weights & Measures (CIPM), Paris (1966-1982) and also a member, Commission on Symbols, Units and Nomenclature of International Union of Pure & Applied Physics (IUPAP).

Personal contacts with the working scientists for monitoring and evaluation of their work through the Planning Monitoring & Evaluation Group which was formed during his tenure constituted a significant feature of his management style. Another significant feature of his personal interest in the welfare of the NPL staff was the establishment of contact with the members of the families of the employees through the NPL Ladies Club to foster a spirit of family relationship among the staff members of NPL and to encourage development of cultural values among their children. He considered NPL as his own family and this is best exemplified by the following message (*written in his own hand*) that he sent to Dr. V N Bindal, and which was published in the First Issue of the Forum's Newsletter dated January 2004 to mark the completion of the First year of the Formation of this Forum:

"I am happy to be a member of the family of NPL Former Scientists Forum. As in actual life, once a member of a particular family, always a member of the family, so it is, I feel with the NPL Family. I am glad the members of this family, who may have moved to different locations after retirement, have now a forum to meet each other and share the joys and sorrows of each other."

Dr. Verma received recognition by being elected as the Fellow of the Indian National Science Academy in 1963 and also served as its Treasurer during 1973-1976 and as its Foreign Secretary during 1977-1980. He was also elected as Fellows of the National Academy of Sciences, Allahabad, and of the Indian Academy of Sciences, Bangalore in 1974. He was also honoured by the Banaras Hindu University with an Honorary DSc. Degree. He also received Sir Shanti Swarup Bhatnagar Prize in Physics in 1964. He retired as Chartered member of the Board of Editors of "Solid State Communication" in 1990. He also received Atma Ram Puruskar in Hindi by Kendriya Sansthan Agra in 1984. He was also invited to deliver the Sir K S Krishnan Memorial Lecture organized by NPL in 1998. It is a matter of pride for NPL that Dr. Verma was honoured by the President of India by the Award of Padma Bhusban in 1982.

During Dr. Verma's tenure a number of Learned Societies that resulted as an off-shoot of the research activities undertaken by NPL, with which he had been associated in different capacities at different times, include the Metrology Society of India, Materials Research Society of India, Indian Carbon Society, Vacuum Society of India, Instruments Society of India, Ultrasonic

Society of India, Non-Destructive Testing Society of India. The NPL Former Scientists Forum of which he readily accepted to be a Patron also owes its existence to a large measure to the interest that he had taken in its formation. He had been participating in the activities of the Forum, which, in turn had been benefiting from his guidance and advice.

Dr. Verma He breathed his last on 4th March 2009. He is survived by his wife Smti Sadhna Verma, one son Atul Verma and two daughters Poonam and Suman. Both the daughters are married and well settled Atul is also married and is well settled in life as a Computer Engineer by profession

Mrs. VEENA ROONWAL



Mrs. Veena Roonwal was born on August 3, 1944, though her date of Birth though in the Official Records it was May 4, 1944. She started her career in the CSIR by joining National Metallurgical Laboratory in January 1964 as Sr. Laboratory assistant where she also got promoted as Junior Scientific Assistant in June 1966. She joined NPL as Senior Scientific Assistant on September 9, 1969, and got promoted first as Sr. Scientific Assistant and then as Scientist A. Though she had been in the Scientific Stream, she got her next promotion as Technical Officer (B), as per the rules prevailing at that time as she did not have a Master's Degree in Science to her credit. It was at that stage that she tried to take corrective action for improving her qualifications and obtained her M. Sc. Degree in Physics from the Annamalai University.

Mrs. Roonwal earned two more promotions in the Technical Stream before her retirement as Technical Officer (E-1) on superannuation on May 31, 2004, as per the date of her birth in the official records, a few months before attaining the age of 60 years. Subsequently she got another post-retirement promotion as Technical Officer (E-2) – the highest stage admissible as per the prevalent rules for the persons in the technical stream.

Mrs. Roonwal remained associated all through her association with NPL with the group on Dimensional Metrology. She was a quiet and sincere worker, but was shy in presenting her work in journals, as can be vouched by Dr. P C Jain, Dr. R P Singal and Shri R K Khanna – the other members of the NPL Former Scientists Forum – with whom she was intimately associated. She had specifically contributed to the preparation of ' Precision Index Table" and its applications , and on "Dimensional Measurements using Laser Interferometer".

Mrs. Roonwal was also an active member of the Metrology Society of India. She had been one of the Founder Members of MSI and had served as a member of its executive council and also as a Member of the "MSI Panel on Industry". She also made some contributions, based on her work at NPL, which was published in MAPAN – Journal of the Metrology Society of India.

Mrs. Roonwal was recently bereaved by the demise of her mother only a few months back, and joined her on April 10, 2009 – Good Friday, leaving behind her the grieving Husband Shri G S Roonwal, her daughter Geetu – a teacher by profession, and son Samir - an Executive in Hotel Management in Canada. Both the daughter and the son are well settled.

Members who had Expired

[Arranged according to the Date of their Expiry]

| Name & Date of Birth | Membership Number | Date on which Expired | Issue of the Newsletter in which Their Transition was Reported |
|---|-------------------|-----------------------|--|
| Anand, Jagdish Raj (Dr.) [10. 03. 1940] | MEMBER [036] | 12. 11. 2003 | Number 1, January 2004, Page 50 |
| Gupta, Pramod Kumar (Dr.) [02. 07. 1935] | MEMBER [044] | 27. 01. 2004 | Number 2, May 2005, Page 139 |
| Upadhyaya, Baij Nath [01. 10. 1919] | MEMBER [141] | 27. 11. 2005 | Number 3, August 2006, Page 105 |
| Chopra, Sash Daman Kumar [15. 03. 1941] | MEMBER [070] | 01. 02. 2006 | Number 3, August 2006, Page 106 |
| Prem Prakash [01. 03. 1912] | MEMBER [148] | 19. 02. 2006 | Number 3, August 2006, Page 104 |
| Tomar, Virendra Singh (Dr.) [01. 12. 1941] | MEMBER [066] | 09. 03. 2006 | Number 3, August 2006, Page 104 |
| Sota, Jagdish Lal [07. 12. 1938] | MEMBER [045] | 13. 06. 2006 | Number 4, September 2007, Page 120 |
| Verma, Mulk Raj) [04. 01. 1909] | MEMBER [085] | 10. 01. 2007 | Number 4, September 2007, Page 120 |
| Mehendra, Pratap Chander (Dr.) [22. 11. 1925] | MEMBER [069] | 25. 01. 2007 | Number 4, September 2007, Page 121 |
| Srivastava, Krishna Chandra [11. 07. 1925] | MEMBER [149] | 01. 07. 2007 | Number 4, September 2007, Page 121 |
| Mitra, Ashesh Prasad (Dr.) [21. 02. 1927] | PATRON | 03. 09. 2007 | Number 4, September 2007, Pages 121-123 |
| Agarwal, Ashok Kumar [08. 02. 1943] | MEMBER [035] | 05. 11. 2007 | Number 5 September 2008 Page 43 |
| Chhappgar, Ardeshir Framji (Dr.) [07. 11. 1924] | MEMBER [017] | 07. 02. 2008 | Number 5 September 2009 Page 43 |
| Saksena, Tribhuwan Kumar (Dr.) [01. 11. 1934] | MEMBER [137] | 23. 12. 2008 | Number 6 September 2009 Page 63 |
| Verma, Ajit Ram (Dr.) [20. 09. 1921] | PATRON | 04. 03. 2009 | Number 6 September 2009 Pages 63-65 |
| Roonwal, Veena (Mrs.) [04. 05. 1944] | MEMBER [131] | 10. 04. 2009 | Number 6 September 2009 Page 65 |

Scholarships & Awards

At the NPL 'Open Day' observed on 25th September 2008, the following Scholarships & Awards 2008 were presented by Dr. Vikram Kumar, Director, NPL, based on the recommendations of the Scholarship Committee at its meeting held on 18th September 2008:

Scholarships & Awards – 2008

| <u>Scholarship/ Award</u> | <u>Initiator</u> | <u>Awardee(s)</u> |
|--|----------------------|---|
| 1. Astronaut Kalpana Chawla Samman Chattravritti | Shri Dev Kumar | 1. Ms. Anjali Pant D/O Sh. Kavindra Pant 2. Sh. Pawan Kumar S/O Sh. Dinesh Kumar Mahto |
| 2. Mrs. Sudha Jain Memorial Scholarship | Prof. S C Jain | 1. Sh. Rahul Kumar S/O Mrs. Shiv Kumari Bhatia 2. Ms. Meghna D/O Sh. T Gangadharan |
| 3. Ashutosh Joshi Memorial Scholarship | Prof S K Joshi | Ms Garima Sethi, D/O Mrs. Lalita Sethi |
| 4. Dr. Savita Singal Scholarship | Shri Sohan Lal Gupta | Ms Madhvi Sharma D/O Mrs. Anita Sharma |
| 5. Vina Jain Memorial Award | Dr. P C Jain | Shri Rahul Kumar S/O Mrs. Shiv Kumari Bhatia |
| 6. Saroj Wasan Memorial Award | Shri V P Wasan | Shri Pawan Kumar S/O Sh. Dinesh Kumar Mahto |
| 7. Savitri Devi Memorial Award | Shri J N Chaudhary | Ms. Anjali Pant D/O Sh. Kavindra Pant |
| 8. M R Verma Memorial Award | Mrs. Sushila Verma | Ms Garima Sethi, D/O Mrs. Lalita Sethi |
| 9. L S Gupta Memorial Award | Dr. Anil Kumar Gupta | Ms Madhvi Sharma D/O Mrs Anita Sharma |
| 10. C R Yadav Memorial Award | Shri Balraj Singh | Ms. Meghna D/O Shri T Gangadharan |

In addition to the cash awards and scholarship amount for a period of 6 months starting from October 2008, *Specially Designed Certificates* were also given to the awardees. In addition, cheques for the amounts of Scholarship money for the awardees of Scholarships for the year 2007, for the period October 2008 to March 2009, were also presented.

Before the presentation ceremony, Dr. V N Bindal, the Co-Chairman of the Scholarship Committee said that, in view of the fact that despite all attempts to bring these scholarships and awards to the notice of the Members of the NPL Staff, and relaxation of the upper limit for the category of staff members who could be eligible to apply for these merit-cum means scholarships to children drawing salaries in the grade of Scientist E-II or equivalent grades in the other cadres, there was not an encouraging response. As for the Awards the Committee had decided to throw them open to all categories of staff. However, there was no applicant for the Awards which had been instituted for children on the merit of the Class XII CBSE Examination. The Committee, therefore, decided that these awards may be given this year on the basis of the performance at the X Class CBSE Examination. Further the Sudha Jain Memorial Scholarships awarded to Ms. Meghna, and the Savita Singhal Scholarship Awarded to Ms Madhvi Sharma were on the terms of the Kalpana Chawla Samman Chattravritti for which they had applied, as there were no suitable applicants for these Scholarships even for the last year 2007. Even the Sudha Jain Memorial Scholarship awarded to Shri Rahul Bhatia was on the basis of his performance in III Year V Semester, to encourage him to complete his studies. This was to ensure the most effective use of the amount that had been donated to the Forum by the initiators of these scholarships with their concurrence. For the next year the Committee decided that if there were no eligible candidates for any of the Merit-cum-Means scholarships, they shall be thrown open to all categories of staff and considered on the Merit-basis only.

Dr. Bindal also said that while the Scholarships were meant for encouraging the children of the NPL Staff members, the Awards were open also to the Children and Grand-Children of the Members of the NPL Former Scientists Forum for which there were no applicants.

He said that attempts will be made to ensure a better response to the Scholarships & Awards for the next year.

New Award

In addition to the above listed Scholarships & Awards which have been offered for the year 2009, Dr. V N Bindal, retired Scientist, 'G', and President of the NPL Former Scientist Forum since its inception in January 2003, has also instituted another Award – **J P Bindal Memorial Award** - in the memory of his Father, for a child scoring the highest marks in Science in Class X CBSE/CISC Examination, and who pursues further studies in the science stream. A Brief information about Shri J P Bindal in whose memory this Award has been instituted is given below.

Shri J P Bindal Memorial Award

Initiated by Dr V N Bindal in the memory of his father

My father, Shri JP Bindal was born on 25th December 1895 at Meerut. He entered UP Government service in 1916, through a competitive examination. Later, after a specialised training in Hewitt Engineering College, Lucknow, he was appointed as Officer In-charge of short term training courses, to the probationary ICS and PCS officers to teach them various aspects of Land Survey, Land Records and Revenue Collection. Many of the trainees under him, which included British Officers, went on to occupy high posts in running the administration of pre-Independence India.

He had a son and three daughters. I remember him as a strict administrator and disciplinarian. The various tasks that he undertook, even in our family life, used to be diligently planned and meticulously executed. We had a very close and appreciative relationship with our father. Discussing things with him, gave us lot of confidence and awareness about the various aspects of life. There was not a topic you could not have quizzed him on. He was truly a Know-all and Do-it-Yourself person.

He was a keen sportsman. In addition to being a good horseman, he liked to play Tennis and enjoyed polo. Even in indoor sports like Chess and Carrom he was matchless. He had a knack for sketching and instrumental music. He wrote a number of short stories and devised many puzzles for children which were published in popular magazines including the *Illustrated Weekly of India*. He was quick to spot talent and went out of his way to help many youngsters to develop their full potential in different fields. He had a philanthropic nature and paid for the education of several children from the economically weak strata.

After serving for over a decade as a Tahsildar in several rural areas of U P, he retired in 1950, as a magistrate. Unfortunately, he expired early on 28th November, 1952 due to a cardiac arrest. Emulating his diligent and generous ways, all his children, led quality life and brought up their children and grandchildren in the manner demonstrated by him.

This award is an humble tribute to him.

Scholarships & Awards – 2009

While the earlier meetings of the Scholarship Committee were being held under the Chairmanship of Dr. Anil Kumar Gupta in his capacity as NPL Director's Nominee, the meeting of the Scholarship Committee held on 27th May 2009, under the Chairmanship of Dr. Vikram Kumar, Director, NPL, as Dr. Anil Kumar Gupta had left to join the Advanced Materials and Processing Research Institute, Bhopal as Director, w.e.f. 09. 08. 2009.

At this meeting, the Committee approved the release of the Scholarships to the existing awardees for the period April – September 2008) after reviewing their progress. The details of the Scholarships & Awards to be announced for the year 2009, were also finalized and in the light of the response, to the earlier advertisements, it was decided that the Scholarships and Awards should be thrown open to children of all the employees of NPL and the Awards to the children/ grand-children of the Members of the Forum.

The three significant outcomes of this meeting were:

- (i) Instead of giving awards to children based on their performance in the XII class Board examinations only, some awards should also be given to the children based on their performance in the X class examinations also.
- (ii) Some scholarships may be given to children of those employees of NPL who had expired at young age to encourage their children to pursue their studies.
- (iii) The Forum will have two separate notice boards for display of the details of the Scholarships & Awards offered by the Forum for eliciting better response

It is gratifying to note that the J P Bindal Memorial Award is the result of the decision of the Committee at (i) above. And it is hoped that more such Awards will be instituted in the future. This as also the other Scholarships and Awards were given publicity for inviting applications for the meriting children of all the employees of NPL by 18th August 2009. The Members of the Forum were also invited to apply for the various awards by this date for their children/ grand children. Information was also gathered about the school-going children of the staff members of NPL who had expired during 2009 for consideration by the Committee in the light of the decision at (ii) above. . One Notice Board had also already been provided by NPL in the light of the decision at (iii) above and action is being taken for the other notice board also..

The Scholarship Committee, at its meeting held on 18th September, 2009, under the Chairmanship of Dr. P Banerjee, Acting Director, NPL, approved the Scholarships & Awards for the year 2009 to be announced at the time of CSIR Golden Jubilee Celebrations to be held at the NPL Auditorium on 24th September 2009. Dr. Banerjee has also requested that in addition to the two notice boards in the Main NPL Building, they may also be provided in the other buildings of NPL as well..

Recipients of NPL-FSF Scholarships & Awards, at the hands of Dr. Vikram Kumar, Director, NPL on September 25, 2008, in the NPL Auditorium



Anjali Pant. d/o Sh. Kavindra Pant



Sh. Pawan Kumar. s/o Sh. Dinesh Kumar Mahto



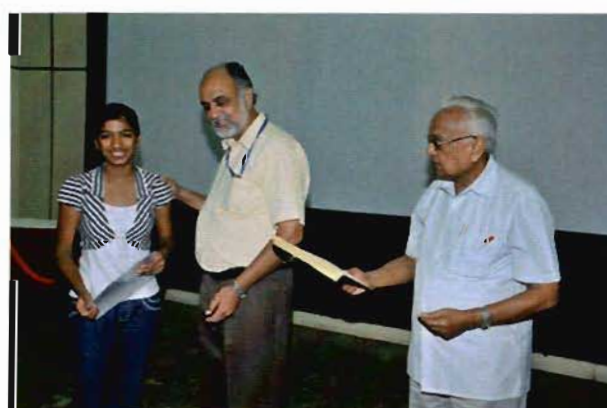
Madhvi Sharma. d/o Smt. Anita Sharma



Km. Meghna. d/o Sh. T. Ganga Dharan



Rahul Bhatia. s/o Smt. Shiv Kumari Bhatia



Km. Garima Sethi. d/o Smt. Lalita Sethi

METROLOGY IN SPORTS - No Games without Measurement

[Adapted from the Posters on Metrology Measurement in Sports displayed in the NPL, on World Metrology Day- 20th May 2008]

Precise measurement is vital in sports and genuinely important to sportsmen and women. Races can be lost by hundredths of a second or field events by fractions of a millimeter. It is accurate measurement which inspires confidence in fair play. Local conditions need to be factored in, so that athletes don't gain an unfair advantage through wind speed or temperature. The equipment used – whether weights, racing bicycles or even footballs – needs to be checked precisely. We can attribute track times to better shoes, better track surfaces, better training – but no-one would suggest that the second is longer now than in the past or that the metre is shorter. We take it for granted that our units are stable in space and time.

The metrology behind the games, of course, varies in its difficulty and in its impact.. Perhaps the most difficult and controversial problems of all involve the monitoring of performance-enhancing drugs. With better measurement and more sensitive testing processes we can hope that this aspect of sporting life can be greatly reduced or, even one day, eliminated.

Clearly the basic concepts of time, height and distance are obvious elements of track and field athletics, swimming, cycling etc. We may believe that the basic metrology is self-evident but we need to take account of a number of extra factors. Which influence the results. The temperature of water in a swimming pool has a significant impact on a lane length. We have seen the use of advanced materials in the manufacture of pole vault, of oars and boats used in rowing events, or in a light-weight bicycle where engineering design has created machines which are as elegant as they are fast.

While sport metrology may not be as sophisticated or demanding as in other areas where measurement is important, it nevertheless requires the core culture of precise measurement – accurate and calibrated reference standards and an appreciation of uncertainty. Today, reference standards do seem to be widely accepted as important. But that only constitutes a part of the equation – uncertainty poses more of a problem. We know that no measurement can ever be without error but it is often hard to persuade that lack of precision is a natural fact of life. In sport, perhaps, the levels of acceptable precision may be such that the highest levels of metrology may not be needed, but we must aspire for it. Perhaps we are not over-confident in saying that this has nearly been achieved in most areas of physics and engineering. The new challenges lie in chemical metrology, and in traceability of measurement in nutrition, forensic science and medicine etc.

Standard Units and the SI System:

| Quantity | Unit | Based on |
|---------------------|----------|---|
| Length | metre | Distance traveled by light in a specified fraction of a second |
| Mass | kilogram | Mass of the International prototype of the kilogram |
| Time | second | Frequency of a particular type of light |
| Electric Current | ampere | Flow of electricity required to produce a specific force between conductors |
| Temperature | kelvin | A fraction of the temperature of water at its triple point (where water, ice and water-vapour co-exist) |
| Amount of Substance | mole | Number of atoms in a specified mass of carbon |
| Luminous Intensity | candela | Intensity of light source of a particular colour |

Everything that is measured has a unit associated with it, from wind chill to heat insulation, and there are thousands of such units in use round the world. The first step in simplifying this is the metric system. The internationally recognized standard unit of length is the metre. Where distances are too short or long to be measured in metres, new units are defined simply by multiplying or dividing the metre by ten as many times as necessary.

SI Prefixes

| Prefix | Symbol | Multiplied by | Prefix | Symbol | Multiplied by |
|---------|--------|---|--------|--------|-----------------------------------|
| Yotta- | Y | 1, 000, 000, 000, 000, 000, 000, 000, 000, 000, | deci- | d | 0.1 |
| Zetta- | Z | 1, 000, 000, 000, 000, 000, 000, 000, 000, | centi- | c | 0.01 |
| Exa- | E | 1, 000, 000, 000, 000, 000, 000, | milli- | m | 0.001 |
| Peta- | P | 1, 000, 000, 000, 000, 000, | micro- | u (mu) | 0.000 001 |
| Terra- | T | 1, 000, 000, 000, 000, | nano- | n | 0.000 000 001 |
| Giga- | G | 1, 000, 000, 000, | pico- | p | 0.000 000 000 001 |
| Mega- | M | 1, 000, 000, | femto- | f | 0.000 000 000 000 001 |
| myriad- | My | 10, 000 | atto- | a | 0.000 000 000 000 000001 |
| kilo- | k | 1, 000 | zepto- | z | 0.000000 000 000 000 000 001 |
| Hector- | h | 100 | yocto- | y | 0.000 000 000 000 000 000 000 001 |
| deca- | da | 10 | | | |

Engineers and scientists have shown that it is possible to reduce all necessary units to just the above listed seven base units. These base units are the core of the SI (*de Systeme International d'unites*). Many other units are the combination of the base units called the **derived units**.

Traceability: Everything that is measured is based ultimately on a primary standard. In mass, the primary standard is the lump of metal (a mixture of platinum and iridium) which is kept in Paris.- the International prototype of the kilogram.

In other base quantities, these primary standards are given in the form of a "recipe" based on the unchanging properties of nature such as the speed of light – so that even if all the metrology laboratories in the world disappear, all the primary standards could be recreated. There is research at present into replacing the International prototype of the kilogram with a similar "recipe".

Primary standards are defined with incredible accuracy, but how does one know whether our watches, bathroom scales or rulers are accurate? There is always a chain of **traceable measurements** – watches, scales and rulers are set by the factories that make them, using devices which are checked against a **working standard** in a metrology laboratory. The testing laboratories use **reference standards**, checked finally by national metrology institutes against **primary standards**. The national metrology institutes of the world, in collaboration with the **International Bureau of Weights and Measures (BIPM)** ensures that all the primary standards give consistent results

MASS: The quantity we feel as weight – is a part of every Olympic sport. Not only is the mass of practically every item of equipment specified, athletes too are sorted into groups according to their mass. If an item of equipment is a few grams heavier or lighter than specified, the athlete could be disqualified. So accurate weighing machines are essential, by checking them by weighing against standard weights and comparing them with the weights of the National Prototype of the Kilogram the host country of the sporting event. In turn the National Prototypes of the Kilogram are checked against the weight of a lump of metal which is kept in Paris – the International Prototype of the Kilogram. .

Did You Know?

- *Olympic weightlifting rules require weighing machines to be accurate to 0.005 %.*
- *In the 1960 Olympics Charles Vinci had to lose 680 grams in less than two hours to compete at his official weight class. He managed it by running, sweating and a hair-cut.*

LENGTH, HEIGHT & DISTANCE: In 1791 the unit of length was defined as one-tenth-millionth of the distance from equator to pole through Paris and given the name – metre. But because the Earth's shape changes constantly, it was necessary to define metre in terms of universal properties that do not change. Until 1960, the ultimate standards of length were actual rods held in national laboratories, but length standards are now optical and based on the unchanging property of light.

The high jump and pole-vault are Olympic events where height matters. In other events goals, nets, hurdles, diving boards – all of them have to be setup at specified distances .from the ground.

From the millimeters that separate losers from winners in archery to 42,195 metres of a marathon, exact distances are part of many events. Rods and rulers are often used to mark out distances -- but they need careful design. Objects change length as temperature rises or falls, and as a result, rulers are longer at the Summer Olympics than at Winter games. So it is essential to choose a material that expands very little with temperature.

Did You Know?

- *In the 1908 London Olympics, 385 yards were added to the 26-mile marathon route, so that the race finished at the royal box. The resulting distance, 42,195 metres, later became the standard.*
- *In the 1936 Olympics, during the basketball tournament, the International Basketball Federation imposed a rule banning all players taller than 1.903 m (6feet 3.inches). The rule was withdrawn following an objection*
- *In the 1960 Olympics, gold medalist pole-vaulter Robert Seagren, decided to skip the 1.53 metre height – a gamble which paid off when he cleared the 5.40 metre. "If I had known the metric system better I might not have passed the height – 5.35 metres doesn't sound as 17feet 6 ½ inches.*
- *In the 1964v Olympics, there were complaints from the Hungarian team that the shallowness of the Water Polo pool allowed the taller Yugoslav team to stand on the bottom with their heads above the surface.*

TIME: Until 1956, the second was defined as 1/186,400 of a day – but the day's length varies due to irregular spin of earth, so the second is now defined in terms of an atomic radiation. Accurate timing is key to many Olympic events, with hundredths of a second often being all that separates winners from losers. Worlds most accurate clocks would not lose or gain a second in thirty million years. In the Olympics what is challenging is to deciding and determining exactly deciding and determining exactly what events are to be timed. – such as at the end of a race and when does the runner's torso reaches a point exactly over

the finish line. This event is measured by a “slit-video” camera, which scans the finishing line up to 2000 times a second. Human judges then view the images to decide who wins. Most clocks including those used in the Olympics are based on the natural “tick” of a crystal of quartz. The accuracy of this tick is compared ultimately with that of the atomic clock.

Did You Know?

- *It takes a few hundredths of a second for the sound of a starting pistol to travel along a row of runners, so those close to the gun used to hear it first.*

SPEED: Speed is the distance traveled in a certain time. So it is usually these two quantities – Distance & Time – that are measured. Many Olympic cyclists make use of speedometers to keep track of their performance, and marathon runners use GPS receivers to determine their speeds, Another way to measure speed is by Doppler radar system.

Did You Know?

- Asafa Powell of Jamaica is officially the fastest man in the world, running 100 m in 9.74 seconds- an average speed of 37 km/h.

Average Olympic speeds (km/h)

| | | | |
|--------------------------------|-----------|---------------------------|-----------|
| 1,500 metre free-style swimmer | 6.1 km/h | 100 metre sprint | 36.6 km/h |
| 50 metre free-style swimmer | 8.2 km/h | 1 km time trial (cycling) | 59.3 km/h |
| 50,000 metre walk | 13.7 km/h | Sprint (cycling) | 71 km/h |
| Marathon | 19.6 km/h | | |

PRESSURE: Pressure is defined as force per unit area, and the SI Unit of pressure is the pascal. Which is one Newton per square metre – and a Newton is about the force which an apple presses on the hand. The normal atmospheric pressure at sea level is about 100 thousand pascals, and the pressure inside an Olympic football is 180 thousand pascals.

The pressure inside a football or volley ball affects its bounce, so standardizing the pressure ensures that the ball behaves as the players expect. In practice, however, a wide margin is permitted as pressure depends on temperature, and the temperature of a ball changes throughout a game.

The pressure of the air in a sports ball is measured by a pressure gauge, and pressure gauges are checked against pressure balances.

Did You Know?

- *The Olympics held at the highest elevation were those at Mexico City. 1968, held at 2,300 metres above sea level. At that altitude, atmospheric pressure is about 25 % less than at sea level, and athletes from lower-lying countries suffered from lack of oxygen.*

AMOUNT OF SUBSTANCE: Fitness is crucial for Olympic events, and that means performance-enhancing drugs are banned, and frequent testing is essential. Following a rise in in both drug use and in the awareness of the problem, the International Olympic Committee banned doping in 1967. What matters is the number of molecules of the drug in an athlete’s body. The World Anti-Doping Agency (WADA) specifies which performance-enhancing drugs are banned. There are three main ways to test a drug viz. Mass spectrometry, Gas chromatography and Immuno-assays.

The SI unit for the amount of substance is the mole. One mole of a drug is 602,214,179,000, 000, 000 identical copies of that molecule.

Did You Know?

- *Drug testing in the Olympics first took place in the Cycling Team Time rial race at the 1964 games.*

DOSIMETRY: Bodies are machines, and athlete’s bodies are machines that are trained and tested to the limit – so they often need to be checked for damage. X-ray machines are powerful enough to produce clear images. The amount of ionization produced when the X-ray passes through the body is a measure of the intensity of the X-ray beam. To check the output of an X-ray machine a probe called the dosimeter measures the ionization produced.

The SI unit of radiation is the sievert, equivalent to one joule of energy per kilogram of mater. A single diagnostic X-ray is about 0.01 to 0.1 millisieverts.

Did You Know?

- *A space shuttle astronaut on a one-week mission receives about the same dose of radiation as an average person does in three years.*

EXERCISE

Ten Myths & One Truth

[Based on the Article by Dr. Anoop Misra, Director, Department of Diabetes & Metabolic Diseases, Fortis Hospital, appearing in Indian Express dated September 9, 2009]

| | |
|--|--|
| MYTH 1: It is okay to cover a week's worth of workout during the weekend | FACT: It is better to spread the physical exercise all over the week instead of pounding the body during week-ends. Blood pressure, blood glucose and other metabolic parameters will accrue if there are consistent exercise sessions, which are not separated by a 24-hour period. |
| MYTH 2: Static Yoga is equivalent to aerobic exercising | FACT: Static yoga should not be considered equivalent to aerobic exercise done with the purpose of weight loss and for gaining several other metabolic benefits as it does not involve rhythmic muscle movement to burn calories and blood sugar the way other aerobic exercises do. |
| MYTH 3: The prime time for exercising is in morning | FACT: Exercise can be done at any time during the day. But it is best to avoid exercise after meals, especially for the elderly and those with heart problems. The total time of exercise (E.G. 45 minutes) can also be spent in doing short bouts of exercise several times a day (e.g. 15 minutes three times daily) |
| MYTH 4: Using Vibrating Exercise Machines, rhythmic movement machines while lying, or Sauna Belts are as good as going for regular aerobic exercises. | FACT: These machines do not lead to any long-term weight loss or have any proven scientific benefits. |
| MYTH 5: I am active during work; I do not need any kind of exercise. | FACT: If activity during work means taking a walk or any kind of strenuous physical activity for more than 30-40 minutes daily then it will lead to benefit. But any kind of sedentary work (sitting/ desk job) with minimum office walking does not lead to any benefit as should not be counted as physical exercise.. |
| MYTH 6: Your muscles will turn to fat if you stop exercising. | FACT: Muscles can never convert to fat but their function starts decreasing immediately after stopping exercise. Regular aerobic and resistance (with weights or resistance exercise machines) exercises are needed to maintain function, tone and adequate girth of muscles, which are important for glucose and cholesterol control. |
| MYTH 7: Exercise is one sure way to lose all the weight you desire. | FACT: Exercise will lead to effective weight-loss only if combined with low calorie diet. Doing regular exercise alone has multiple benefits (metabolism, cardio-vascular, fitness) but long-term weight loss may not occur. Some people do experience short-term weight loss. |
| MYTH 8: There are specific exercises to reduce abdominal fat. | FACT: It is a common belief that exercise and training a particular body part will preferentially shed the fat on that part. All types of aerobic or resistance exercises will lead to generalized fat reduction including abdominal fat. Despite popular advice to do various exercises which are aimed at specific fat reduction, there is no scientific basis to it. These exercises, however, may increase the muscle tone. |
| MYTH 9: To be fit you have to join a gym. | FACT: Any aerobic exercise along with a balanced calorie restricted diet will lead to weight loss. Best exercise remains brisk walk. A gym provides varied options for exercising and once you have paid money you tend to become more regular. |
| MYTH 10: I can start exercising today by doing a 60-minute physical activity. | FACT: If you are above 40 years of age, please get yourself checked and then start physical activity. A gradual escalation of exercise would not stress bones and muscles in undue manner. |

TRUTH: Regular physical exercise is a key component for achieving and maintaining ideal body weight. A total of 60 minutes of physical activity is recommended every day in view of high tendency to develop diabetes and heart disease. Daily exercise includes aerobic activity, work-related activity and muscle strengthening activity.

How to do exercise (total time 60 minutes per day)

1. A good way to start is with 15 minutes of normal paced walk daily. Increase by 5 minutes weekly till you reach 30-35 minutes daily. If you have no unusual shortness of breath, or chest pain, or increase pace gradually. Make sure first 5 minutes are slow, to warm you up and last 5 minutes are for cooling down. (**Total Average – 45 minutes** per day).
2. You can do another ten minutes of walk during office hours 9-4 minutes of walk every 2 hours of sedentary work) (**Total Average – 10 minutes** per day).
3. Start under supervision to learn weight (small weights – 1, 2, 3, 4, 5 kg each) training, with 10 repetitions (three such daily) weights using major muscles of arms and legs at least for ten minutes 3-5 times per week. (You can do on your own once you learn it properly) (**Total Average – 5 minutes** per day).

Trust Your Genes Not the Planets

[Adapted from the Article by Bimal Basu published in MAIL TODAY, Dated 20. 09. 2009, page 27]

The main argument against astrology is that there is no rationale for the assumption it makes to cast horoscopes and make predictions. Advocates of astrology cannot account for the underlying basis of astrological associations of cosmic bodies with terrestrial affairs, and have no plausible explanation for their claims.

The mainstay of astrological 'calculations' is the so-called influence of planets (including the Sun, Moon and fictional *Rahu* and *Ketu*) on individuals. If we have to accept this, then the first question that arises is: In what manner do the planets millions of kilometers away interact with or exert their influence on individuals on Earth? Astrologers cannot provide the answer.

Thanks to modern science, the mysteries of the natural world no more bewilder us. Today we have scientific explanations for most of the natural phenomena, whether eclipses or earthquakes, or sighting of comets. The rising Sun, Moon and the stars in the sky, are all well-understood natural phenomena. But there is no scientific or logical basis to suggest that these phenomena can be related to individual human fate, as astrologers would have us believe. Even if so-called use of computers for horoscope calculation doesn't endow astrology with any scientific legitimacy; it is only aimed at misleading the public.

The next question is – *even if for a moment we accept planets do have some influence, however miniscule – how can that influence be selective for certain individuals, and how can it decide future events in the life of the individual, as astrologers claim?*

Any influence of planets can be only gravitational. What kind of gravitational effect bring about in the genes at the time of birth of individuals or decide their personality or fate? There is no known mechanism by which the planetary positions can influence the genetic make-up of an individual, which is decided long before birth at the time of conception.

On the other hand, advances in genetics have shown that genes do decide many of the human traits and frailties, including proneness to certain disease. So, it is not the planets but the genes and our environment that may be controlling our fate to some extent. Moreover, when 290,000 people are killed in a natural disaster, it would be naïve to suggest that planetary positions were unfavourable for all of them at the same time.

Another trick that astrologers use to lead people astray is by recommending gemstones as the panacea for their misfortune. From purely a scientific angle, a gemstone is nothing but a variety of minerals highly prized for their beauty, durability, and rarity. A few non- crystalline materials of organic origin (like pearl, red coral, and amber) are also called as gemstones. There is no evidence that gemstones emit mysterious 'rays' (apart from reflecting or scattering the light incident on them) that may be capable of curing a disorder or a chronic disease.

It is important to remember that astronomy is a predictable science which can be practiced and enjoyed by everyone, but astrology is unscientific, and is born out of ignorance and fear. It is unfortunate that astrology continues to be promoted recklessly by the media – both print and electronic – purely for commercial ends.

Basis of Astrology is fear, feels Biman Basu

If a Child Lives with ...

Criticism, he learns to condemn.

Honesty, he learns to fight.

Ridicule, he learns to be shy.

Shame, he learns to feel guilty.

Tolerance, he learns to be patient.

Encouragement, he learns confidence.

Praise, he learns to appreciate.

Fairness, he learns justice.

Security, he learns to have faith.

Approval, he learns to like himself.

Acceptance or Friendship, he learns to find love in the world.

Three times Thirteen Tips for Better Life

1. Take a 10-30 minutes walk every day. And while you walk, smile.
2. Sit in silence for at least 10 minutes each day.
3. Sleep for 7 hours.
4. Live with the 3 E's - Energy, Enthusiasm, and Empathy.
5. Play more games.
6. Read more books.
7. Make time to practice meditation, yoga, and prayer. They provide us with daily fuel for our busy lives.
8. Spend time with people over the age of 70 & under the age of 6.
9. Dream more while you are awake.
10. Eat more foods that grow on trees and plants and eat less food that is manufactured in plants.
11. Drink plenty of water.
12. Try to make at least three people smile each day.
13. Don't waste your precious energy on gossip.
14. Forget issues of the past. Don't remind your partner with his/her mistakes of the past. That will ruin your present happiness.
15. Don't have negative thoughts or things you cannot control. Instead invest your energy in the positive present moment.
16. Realize that life is a school and you are here to learn. Problems are simply part of the curriculum that appear and fade away like algebra class but the lessons you learn will last a lifetime.
17. Eat breakfast like a king, lunch like a prince and dinner like a beggar.
18. Smile and laugh more.
19. Life is too short to waste time hating anyone. Don't hate others.
20. Don't take yourself so seriously. No one else does.
21. You don't have to win every argument. Agree to disagree.
22. Make peace with your past so it won't spoil the present.
23. Don't compare your life to others'. You have no idea what their journey is all about. Don't compare your partner with others.
24. No one is in charge of your happiness except you.
25. Forgive everyone for everything...
26. What other people think of you is none of your business.
27. GOD! heals everything.
28. However good or bad a situation is, it will change.
29. Your job won't take care of you when you are sick. Your friends will. Stay in touch.
30. Get rid of anything that isn't useful, beautiful or joyful.
31. Envy is a waste of time. You already have all you need.
32. The best is yet to come.
33. No matter how you feel, get up, dress up and show up.
34. Do the right thing!
35. Call your family often.
36. Your inner most is always happy. So be happy.
37. Each day give something good to others.
38. Don't over do. Keep your limits.
39. When you awake alive in the morning, thank GOD for it.

It is hoped that you are not suspicious of 3, 13
and Multiples of 13

NPL FORMER SCIENTISTS FORUM

Self Assessment Survey on Superstitions & Myths

[12. 08. 2009]

In fact, most probably we all are superstitious to an extent, in real life. This survey form is to create an awareness and to have a *Self Realization* towards the extent to which we follow many baseless beliefs out of ignorance or fear of unknown.

(Incase you believe in following statements, Please write 'Y', if not please write 'N')

NOTE: Column (3) left blank will be interpreted as 'Y'

Name.....

Date.....

| Sr. No. | Statement | Write Y or N |
|---------|---|-----------------|
| (1) | (2) | (3) |
| 1. | Fasting and praying at the time of solar or lunar eclipse is auspicious. | |
| 2. | Daily / weekly or yearly predictions by astrologers have truth in them. | |
| 3. | Existence of ' <i>ghosts</i> ' and calling ' <i>souls</i> ' of dead persons is a possibility. | |
| 4. | Curing of diseases and bringing good luck in ones life by ' <i>Tantriks</i> ' and ' <i>Ojhas</i> ' is achievable. | |
| 5. | Prediction of future happenings by looking at the palm or forehead of individuals is possible. | |
| 6. | ' <i>VatsuShastra</i> ' is worth following. | |
| 7. | Miracles attributed to sages, saints or so called Godmen are true and not possible. | |
| 8. | Fasting can ward-off bad luck or misfortunes. | |
| 9. | Number ' <i>7</i> ' is lucky and number ' <i>13</i> ' is inauspicious. Some numbers are lucky and some are unlucky. | |
| 10. | ' <i>Sneezing</i> ' before starting a journey – bad omen. | |
| 11. | ' <i>Seeing an empty bucket or vessel</i> ' before starting a journey or an action – bad omen. | |
| 12. | Touching wood or even saying ' <i>Touch Wood</i> ' wards off any the ill effects on any thing you are praising. | |
| 13. | Cawing of a crow in one's house foretells the arrival of guests. | |
| 14. | Owl sitting on a housetop is a sure sign of ruin and destruction. | |
| 15. | ' <i>Nazar Lagna</i> ' and ' <i>Nazar Utarna</i> ' has significance. | |
| 16. | ' <i>Totka Karma</i> ' can bring bad or good luck to a person. | |
| 17. | ' <i>Seeing oil-filled vessel or container</i> ' on a Saturday is auspicious. | |
| 18. | If the lamp (<i>Deepak</i>) at <i>Puja</i> blows out, it is a very bad signal. | |
| 19. | If a black cat crosses your path, you will have bad luck | |
| 20. | To break a mirror will bring you bad luck | |
| 21. | Matching of horoscopes of a to-be-married couple ensures happy married life | |
| 22. | Our fate is written in the stars | |
| 23. | An itchy palm means money will come your way | |
| 24. | Iron goods and oil should not be purchased or brought home are on Saturday. | |
| 25. | It is inauspicious to have a clock on the wall which has stopped working. | |
| 26. | When some one is leaving the house for examination/ interview, curd is given to him for good luck. | |

| | | |
|-----|---|--|
| 27. | If the bottom of your feet itch, you will make a trip | |
| 28. | When a dog howls, death is near | |
| 29. | Hanging lemon and green chilies keeps the evil sprits away. | |
| 30. | If a married lady accidentally drops her little box of Vermilion (<i>Sindoor</i>), her husband's life is in grave danger | |
| 31. | House on a <i>Gomukhi</i> plot of land (which has front side smaller than the back side) brings prosperity, and on a <i>Shermukhi</i> plot (which has front side greater than back side) is not auspicious. | |
| 32. | Any physical disability is a consequence of bad deeds (<i>Karma</i>) of previous life. | |
| 33. | Some gems or natural stones are lucky or unlucky for individuals | |
| 34. | Dreams have some significance and morning dreams are a prediction of things to happen in future | |
| 35. | Everything happening in life is pre-destined | |
| 36. | If questioned/ interrupted, while leaving the house, for some work, it is detrimental. | |
| 37. | By putting a black mark (<i>Kajal Ka Tika</i>) on the forehead of an infant, the child is protected from any evil sprit (<i>Buri Nazar</i>) | |
| 38. | Hiccups or sneezing is an indication that some near-one is remembering you. | |
| 39. | Crossing your fingers helps to avoid bad luck and helps a wish come true | |
| 40. | Wearing <i>Rudraksha</i> beads brings good luck and keeps the blood pressure normal. | |
| 41. | Wearing a Lucky Charm (may be a shirt, chain, pendent or shoes etc) for an interview/ examination/ sports etc. helps in getting the desired success or to avert any evil. | |
| 42. | A widow is not welcome to attend an auspicious ceremony as she may bring bad luck. | |
| 43. | Meeting an one-eyed person on your way to an important job, brings harmful result. | |
| 44. | Twitching of right eye brings good luck and of left eye is an indication of bad luck. | |
| 45. | Hanging a shoe on the rear side of a truck or a lorry protects it from an evil eye. | |
| 46. | Any good or bad occurrence in the family, during the first year of marriage, is attributed to the presence of the bride. | |
| 47. | There are houses which are 'Cursed' (<i>Manhoos</i>). Any body living in them will be ruined. | |
| 48. | If three people go for a job they are sure to spoil it. <i>Teen Tigara Kam Bigara</i> . | |
| 49. | Clipping ones mails at night or use of scissors will be angering the evil spirits. | |
| 50 | Looking at the palms of their hands as soon as one gets up in the morning, ensures happiness through out the day. | |

Suggest some other common superstitions that you know of in the space below, or on a separate sheet

| | | |
|----|--|--|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |
| 7. | | |

For official use only

THE LAWS OF ULTIMATE REALITY

Law of Mechanical Repair: After your hands become coated with grease, your nose will begin to itch and you'll also want to go to the washroom.

Law of Gravity: Any tool, when dropped, will roll to the least accessible corner.

Law of Probability: The probability of being watched is directly proportional to the stupidity of your act.

Law of Random Numbers: If you dial a wrong number, you never get a busy signal and someone always answers.

Law of the Alibi: If you tell the boss you were late for work because you had a flat tire, the very next morning you will have a flat tire.

Variation Law: If you change lines (or traffic lanes), the one you were in will always move faster than the one you are in now (works every time)

Law of the Bath: When the body is fully immersed in water, the telephone rings.

Law of Close Encounters: The probability of meeting someone you know increases dramatically when you are with someone you don't want to be seen with.

Law of the Result: When you try to prove to someone that a machine won't work, it will.

Law of Biomechanics: The severity of the itch is inversely proportional to the reach.

Law of the Theater: At any event, the people whose seats are furthest from the aisle arrive last.

The Starbucks Law: As soon as you sit down to a cup of hot coffee, your boss will ask you to do something which will last until the coffee is cold.

Murphy's Law of Lockers: If there are only two people in a locker room, they will have adjacent lockers.

Law of Physical Surfaces: The chances of an open-faced jelly sandwich landing face down on a floor covering are directly correlated to the newness and cost of the carpet/rug.

Law of Logical Argument: Anything is possible if you don't know what you are talking about.

Brown's Law of Physical Appearance: If the shoe fits, it's ugly.

Oliver's Law of Public Speaking: A closed mouth gathers no feet.

Wilson's Law of Commercial Marketing Strategy: As soon as you find a product that you really like, they will stop making it.

Doctors' Law: If you don't feel well, make an appointment to go to the doctor, by the time you get there you'll feel better. Don't make an appointment and you'll stay sick.

N. Sharma & Associates

Chartered Accountants

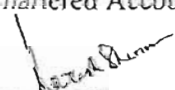
V-6, First Floor, Green Park Extension New Delhi-110 016 India
Phone : 42654847, 26183266

28th April 2009

The Members,
NPL Former Scientists Forum
NPL Premises, Dr. K S Krishnan Marg,
New Delhi.

1. We have verified the attached Balance Sheet of NPL FORMER SCIENTISTS FORUM, New Delhi as at March 31, 2009 and the Income and Expenditure Account for the year ending on that date. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. We conducted our audit in accordance with the auditing standards generally accepted in India. Those Standards require that we plan and perform the audit to obtain reasonable assurances about whether the financial statements are free of material mis-statement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements presentation. We believe that our audit provides a reasonable basis for our opinion. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.
3. In our opinion, proper Books of Accounts have been kept by the society so far as it appears from our examination of the books of Accounts.
4. The said Balance Sheet and the Income & Expenditure Account dealt with by this report are in agreement with the Books of Accounts.
5. In our opinion and to the best of our information and according to the explanations given to us, the Accounts give a true and fair view,
 - 1) In the case of Balance Sheet, of the state of affairs of the society at March 31, 2009,
 - 2) In the case of Income & Expenditure Account of the Income/ Expenses of the year ending on March 31, 2009.

Yours faithfully,
For N. SHARMA & ASSOCIATES
Chartered Accountants


CA NARESH SHARMA,
Prop.



Mobile : 9810075023, 9910075023, 9810140023
e-mail : naresh_351@rediffmail.com; naresh_35@hotmail.com

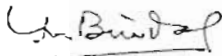
NPL FORMER SCIENTISTS FORUM : New Delhi
 NPL Premises, Dr. K S Krishnan Marg, New Delhi

Balance Sheet as on 31st March 2009


| <u>LIABILITIES</u> | <u>Rs.</u> | <u>Rs.</u> | <u>ASSETS</u> | <u>Rs.</u> |
|-----------------------------------|------------|-------------------|---------------------------|------------------|
| <u>Reserve Funds</u> | | | | |
| Opening Balance | | 93,357.33 | FDs with Syndicate Bank | 53,762.20 |
| Less: | | | Cash in Hand | 5,431.00 |
| Excess of Expenditure over Income | | <u>(7,957.70)</u> | Balance at Syndicate Bank | 28,412.43 |
| | | 85,399.63 | | |
| Audit Fees Payable | | 2,206.00 | | |
| | | <u>87,605.63</u> | | <u>87,605.63</u> |

for NPL Former Scientists Forum

As per Our Audit Report of Even Date
 for N. Sharma & Associates


 President
 New Delhi
 April 28, 2009

 Secretary
 Treasurer


 CA Naresh Sharma
 Prop.



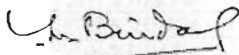
NPL FORMER SCIENTISTS FORUM : New Delhi
 NPL Premises, Dr. K S Krishnan Marg, New Delhi

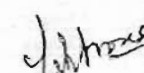
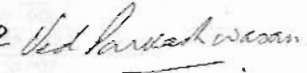
Income and Expenditure Account for the year ending on 31st March 2009


| <u>Expenditure</u> | <u>Rs.</u> | <u>Income</u> | <u>Rs</u> |
|------------------------------------|-------------------|--|-------------------|
| Photocopying | 1,475.00 | Subscription | 16,100.00 |
| Stationery | 4,811.50 | Advertisements | 16,000.00 |
| Postage | 4,965.00 | Donations for Expenses | 17,226.00 |
| Meeting Expenses | 5,781.00 | Donations for Scholarship Funds | 62,200.00 |
| Newsletter | 7,126.00 | Bank Interest Income -Forum A/c | 2,198.39 |
| Miscellaneous Exps. | 8,625.10 | Bank Interest Income -Scholarship A/c | 7,819.74 |
| Scholarships Given | 10,800.00 | Overheads Recovery | 1,700.00 |
| Audit Fees | 2,206.00 | | |
| Donations Trf to Scholarship Funds | 85,412.23 | | |
| | | Excess of Expenditure over Income during the year transfer to Reserves | 7,957.70 |
| | | | - |
| | <u>131,201.83</u> | | <u>131,201.83</u> |

for NPL Former Scientists Forum

As per Our Audit Report of Even Date for N. Sharma & Associates


 President
 New Delhi
 April 28, 2009

 Secretary
 Treasurer


 CA Naresh Sharma
 Prop.



NPL FORMER SCIENTISTS FORUM

Donations Received From Members

(After 01. 09. 2008)

NOTE: Information relating to the amount received by way of donations amounting to Rs. 17, 851 up to 01. 09. 2009 had been furnished in the Newsletter Issue No. 5 dated September 2008

| Receipt Number | Date | Party & Purpose | Amount (Rs.) | Mode of Payment | Membership Number |
|----------------|--------------|---------------------------------|------------------|-----------------|-------------------|
| 400 | 27. 10. 08 | Wasan, Ved Parkash | 1,575.00 | Cash | MEMBER [015] |
| 401 | 27. 10. 08 | Verma, Tribhawan | 1,500.00 | Cash | MEMBER [174] |
| 403 | 27. 10. 08 | Dhawan, Urmil (Mrs) | 200.00 | Cash | MEMBER [020] |
| 404 | 27. 10. 08 | Manrai, Santosh (Mrs.) | 200.00 | Cash | MEMBER [054] |
| 405 | 22. 11. 08 | Mohanani, Vellur (Dr.) | 1,000.00 | Cheque | MEMBER [190] |
| 414 | 12. 03. 09 | Singh, Shiv Nath (Dr.) | 1,000.00 | Cheque | MEMBER [195] |
| 415 | 12. 03. 09 | Gupta, Suresh Kumar (Dr.) | 1,000.00 | Cheque | MEMBER [185] |
| 416 | 12. 03. 09 | Chitnis, Vijay Trimbak (Dr.) | 1,000.00 | Cheque | MEMBER [207] |
| 417 | 12. 03. 09 | Kothari, Prafulla Chandra (Dr.) | 2,100.00 | Cheque | MEMBER [208] |
| 423 | 16. 03. 09 | Singh, Ved Ram (Dr.) | 1,500.00 | Cash | MEMBER [167] |
| 424 | 16. 03. 09 | Shiv Nath | 500.00 | Cheque | MEMBER [006] |
| 425 | 16. 03. 09 | Tomer, Tej Ram | 500.00 | Cash | MEMBER [066] |
| 426 | 16. 03. 09 | Ram Swarup (Dr.) | 2,001.00 | Cash | MEMBER [142] |
| 427 | 16. 03. 09 | Inder Bhan | 500.00 | Cheque | MEMBER [102] |
| 428 | 16. 03. 09 | Dev Kumar | 200.00 | Cash | MEMBER [108] |
| 430 | 16. 04. 09 | Joshi, Kundal Chandra (Dr.) | 1,000.00 | Cash | MEMBER [047] |
| 431 | 16. 04. 09 | Ram Narain | 100.00 | Cash | MEMBER [099] |
| 432 | 16. 04. 09 | Dev Kumar | 100.00 | Cash | MEMBER [108] |
| 433 | 16. 04. 09 | Kanjilal, Alok Kumar | 100.00 | Cash | MEMBER [075] |
| 434 | 16. 04. 09 | Mahesh Chander (Gupta) (Dr.) | 5,000.00 | Cheque | MEMBER [162] |
| 435 | 16. 04. 09 | Harish Chander (Dr.) | 1,000.00 | Cheque | MEMBER [187] |
| 436 | 16. 04. 09 | Sharma, Chhatra Pal (Dr.) | 1,000.00 | Cheque | MEMBER [179] |
| 438 | 16. 04. 09 | Saksena, Rakesh Chandra (Dr.) | 2,500.00 | Cash | MEMBER [028] |
| 439 | 16. 04. 09 | Khanduja, Radhey Sham | 1,500.00 | Cash | MEMBER [049] |
| 441 | 16. 04. 09 | Alam, Mohammed Izhar | 1,000.00 | Cash | MEMBER [128] |
| 450 | 27. 06. 09 | Agarwal, Shyam Kishore (Dr.) | 1,000.00 | Cheque | MEMBER [213] |
| 459 | 23. 08. 09 | Sharma, Jagdish Prashad | 1,000.00 | Cheque | MEMBER [143] |
| 460 | 12. 09. 09 | Varma, Satya Prakash (Dr.) | 2,000.00 | Cheque | MEMBER [064] |
| | TOTAL | | 32,076.00 | | |

It is heartening to note that an amount of Rs. 32,076 has been received as against the amount of Rs. 17,851 that had been received till 01. 09. 2008, and reported in the last Issue of the Newsletter, for meeting the expenses on (1) Tea and Refreshment served to the members at the various meetings, (2) Xeroxing of material for the meetings e.g. notices and the enclosures thereto, (3) Postage of letters and the stationery e.g. envelopes, glue etc, and (4) other Miscellaneous expenses The Forum expects that this support through donations for such activities will continue increasing.

A closer look at the above table will reveal that the member who had been appointed as Emeritus Scientists or whose services had been requisitioned for specific assignments in NPL after their retirement, or else had got promoted post-retirement; or who have been blessed with the birth of grand children, or have successfully discharged their responsibilities towards their children through their marriages, or else their contributions have been recognized by various bodies through honours conferred on them; or have had grah pravesh to a home that they had cherished to have after their retirement; or have post-retirement publications to their credit, have made very generous contributions and shared their joy with the members of the Forum. It is hoped that they shall continue to do so and also keep the Forum informed for reporting in the Newsletter also..

As has been mentioned under the Section "Scholarships & Awards", in addition to the institution of a new award – J P Bindal Memorial Award – from the year 2009 by Dr. V N Bindal, by donating a corpus of Rs. 20,501, for making it a perpetual award like the other Scholarships & Awards, the Forum has also decided to give scholarships to the school-going children of the staff members of NPL who had expired during their service of the Laboratory, at the suggestion given by Dr. Vikram Kumar, Chairman of the Scholarship Committee at its meeting held on 27th May 2009. Three such scholarships of Rs. 125/- per month for one year have been awarded at the Cultural Programme that had been organized by NPL on 24th September, 2009 in celebration of the CSIR Foundation Day – 26th September. Recently an amount of Rs. 10,000/- has been donated by Dr. V V Shah and Rs. 1000/- has been donated by Shri R K Khanna with the offer of making similar contributions every year. Another amount of Rs. 2,000/- has been donated by an industrialist for supporting this activity. It is hoped that the other members of the Forum shall also come forward to support this activity so that not only the quantum of assistance to them could be increased, but also to enable them to continue their studies till XII class, subject to the conditions approved at the subsequent meeting of the Scholarship Committee held under the Chairmanship of Dr. P Banerjee on 18th September 2009.

Membership List

(Status as on 12. 08. 2009) - [Updated as on 03. 09. 2009]

This is a list of Members of the NPL Former Scientists Forum living in and around Delhi as also others staying elsewhere but who have enrolled themselves as Members of the Forum. Entries, in the list (**Column 2**), have been arranged **alphabetically by the Surnames**, and these have been **indicated in bold face**.

The **Date of Birth** of the Scientist listed has also been indicated. This is indicated just after the name in square brackets e. g. [16. 09. 43], in respect of Dr. Raghunath Bhattacharyya. The **Last Designation held in the NPL**, as also the **Date of Leaving NPL** is indicated in this column. This date is indicated in circular brackets, and is put in bold face e.g. (30. 09. 2003), in respect of Dr. Raghunath Bhattacharyya. **Residential Addresses** have been indicated. **E-mail Address** has also been indicated, wherever available.

In **Column (1)**, the Personal File Numbers used by the Establishment Branch (E – II Branch) of NPL have been used as **Identification Numbers (I.D. Numbers)** of the various persons covered in the list. More than one I.D. Number in this column in respect of a Member indicates that the E-II Section had opened personal files relating to them under those numbers as well.

Indication has also been given about the Membership Number in **Column (3)**. Particulars about the **CGHS Card Number** and the **Dispensary Number** have also been indicated. **Date of Expiry** of the member, where applicable, has also been indicated in this column.

Residential Telephone Numbers/ Contact Numbers/ Mobile Numbers have been indicated in **Column (4)**. Wherever the information presently available is only partial/ incomplete/ doubtful, it has been indicated by signs of question marks [??], to be appropriately replaced by the correct information later.

AN APPEAL : Members are requested to inform the Secretary about changes in any of the Items of Information relating to them in respect of **Columns 2, 3, and 4**, so that the same could be made in this List and also incorporated in the Membership Register maintained by him.

| Sr. No. & I D No. | Name, Date of Birth, Last Post held, Date of Retirement & Postal Address and e-mail address | Membership Number, CGHS Card Number and Dispensary Number & Remarks | Phone Number/ Contact Phone Number/ Mobile Phone Number & REMARKS |
|--------------------|--|---|---|
| (1) | (2) | (3) | (4) |
| 1 1709 | Agarwal, Ashok Kumar [08. 02. 43] Scientist 'F' (28. 02. 2003) 190, Deepali, Pitam Pura, Delhi – 110 034. | MEMBER [035] P-064340 54 | [EXPIRED on 05. 11. 07] |
| 2 3453 4974 | Agarwal, Shyam Kishore (Dr.) [23. 11. 48] Scientist 'F' (30. 11. 2008) 47, Rama Krishna Apartments, Plot-10, Sector-9, Rohini, Delhi – 100 085. prof.agarwal@gmail.com | MEMBER [213] P-110062 86 | 47026447; 9811542287 (Mobile) |
| 3 1229 | Aggarwal, Santosh (Mrs.) [27. 08. 37] Scientist 'F' (31. 08. 1997) 6, NPL Apartments, Vikas Puri, New Delhi – 110 018. santosh.aggarwal@rediffmail.com | MEMBER [008] P-001362 74 | 28543656; 9313106956 (Mobile) |
| 4 2662 | Agnihotry, Suhasini (Dr. Mrs.) [13. 10. 45] Scientist 'F' (31. 10. 2005) D-7, Flat No. 7289, Vasant Kunj, New Delhi – 110 070. suhasavi@gmail.com | MEMBER [157] P-085224 71 | 26892962; 26134975 (Contact); 9911137334 (Mobile) |
| 5 2140 | Agrawal, Arun Kumar (Dr.) [15. 11. 47] Scientist 'F' (30. 11. 2007) B-304, Divya Apartments, Plot No. 21, Sector 10, Dwarka, New Delhi – 110 075. contact2aka@yahoo.co.in | MEMBER [193] P-099997 45 | 45700950; 9811707279 (Mobile) |
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| 7 1760 | Ali, Sultana Zulfiqar (Dr. Mrs.) [19. 08. 22] Scientist 'F' (31. 08. 1982) A 505/506, UNESCO Apartments, 55, Indra Prastha Extension, New Delhi – 110 092. viyengar@satyam.net.in | MEMBER [106] | 22238880; 22238881; 9312656884 (Mobile) |
| 8 1988 | Anand, Jagdish Raj (Dr.) [10. 03. 40] Scientist 'G' (31. 03. 2000) 56-A, Pocket B, SFS (DDA)Flats, Outer Ring Road, Vikas Puri Extension, New Delhi – 110 018. | MEMBER [036] P-030473 | [EXPIRED on 12. 11. 03] |
| 9 2222 | Arora, Gyanendra Kumar [04. 04. 35] Scientist 'F' (30. 04. 1995) 180, Mandakini Enclave, Alaknanda Complex, New Delhi – 110 019. gyanarora35@hotmail.com ; gyanaroral935@yahoo.co.in | MEMBER [003] P-028249 75 | 26275334; 9891025362 (Mobile) |
| 10 1340 | Awasthy, Bal Ram [05. 10. 38] Scientist 'E II' (31. 10. 1998) WZ 468 H, M S Block, Hari Nagar, Clock Tower, New Delhi – 110 064. | MEMBER [037] P-005444 48 | 25128032 |
| 11 0292 | Bahadur, Kanwar (Dr.) [13. 04. 25] Jr Sci Offer (02. 02. 1962 – Defence Science Centre, Delhi) 53, Hanuman Road, New Delhi –110 001 | MEMBER [161] | 23742434; 9811358410 (Mobile) |
| 12 1977 4223 | Bahl, Om Parkash (Dr.) [05. 10. 39] Scientist 'G' (31. 10. 1999) D-210, Sector-55, NOIDA – 201 301, (Uttar Pradesh). opbahl@mail.nplindia.ernet.in | MEMBER [009] P-018125 85 | 0120-4324415; 9811251200 (Mobile) |
| 13 1768 | Balakrishnan, K Saraswathi (Dr. Mrs.) [13. 11. 39] Tech Offcr (E-1) (30. 11. 1999) 54-A, C4-D Block, Janak Puri, New Delhi – 110 058. | MEMBER [087] P-070903 61 | 25554698 |

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|----------------------------|---|--|---|
| 14 0786 | Balchandani, Mulchand Kewalram [07.04.28] Tech Offcr © (30.04.1988) Bangalow No. 4, NCL Housing Society, Pashan Road, Pune, Maharashtra - 410 008. Also: 672, Freedom Fighters Home, Baba Kharag Singh Marg, Near Gol Dak Khana, New Delhi - 110 001. | MEMBER [089] P- 038023 31 Permanent Card- Freedom Fighter's | (020)-25898213 (Pune); 23360171 (Local Contact); 9868012556 (Mobile) |
| 15 2523 | Banerjee, Prasun Kumar (Dr.) [31.12.48] Scientist 'F' (31.12.2008) L-34, Ridgewood Estate, DLF City, Phase 4, Gurgaon - 122 002 (Haryana). prasun4193@gmail.com | MEMBER [224] 007134 52 In Wife's Name | 0124-4041423; 9810183189 (Mobile) |
| 16 3258 | Batra, Jai Dev [15.05.46] Dy Str & Pur Offcr (31.05.2006) Nouse No. D-169, Sector 11, DLF, Faridabad - 121006, (Haryana). | MEMBER [172] P-090610 70 | 0129-4008665; 0129-4128665 (Contact); 9910156267 (Mobile); 9212703249 (Mobile) |
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| 18 2056 | Bhasin, Rajendra Kumar [22.06.46] Private Secretary (30.06.2006) 37C/Y1, Dilshad Garden, Delhi - 110 095 | MEMBER [166] P-088974 87 | 22588451; 9868331747 (Mobile) |
| 19 2805 | Bhaskar, Hira Lal Bhagat [01.01.42] Scientist 'E II' (31.12.2001) AG-J/51 A, MIG (DDA) Flats, Vikas Puri, New Delhi - 110 018. | MEMBER [088] P-058744 17A | 25559192; 9899690059 (Mobile Contact) |
| 20 1063 | Bhatheja, Ram Chand [10.08.36] Tech Offcr (C) (31.08.1996) SU-162, Pitam Pura, Delhi - 110 088. | MEMBER [039] P-031635 81 | 27341558 |
| 21 1066 | Bhatnagar, Kameshwer Nath [20.02.34] Scientist 'E II' (28.02.1994) H-322, Naraina Vihar, New Delhi - 110 028. | MEMBER [019] P-041628 98 | 25792881; 9868084026 (Mobile Contact) |
| 22 2342 2226 4639 | Bhattacharyya, Raghunath (Dr.) [16.09.43] Scientist 'G' (30.09.2003) Flat 235, Dakshinayam CGHS, Dwarka Sector 4, New Delhi - 110 075. Also: A/S 75, Ageya Nagar, Bilaspur - 495 001, (Chattisgarh). raghubhatin@yahoo.com | MEMBER [156] | 9313418406 (Mobile); (07752)- 224431 (Bilaspur) |
| 23 1335 | Bhola, Om Parkash [22.01.37] Tech Offcr (E-I) (31.01.1997) F-28, Faridkot House Lane, Copernicus Marg, New Delhi - 110 001. | MEMBER [107] P-012730 33 | 23388273 |
| 24 1136 | Bindal, Vishwa Nath (Dr.) [25.12.30] Scientist 'G' (31.12.1990) F-139, Mansarovar Garden, New Delhi - 110 015. vnbindal@yahoo.co.in | MEMBER [001] P-008179 53 | 25192397 ; 41001400 |
| 25 4380 | Chakladar, Swapan Kumar [01.08.46] Scientist 'F' (31.07.2006) 4200, Sector D, Pocket 4, Vasant Kunj, New Delhi - 110 070. skchakladar1@yahoo.co.in | MEMBER [170] P-090024 71 | 26133871; 9873272512 (Mobile) |
| 26 2432 | Charavarty, Tushar Kanti [05.01.48] Scientist 'E-II' (31.01.2008) B-301, Garden Apartment, Vaishali, Sector 4, Ghaziabad - 201 010 (Uttar Pradesh). tushar2009@gmail.com ; tushar@mail.nplindia.ernet.in | MEMBER [206] P- 102539 37 | 9968300043 (Mobile) |
| 27 0916 | Chandra, Kailash (Dr.) [10.11.34] Scientist 'Dir Grd.' (26.11.1991 - Voluntary) E-46, Greenwood City, Near South City I, Gurgaon, Haryana - 122 001. kchandra100@hotmail.com | MEMBER [040] P- 086533 65 | 0124-2582165; 9910939287 (Mobile) |
| 28 2209 | Chandra, Mukesh (Dr.) [19.09.48] Scientist 'E-II' (30.09.2008) 21, Bhargava Lane, Boulevard Road, Civil Lines, Delhi - 110 054. mchandra1948@yahoo.in | MEMBER [214] P-111627 59 | 23972321; 23959279; 9911118021 (Mobile) |
| 29 2195 | Chandra, Subhas (Dr.) [06.01.40] Scientist 'G' (31.01.2000) DDA Flat No. 25 C, Shalimar Bagh (A/N), Delhi - 110 088. | MEMBER [016] P-014387 62 | 27478324 |
| 30 3426 | Chandra, Subhash [15.01.46] Tech Offcr (E-I) (31.01.2006) 231, Vishwas Apartment, Plot No. 6A, Sector 23, Dwarka, New Delhi - 110 075 chandrasubhash@yahoo.co.uk | MEMBER [158] P-089810 61 | 28051756; 9213131281 (Mobile) |
| 31 2286 0323 | Chattar Singh (Bharti) [17.07.31] Tech Offcr (A) (31.07.1991) 9/5, Amrit Kaur Puri, Tank Road, Karol Bagh, New Delhi - 110005 | MEMBER [173] P-007770 18 | 25738917; 25863895; 0120-2531223 |
| 32 0147 | Chaudhary, Janki Nath [12.07.30] Admn Offcr (31.07.1988) House No. 124, Sector 5, Part III, Gurgaon - 122 001, (Haryana). | MEMBER [092] P-032497 73 | 0124-3207859; 9811107891 (Mobile Contact) |
| 33 2440 | Chaudhuri, Mihir Kumar [02.10.42] Scientist 'E-II' (31.10.2002) 37, NPL Apartments, Block H-3, Vikas Puri, New Delhi - 110 018. mkchaudhuri@yahoo.com | MEMBER [134] P-076408 74 | 28544804 |
| 34 2753 | Chhabra, Kailash Chander [02.10.42] Scientist 'B' (04.11.1981 - DOE) 23, NPL Apartments, Block H-3, Vikas Puri, New Delhi - 110 018. kcchhabra@yahoo.com | MEMBER [116] P-064431 74 Permanent Card | 28545836 ; 47052023; 9818087753 (Mobile) |
| 35 0160 | Chhappgar, Ardeshir Framji (Dr.) [07.11.24] Scientist 'F' (30.11.1984) F-16 A, Saket, New Delhi - 110 017. | MEMBER [017] P-005712 65 | [EXPIRED on 07.02.08] |
| 36 2682 | Chhibber, Mohinder Kumar [05.12.47] Tech Offcr (E-I) (31.12.2007) EG-5, Inder Puri, New Delhi - 110 012. mkchhibber@hotmail.com | MEMBER [217] MEDICLAIM | 25834305; 9810122152 (Mobile) |
| 37 2301 | Chitnis, Vijay Trimbak (Dr.) [16.08.48] Scientist 'G' (31.08.2008) A-403, Krishan Kunj Society, Plot No. 19, Pocket-6, Nasirpur Road, Dwarka Kunj, New Delhi - 110 045. vt_chitnis@hotmail.com | MEMBER [207] P-106989 36A | 45564403; 9810957247 (Mobile); 9811456335 (Mobile Contact) |
| 38 4025 1779 | Chopra, Bir Bal [30.09.42] Str & Pur Offcr (20.10.1997 - NISTADS) [Retired as Under Secretary, CSIR Complex - 30.09.2002] A5B/182B Janak Puri, New Delhi - 110 058. | MEMBER [129] P-060276 61 [H Qrs.] | 25613639; 9911191272 (Mobile) |

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| 39 0908 | Chopra, Sarb Daman Kumar [15. 03. 41] ??? (. 01. 1966 – CDRI) [Retired from CDRI, Lucknow as Scientist 'E-II'] 7/5, Ground Floor, South Patel Nagar, New Delhi – 110 008. | MEMBER [070] P-049880 20 | <u>EXPIRED on 01. 02. 06]</u> |
| 40 2152 | Das, Bijoy Kishore (Dr.) [01. 05. 45] Scientist 'G' (02. 01. 2000 - Joined C-MET) B-210, Nirmala Plaza Apartment, Forest Park, Bhubaneswar - 751009 (Orissa). bkdas45@yahoo.co.uk ; bkdas45@gmail.com | MEMBER [223] CSIR Scheme – IMMT, Bhubaneswar | (0674)- 2595311(Bhubaneswar); 9777438454 (Mobile) |
| 41 2613 | Das, Mati Lal [14. 05. 46] Scientist 'F' (31. 05. 2006) 110B, Pocket C, Mayur Vihar Phase 2, New Delhi – 110 091. mldas@mail.nplindia.ernet.in | MEMBER [181] P-088680 77 | 22774814; 9891871999 (Mobile) |
| 42 1508 | Das, Satya Ranjan (Dr.) [01. 06. 26] Scientist 'F' (31. 05. 1986) Flat No. 2214, Sector D, Pocket II, Vasant Kunj, New Delhi – 110 070. kumar.das@nokia.com | MEMBER [177] P-014284 52 | 26130402 |
| 43 1412 | Das Gupta, Mrinal Kanti [10. 11. 36] Scientist 'F' (30. 11. 1996) B-4/116, Paschim Vihar, New Delhi – 110 063. mk_dasgupta@hotmail.com | MEMBER [117] P-047110 80 | 25286535; 25279653; 9810754648 (Mobile) |
| 44 0425 | Datta, Kali Kirshan [13. 11. 28] Scientist 'E I' (30. 11. 1988) House No. 2196, Sector – 16, Faridabad – 121 002, (Haryana). | MEMBER [086] P-039024 70 | 0129-2268255; 0129-2290020 (Contact) |
| 45 2066 | Dev Kumar [25. 04. 22] Section Offcr (. 10. 1977 – Transferred) 5/27 A, East Punjabi Bagh, New Delhi – 110 026. kumarbhupindra@gmail.com ; kumarbhupindra@hotmail.com | MEMBER [108] P-005630 18 | 28314686; 28315430 |
| 46 0027 | Dewan Singh [28. 08. 29] Tech Offcr (B) (31. 08. 1989) 33/42, Punjabi Bagh (West), New Delhi – 110 026. | MEMBER [072] P- 022457 80 | 25221456 |
| 47 2955 | Dhawan, Jagdish Kumar [02. 04. 45] Scientist 'F' (30. 04. 2005) B-204, Krishan Kunj, Pocket 6, Plot No. 19, Nasirpur Road, Dwarka Phase I, New Delhi – 110 045. jkdhawan17@rediffmail.com | MEMBER [144] P-081813 66 | 25039344; 25053042; 9350157964 (Mobile) |
| 48 0587 | Dhawan, Ramesh Chandra [02.12. 32] Scientist 'E-I' (31. 12. 1992) 144, Ambica Vihar, Paschim Vihar, New Delhi – 110 087. | MEMBER [013] P-022814 82 | 25253655; 9810435238 (Mobile) |
| 49 2048 | Dhawan, Surinder Mohan (Dr.) [15.01. 45] Scientist 'F' (31. 01. 2005) 114, Dayanand Vihar, Delhi – 110 092. smdhawan@yahoo.com | MEMBER [135] P-080072 79 | 22374535; 9990339279 (Mobile) |
| 50 1880 | Dhawan, Urmil (Mrs.) [25. 05. 39] Scientist 'E II' (31. 05. 1999) RA-31, Inder Puri, New Delhi – 110 012. urmildhawan@yahoo.com | MEMBER [020] P-009523 55 | 25835802 |
| 51 3001 | Dixit, Prakash Narain (Dr.) [08.07. 47] Scientist 'G' (31. 01. 2007) C-22, Balaji CGHS Ltd., Plot No. 7, Sector-3, Dwarka, New Delhi – 110 078 pndixit47@gmail.com | MEMBER [192] | 25097179; 9873423522 (Mobile); |
| 52 2524 | Dutta, Hirday Nath (Dr.) [05.01. 47] Scientist 'G' (31. 01. 2007) D-2, Poorti Appartment, Vikas Puri, New Delhi – 110 018. hndutta@gmail.com | MEMBER [209] | 28539811; 9871026253 (Mobile) |
| 53 2359 | Ekbote, Srikant Narayan (Dr.) [03. 06. 46] Scientist 'F' (30. 06. 2006) EG-28, 1 st Floor, Near Mohayal Bhawan, Inder Puri, New Delhi – 110 012. snekbote@yahoo.com | MEMBER [189] | 25833107; 9811078308 (Mobile) |
| 54 2008 4620 | Garg, Satish Chand [05. 01. 46] Scientist 'G' (31. 01. 2006) A-2/253, Paschim Vihar, New Delhi – 110 063. segarg@mail.nplindia.ernet.in | MEMBER [155] P-087238 80 | 25261564; 25285910; 9313547045 (Mobile) |
| 55 1489 | Gautam, Chhail Behari Lal [26. 05. 31] Tech Offcr (B) (31. 05. 1991) H. No.197, Gali No. 4-B, Durga Puri Extension, Shahdara, Delhi – 110 093. | MEMBER [068] P-042519 49 | 22802973 |
| 56 2130 | Gera, Subhash Chander [01.05. 47] Scientist 'F' (30. 04. 2007) EA-281, SFS (DDA) Flats, Maya Enclave, New Delhi – 110 064. gera_subhash@yahoo.co.in | MEMBER [182] P-095959 48 | 25120313; 9999243050 (Mobile) |
| 57 2465 | Ghosh, Anand Krishna [18. 07. 40] Tech Offcr (C) (31. 07. 2000) 74-B, Pocket-B, DDA Flats, Hari Nagar, New Delhi – 110 064. | MEMBER [094] P-015105 48 | 28126877; 9811792307 (Mobile) |
| 58 1956 4335 | Ghosh, Pradip Kumar (Dr.) [01. 12. 40] Scientist 'G' (31. 11. 2000) B-12, Inder Puri, New Delhi – 110 012. arindb12@yahoo.com | MEMBER [042] P-009675 55 | 25835016; 9811939575 (Mobile) |
| 59 3326 | Goel, Ramesh Chandra [30. 01. 42] Tech Offcr (E-I) (31. 01. 2002) SU- 18, Pitam Pura, New Delhi – 110 088. rcgoel2005@yahoo.co.in | MEMBER [021] P-051342 81 | 27342951; 9312412440 (Mobile); 0124-4112208 (Gurgaon) |
| 60 2526 | Gupta, Akhilesh Chandra [07. 08. 45] Scientist 'G' (31. 08. 2005) 18B, Pocket C, MIG Flats, Ashok Vihar Phase III, Delhi – 110 052. acgupta_npl@yahoo.co.in | MEMBER [152] P-083011 62 | 27455479; 9811927922 (Mobile) |
| 61 2619 4465 | Gupta, Ashok Kumar (Dr.) [01. 01. 44] Scientist 'G' (31. 12. 2003) Flat No. 3, Millennium Apartment, Plot No. E-10 A, Sector 61, NOIDA – 201 301, (Uttar Pradesh). dak_gupta@yahoo.co.in ; akashok.gupta@gmail.com | MEMBER [113] P-070281 45 | 0120-4229310; 9818321414 (Mobile) |
| 62 1734 | Gupta, Jitendra Kumar (Dr.) [20. 01. 41] Scientist 'E II' (31. 01. 2001) B-602, Krishan Kunj, Plot No. 19, Pocket No. 6, Nasirpur Road, Dwarka Phase I, New Delhi – 110 045. | MEMBER [043] P-034552 66 | 25053847 |
| 63 1090 | Gupta, Pramod Kumar (Dr.) [02. 07. 35] Scientist 'F' (31. 07. 1995) C-102, K M Apartment, Plot 12, Setor 12, Dwarka, New Deli – 11. 0025 | MEMBER [044] P-008118 53 | <u>EXPIRED on 27. 01. 04]</u> |
| 64 3350 | Gupta, Satish Chander [16. 05. 33] Scientist 'E II' (31. 05. 1993) C –2 / 299, Janak Puri, New Delhi – 110 058. | MEMBER [125] P-056978 61 | 25554043; 25557019 |
| 65 0754 | Gupta, Satya Vir (Dr.) [08. 01. 33] Scientist 'E II' (24. 09. 1991 – Voluntary) 269 / B-5, Sector 8, Rohini, Delhi –110 085. satyavirji@yahoo.co.in | MEMBER [034] P-024683 86 | 27949372 |

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|--------------------|--|---|---------------------------------------|---|
| 66 0935 | Gupta, Sohan Lal [06. 07. 31] I-95, Naraina Vihar, New Delhi – 110 028. sohan_lalgupta@yahoo.com | Sr Personal Asstt (31. 07. 1989) | MEMBER [130] P-041351 98 | 25797432; 9871004901 (Mobile) |
| 67 2430 | Gupta, Suresh Kumar (Dr.) [22. 07. 47] House No 108, Pocket C-11, Sector 3, Rohini, Delhi – 110 085. skgupta@mail.nplindia.ernet.in ; drskgupta47@gmail.com | Scientist 'G' (31. 07. 2007) | MEMBER [185] P-057278 86 | 27513979; 9910781930 (Mobile) |
| 68 2602 | Halder, Sujit Kumar (Dr.) [08. 07. 48] 19, NPL Apartments, H-3 Block, Vikas Puri, New Delhi – 110 018. Also: Flat No. 302, Shuivam Apartment, 30, Dey Street, Srirampur, East Hoogly, (West Bengal). haldersujitkumar@yahoo.com | Scientist 'F' (31. 07. 2008) | MEMBER [219] P-106556 61 | 28544718; 9818234053 (Mobile) |
| 69 1487 | Hamid, Abdul [05. 01. 39] 3A, Ground Floor, LIG (DDA) Flats, Ber Sarai, Opp. JNU Gate (Old Campus), New Delhi – 110 016. | Tech Offer (C) (31. 01. 1999) | MEMBER [073] P-005274 69 | 9891187879 (Mobile) |
| 70 3341 | Hans, Gokul Singh [02. 03. 36] 2983/2, Gali No. 11, Ranjit Nagar, New Delhi 110 008. | Tech Offer (E-1) (31. 03. 1996) | MEMBER [074] P-021760 20 | 25706840; 9350978916 (Mobile) |
| 71 2099 4975 | Harish Chander (Dr.) [09. 04. 47] 29, FF, Gautam Nagar, New Delhi – 110 049. hchander@mail.nplindia.ernet.in | Scientist 'G' (30. 04. 2007) | MEMBER [187] | 26531110; 9868170932 (Mobile) |
| 72 1692 | Inder Bhan [12. 03. 30] H.No. 160 A/11, Inder Puri, Gurgaon – 122 001, (Haryana). | Tech Offer (B) (31. 03. 1990) | MEMBER [102] P-032424 73 | 0124-2333724; 9810629733 (Mobile) |
| 73 2479 | Jai Bhagwan [08. 04. 49] R-177, Vani Vihar, Uttam Nagar, New Delhi – 110 059. | Tech Offer (E-1) (30. 04. 2009) | MEMBER [222] Applied For CGHS Card | 9312636002 (Mobile); 9313575881 (Mobile Contact) |
| 74 1759 | Jain, Adeshwar Preshad (Dr.) [21. 10. 34] U-10, Green Park Extension, New Delhi – 110 016. jain_ap@rediffmail.com | Scientist 'F' (31. 10. 1994) | MEMBER [002] P-046960 47 | 26191367; 9212503665 (Mobile Contact) |
| 75 2625 | Jain, Atma Ram (Dr.) [21. 07. 42] A152, Sector 26, NOIDA – 201 301, (Uttar Pradesh). atma.jain@gmail.com ; jain_ar@rediffmail.com | Scientist 'E II' (16. 07. 1990 – ISRO) | MEMBER [067] Permanent Card | 95120-4347867; 9818089280 (Mobile) |
| 76 2343 | Jain, Kamlesh Kumar (Dr.) [04. 02. 49] A-2/94, Safdarjung Enclave, New Delhi – 110 029. kkjain4@yahoo.com | Scientist 'G' (28. 02. 2009) | MEMBER [220] Applied For CGHS Card | 26186895; 9810971410 (Mobile) |
| 77 0686 4039 | Jain, Prakash Chandra (Dr.) [05. 10. 31] 112, Old MIG Flats, Prasad Nagar, New Delhi – 110 005. pcjvj@yahoo.co.in ; jalnpc2@yahoo.com | Scientist 'E II' (15. 09. 1991 – Voluntary) | MEMBER [012] P-021550 20 | 25711192; 9871215124 (Mobile) |
| 78 2484 4698 | Jain, Sohan Lal (Dr.) [07. 06. 46] 1104, Joy Apartments, Sector-2, Plot-2, Dwarka, New Delhi – 110 075 sljain@mail.nplindia.ernet.in ; sohan46@yahoo.com | Scientist 'G' (30. 06. 2006) | MEMBER [168] P-088973 45 | 25084962; 45591026; 9311072999 (Mobile); |
| 79 2105 2521 | Jain, Sukhmal Chand (Dr.) [18. 02. 49] 67, NPL Apartments, H-3 Block, Vikas Puri, New Delhi – 110 018. sukhmal_jain@yahoo.com | Scientist 'G' (28. 02. 2009) | MEMBER [225] P-111656 45 | 9891993962 (Mobile); |
| 80 0203 | Jain, Suresh Chand (Prof.) [05. 12. 26] 75, Vigyan Lok, Delhi – 110 092. sureshcjain@gmail.com | Deputy Director (01. 03. 1969 – Defence) [Retired as Director, Solid State Physics Laboratory, Delhi – (31. 12. 1984)] | MEMBER [139] Permanent Card | 43061375; 9818947663 (Mobile) |
| 81 0899 | Jain, Vakil Chand [06. 03. 33] 11, Arihant Nagar, West Panjabi Bagh, Delhi – 110 026. | Scientist 'E I' (31. 03. 1993) | MEMBER [046] P-028767 80 | 25225701 |
| 82 1640 | Joginder Singh (Dr.) [02. 11. 39] Flat No. 01, NPL Apartments, H-3 Block, Vikas Puri, New Delhi – 110 018. | Scientist 'F' (30. 11. 1999) | MEMBER [175] P-018246 17A | 28541089; 9873159002 (Mobile) |
| 83 1714 | Joshi, Kundal Chandra (Dr.) [18. 01. 37] EA-346, Maya Enclave, Hari Nagar, New Delhi – 110 064. kanta_joshi@yahoo.com | Scientist 'G' (31. 01. 1997) | MEMBER [047] P-046367 48 | 25128851; 9818153137 (Mobile) |
| 84 3462 4717 | Joshi, Shri Krishna (Prof.) [06. 06. 35] M-56, South City, 32 Mile Stone, Gurgaon – 122 001, (Haryana). skjoshi@mail.nplindia.ernet.in | Director (18. 04. 1991 – CSIR) [Retired as Director General, CSIR] | PATRON | 0124-2383700 ; 9899333258 (Mobile) |
| 85 3738 | Kakkar, Om Prakash [21. 11. 36] C-2/103, Janak Puri, New Delhi – 110 058. | Fin & A/c Offer (30. 11. 1994) | MEMBER [124] P-081410 61 | 25590577 |
| 86 2180 | Kanjilal, Alok Kumar [10. 01. 41] EA-1/ 57, First Floor, Inder Puri, New Delhi – 110 012. alokkanjilal@yahoo.com | Tech Offer (E-1) (31. 01. 2001) | MEMBER [075] P-009674 55 | 25832288; 9810208438 (Mobile) |
| 87 3435 | Kapahi, Shashi Bhushan [19. 10. 41] BL-117, L Block, Jail Road, Hari Nagar, New Delhi – 110 064. | Tech Offer (E-2) (31. 10. 2001) | MEMBER [154] P-052166 48 | 42851231; 9868415185 (Mobile Contact) |
| 88 1864 | Kapur, Sudarshan Singh [05. 11. 35] 22/ 102, East End Apartments, Mayur Vihar Phase I, Delhi – 110 096. | Asstt Engr (30. 11. 1995) | MEMBER [145] P-030501 85 | 22742064 |
| 89 2335 | Karfa, Mritunjay [02. 01. 45] 46, NPL Apartments, Near H-3 Block, Vikas Puri, New Delhi – 110 018. mkarfa@rediffmail.com | Scientist 'E I' (31. 01. 2005) | MEMBER [140] P-079065 74 | 28542713; 9818764943 (Mobile); 25778373 (Contact) |
| 90 2311 | Kasturi Lal [02. 07. 46] B113/ 1, Rishi Nagar, Delhi – 110 034. kasturienator@gmail.com | Scientist 'E II' (31. 07. 2006) | MEMBER [169] P-089881 54 | 27025357 |
| 91 1637 | Kaul, Niranjan Nath [27. 06. 28] AL 143, Shalimar Bagh, Delhi – 110 088. | Tech Offer (A) (30. 06. 1988) | MEMBER [105] P-017542 62 | 47056390; 27471160; 9811272536 (Mobile) |

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| 92 2128 | Kaushik, Asha Rani (Mrs.) [01. 09. 44] Blóck AD, House No. 2C, Shalimar Bagh, Delhi – 110 088. | Tech Offcr (C) (31. 08. 2004) | MEMBER [160] P-076039 62 | 27482137; 9810420904 (Mobile Contact) |
| 93 1728 | Kewal Krishan [15. 09. 41] B-3 / 260, Paschim Vihar, New Delhi, - 110 063. | Scientist 'E II' (30. 09. 2001) | MEMBER [095] P-049295 80 | 25261285; 9810493301 (Mobile) |
| 94 1702 | Khandekar, Ramakrishna Sitaram [01. 07. 34] A-506, Express Green Apartments, Plot No. D-10, Sector 44, NOIDA – 201 301, (Uttar Pradesh.) rskhandekar@rediffmail.com ; rskhandekar@indiatimes.com | Scientist 'E-I' (30. 06. 1994) | MEMBER [178] P-047096 85 | 0120-4319530; 9910261788 (Mobile) |
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| 96 0780 | Khanna, Radhey Kishen [09. 11. 30] C-2/ 55 C, MIG (DDA) Flats, Lawrence Road, Delhi – 110 035. | Tech Offcr (C) (30. 11. 1990) | MEMBER [146] P-037651 62 | 27101102; 27187309; 9818633326 (Mobile) |
| 97 1071 | Khattar, Dharam Chand [08. 09. 37] A-1/ 192 B, Keshav Puram, Delhi – 110 035. | Tech Offcr (C) (30. 09. 1997) | MEMBER [076] P-018332 62 | 27391519; 9868942380 (Mobile) |
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| 101 3807 | Kishore, Ram (Dr.) [03. 04. 48] AG-664, Shalimar Bagh, Delhi – 110 088. | Scientist 'F' (30. 04. 2008) | MEMBER [199] P-104076 62 | 27472759; 9899764547 (Mobile); 9899656326 (Mobile Contact) |
| 102 3430 | Kohli, Nand Kishore [02. 02. 40] H-227, Vikas Puri, New Delhi – 110 018. | Tech Offcr (E-2) (29. 02. 2000) | MEMBER [051] P-019217 74 | 28543009 |
| 103 2450 | Kothari, Prafulla Chandra (Dr.) [09.08.48] D-201, Raj Hans Premier Apartments, 4/ 4, Ahimsa Khand, Indrapuram, Ghaziabad – 201 014, (Uttar Pradesh) pck48@rediffmail.com ; pkothari@mail.nplindia.ernet.in | Scientist 'G' (31. 08. 2008) | MEMBER [208] | 9810394558 (Mobile) |
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| 106 2375 | Kundu, Namita (Dr. Mrs.) [29. 07. 37] A-56, SFS (DDA) Flats, Mount Kailash, New Delhi – 110 065. drnkundu@yahoo.co.uk | Scientist 'E II' (31. 07. 1997) | MEMBER [014] P-006006 39 | 26210109; 65186095; 9811378183 (Mobile) |
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| 108 2344 1914 | Lakshmi, Duggirala Rama (Dr. Mrs.) [30. 08. 41] 10-3-74/ 24, Teachers Colony, Marredpalli, Secunderabad – 500 026, (Andhra Pradesh) drlakshmidr@yahoo.co.uk | Scientist 'G' (31. 08. 2001) | MEMBER [201] | (040)-27734791; 9849407361 (Mobile); 22723285 (Local Contact) |
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| 110 1761 | Luthra, Ram Krishan [11. 10. 39] 18/ 4, Kalkaji, Near Desh Bandhu College (Main Gate), New Delhi – 110 019. | Scientist 'F' (31. 10. 1999) | MEMBER [096] P-018080 42 | 26436577; 9968096577 (Mobile) |
| 111 1236 4226 | Mahajan, Kushal Kumar (Dr.) [12. 12. 39] C-1/121, Janak Puri, New Delhi – 110 058. kkmahajan@mail.nplindia.ernet.in | Scientist 'G' (31. 12. 1999) | MEMBER [097] P-037730 61 | 25536334; 9810092120 (Mobile) |
| 112 2722 | Mahajan, Surender Kumar (Dr.) [01. 05. 46] 25/ 19, Shakti Nagar, Delhi – 110 007. mahajan_surender@yahoo.co.in | Scientist 'F' (30. 04. 2006) | MEMBER [163] P-088573 6 | 23842361; 23848981; 9810222616 (Mobile) |
| 113 2630 | Mahendra Mohan (Srivastava.) (Dr.) [30. 06. 47] G-195, Pratap Vihar, Ghaziabad – 201 009, (Uttar Pradesh). | Scientist 'F' (30. 06. 2007) | MEMBER [204] P-098233 68 | 0120-2741576; 9350581616 (Mobile Contact) |
| 114 1942 | Mahesh Chander (Gupta) (Dr.) [01. 01. 41] F-17, Sarita Vihar, New Delhi – 110 076. mc1941@rediffmail.com | Scientist 'F' (31. 12. 2000) | MEMBER [162] P-009281 37 | 26946164; 9810907702 (Mobile) |
| 115 2262 | Majumdar, Suhas Chandra (Dr.) [19. 01. 37] [Retired as Scientist 'G' (CSIR, Complex, Delhi) - (31. 01. 1997)] F-1147, Chittaranjan Park, New Delhi – 110 019. kinshuk_majumdar@rediffmail.com | Scientist 'CI' (.07.1976 – Parent Organization) | MEMBER [138] P-037914 75 [H Qrs.] | 26279893; 9212735761 (Mobile) |
| 116 0695 | Malhotra, Girdhari Lal [11. 07. 31] C-2D / 21 C, Janak Puri, New Delhi – 110 058. | Scientist 'E II' (31. 07. 1991) | MEMBER [052] P-055990 61 | 25523761 |
| 117 1935 | Malhotra, Padam Lal (Dr.) [01. 10. 38] Malhotra Nivas, 109 Mirza Jan Street, Inside Sehani Gate, Ghaziabad, - 201 001, (Uttar Pradesh). | Scientist 'E II' (30. 09. 1998) | MEMBER [084] P-042455 68 | 0120-2852442 |

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| 118 0582 | Malik, Manmohan Kumar [01. 02. 35] Sr Inform Offer (31. 07. 1986 – Voluntary) 135-A, MIG (DDA) Flats, Rajouri Garden, New Delhi – 110 027. | MEMBER [053] P-011713 53 | 25971703; 9810446828 (Mobile) |
| 119 1969 | Manrai, Santosh (Mrs.) [17. 02. 39] Scientist 'E II' (28. 02. 1999) A-204, Krishan Kunj, Plot No. 19, Nasirpur Road, Dwarka Phase I, New Delhi – 110 045. santoshmanrai@yahoo.co.in | MEMBER [054] P-005931 36A | 25053140 ; 20463140 (Mobile) |
| 120 1666 | Marwah, Raksha (Mrs.) [18. 08. 41] Tech Offer (B) (31. 08. 2001) 552, Double Storey, Geeta Mandir Marg, New Rajinder Nagar, New Delhi – 110 060. | MEMBER [103] P-027042 45 | 42411134; 29214821 (Contact) 29216842 (Contact) |
| 121 3180 | Mathur, Hari Mohan [01. 01. 30] Admn Offer (SG) (07. 11. 1985 - Transferred to CSIR Hqrs) 74A, Block E, Kanchanchanga Apartments, Sector 53, NOIDA – 201 307, (Uttar Pradesh) | MEMBER [153] MEDICLAIM | 0120-4311274 ; 9711519653 (Mobile) |
| 122 0753 | Mathur, Harish Chand [04. 07. 33] Tech Offer (C) (31. 07. 1993) M-102, Habitat Apartments, B-19 Vasundhara Enclave, Delhi – 110 096. | MEMBER [091] P-019932 77 | 22614915 |
| 123 0283 | Mathur, Sartaj Swarup (Prof.) [26. 12. 33] Jr Sci Offer (. 05. 1962 – IIT, Delhi) 844, Sector A, Pocket C, Vasant Kunj, New Delhi – 110 070. Also: 98, National Media Centre, Nathupur, Gurgaon – 122 002, (Haryana). sartajmathur@yahoo.co.in | MEMBER [109] IIT, Delhi, Scheme | 26137303; 26131520; 9811132228 (Mobile); 0124-2357273 (Gurgaon) |
| 124 0204 | Mehendru, Pratap Chander (Dr.) [22. 11. 25] Scientist 'G' (30. 11. 1985) Flat No. 23-C, N-Block, Saket, New Delhi – 110 017. | MEMBER [069] P-060876 65 | <u>EXPIRED on 25. 01. 07</u> |
| 125 3254 | Mendiratta, Roshan Lal [15. 07. 42] Tech Offer (E-1) (31. 07. 2002) House No. 744, Near Samta Ashram, Sector 21, Gurgaon, Haryana – 122 001. | MEMBER [083] P-089322 73 | 0124-2365638; 9313982511 (Mobile Contact) |
| 126 1014 | Mitra, Ashesh Prasad (Dr.) [21. 02. 27] Director (26. 02. 1986 – CSIR) [Retired as Director General, CSIR] 30, Kailash Kunj, Greater Kailash I, New Delhi – 110 048. | PATRON P-047086 45 | <u>EXPIRED on 03. 09. 07</u> |
| 127 1980 | Mitra, Ved (Dr.) [20. 07. 41] Sr Res Fellow (. 1971 – MNES) [Retired as Advisor, MNES, Govt. of India, New Delhi] 800, Sector A, Pocket C, Vasant Kunj, New Delhi – 110 070. mitraved@hotmail.com | MEMBER [122] Permanent Card | 26133201; 26890441 |
| 128 1484 | Mittal, Pramod Kumar [17. 09. 40] Tech Offer (E-1) (30. 09. 2000) C-212, Sector 20, NOIDA – 201 301, (Uttar Pradesh). | MEMBER [055] P-049279 85 | 0120-4349864; 0120-2533968 |
| 129 2131 4824 | Mohanan, Vellur (Dr.) [13. 07. 47] Scientist 'G' (31. 07. 2007) B-222, Prodyogiki Apartments, Plot No. 11, Sector 3, Dwarka Phase I, New Delhi – 110 075. vmohanan@mail.nplindia.ernet.in | MEMBER [190] P-097117 36A | 25097060; 9891194332 (Mobile); |
| 130 1003 | Nagpal, Kailash Chandra (Dr.) [01. 01. 32] Scientist 'F' (31. 12. 1991) 54, SFS (DDA) Flats, Vasant Enclave, New Delhi – 110 057. | MEMBER [005] P-024064 52 | 26143790; 9818842204 (Mobile) 41661470 (Contact) |
| 131 2183 | Naib Singh [20. 01. 48] Scientist 'E II' (31. 01. 2008) C-1/ 127A, Keshav Puram, Delhi – 110 035. singh_naib@yahoo.co.in | MEMBER [221] Not Availing CGHS Facility | 27187292; 9212164472 (Mobile) |
| 132 1946 | Nangia, Shiv Nandan [08. 07. 40] Scientist 'E II' (31. 07. 2000) B-2/ 144, Janak Puri, New Delhi – 110 058. archnanangia@yahoo.co.in | MEMBER [024] P-023603 61 | 25531789 |
| 133 0483 | Nath, Mohinder [23. 03. 31] Scientist 'E II' (31. 03. 1991) A-3 / 221, Paschim Vihar, New Delhi – 110 063. | MEMBER [077] P-028686 80 | 25267504; 9810525018 (Mobile) |
| 134 0166 | Nayar, Raj Kumar [14. 02. 36] Tech Offer (E-1) (29. 02. 1996) A-194, Inder Puri, New Delhi – 110 012. | MEMBER [078] P-013222 55 | 66348171; 9213493418 (Mobile) |
| 135 2572 | Nijhawan, Satish Kumar [08. 04. 47] Tech Offer (E-1) (30. 04. 2007) Block A, Pocket 8, Hse No. 120, Sector 16, Rohini, Delhi – 110 085. | MEMBER [183] P-096458 81 | 27290882; 9868842874 (Mobile) |
| 136 0058 | Ojha, Jai Narain [16. 07. 28] Tech Offer (C) (31. 07. 1988) 575, Sector 7, Urban Estate, Gurgaon – 122 001, (Haryana). | MEMBER [101] P-032083 73 | 0124-2311575; 0124-2310501 (Contact); 9818634668 (Mobile Contact) |
| 137 2032 | Om Prakash (Dr.) [01. 01. 46] Scientist 'F' (31. 12. 2005) House No. 16, Sector 13, Vasundhra, Ghaziabad – 201 012, (Uttar Pradesh). oprakash1946@yahoo.co.in ; deepmat23@rediffmail.com | MEMBER [159] P-086274 79 | 0120-2880255; 9953024932 (Mobile) |
| 138 2145 | Pandey, Vijay Kumar (Dr.) [01. 07. 47] Scientist 'F' (30. 06. 2007) RZ-25, Santosh Park, Uttam Nagar, New Delhi – 110 059. | MEMBER [210] | 25342440; 25337355 |
| 139 1466 | Panwar, Vinay Singh (Dr.) [15. 01. 40] Scientist 'E II' (31. 01. 2000) Flat No. 21-B, B-B Block, Janak Puri, New Delhi – 110 058. panwarmani@yahoo.com | MEMBER [007] P-014386 74 | 25543467; 9899995021 (Mobile) |
| 140 2405 | Poddar, Hari Nandan Prasad [04. 11. 48] Scientist 'G' (30. 11. 2008) 27/ 21, East Patel Nagar, New Delhi – 110 008. poddar_4@yahoo.com | MEMBER [215] P-112615 20 | 25850249; 9891958728 (Mobile) |
| 141 1506 | Pradhan, Man Mohan (Dr.) [10. 02. 38] Scientist 'F' (28. 02. 1998) C-5A, MIG (DDA) Flats, C Street, Maya Puri, New Delhi – 110 064. | MEMBER [026] P-002595 48 | 25143933 |
| 142 0004 | Prem Prakash [01. 03. 12] Deputy Director In-Charge of Group of Standards Divisions (29. 02. 1972) B-7 / 5013, Vasant Kunj, New Delhi – 110 070. | MEMBER [148] P-038233 71 | <u>EXPIRED on 19. 02. 06</u> |
| 143 2050 | Rahul Kumar [14. 07. 47] Engineer 'B' (30. 09. 1982 – Resigned) C-210, SFS (DDA) Flats, Sheikh Sarai Phase – I, New Delhi – 110 017. rahulkumar127@rediffmail.com | MEMBER [184] Not Availing CGHS Facility | 26014952; 41864152; 9811132705 (Mobile) |

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| 145 1987 | Raj Singh [16. 04. 48] Scientist 'E-II' (30. 04. 2008) House No. 126, T-Block, Uttam Nagar, New Delhi - 110 059. | MEMBER [200] P-105314 61 | 9873868466 (Mobile) |
| 146 3768 4115 | Raja Gopal, Erode Subbranian (Dr.) [12. 05. 36] Director (11. 09. 1997) 100 / 1, XI Cross, 7 th Main Corner, Malleswaram, Bangalore - 560 003, (Karnataka). gopal@physics.iisc.ernet.in | PATRON | (080)-23347449 (Bangalore) |
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| 148 0400 | Ram Narain [15. 05. 35] Tech Offer (C) (31. 05. 1995) WZ-53, Todapur, New Delhi - 110 012 | MEMBER [098] P-013296 55 | 25845305 ; 25844940 (Contact) |
| 149 1874 | Ram Prasad [01. 01. 31] Scientist 'E I' (31. 12. 1990) D-5, Dronacharya Apartments, Mayur Vihar Phase I Extension, Delhi - 110 091. tnordramprasad@yahoo.co.in | MEMBER [099] P-027957 77 | 22714920 |
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| 151 2578 | Raman, Vasantha (Dr. Mrs.) [15. 04. 47] Scientist 'G' (30. 04. 2007) D-302, Sarvodaya Enclave, New Delhi - 110 017. vasantha@mail.nplindia.ernet.in | MEMBER [205] Not Availing CGHS Facility | 26965849; 26531495; 9810503518 (Mobile) |
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| 153 1926 3980 | Reddy, Borra Madhava (Dr.) [29. 09. 34] Scientist 'G' (30. 09. 1994) 302-N, Vamsy Home, Mayur Marg, Begumpet, Hyderabad - 500 016, (Andhra Pradesh). borramreddy@rediffmail.com | MEMBER [196] | (040)-27760542 (Hyderabad); 9949902886 (Mobile) |
| 154 2017 | Roonwal, Veena (Mrs.) [04. 05. 44] Tech Offer (E-2) (31. 05. 2004) C-520, SFS (DDA) Flats, Sheikh Sarai I, New Delhi - 110 017. | MEMBER [131] P-074049 41 | [EXPIRED on 10. 04. 09] |
| 155 2168 | Roy, Binod Kanti [06. 05. 46] Tech Offer (E-1) (31. 05. 2006) 51C, J & K Pocket, Dilshad Garden, Delhi - 110 095 bkroy46@yahoo.com | MEMBER [180] P-088572 87 | 9911516142 (Mobile); 09831738564 (Mobile - Kolkata) |
| 156 2651 | Rustagi, Vijay Kumar [16. 10. 47] Scientist 'F' (31. 10. 2007) Flat No. 9259, Sector C, Pocket 9, Vasant Kunj, New Delhi - 110 070. vkrustagi@yahoo.com | MEMBER [198] P-099951 71 | 26893038; 9891566859 (Mobile) |
| 157 2160 | Saksena, Rakesh Chandra (Dr.) [30. 12. 41] Scientist 'F' (31. 12. 2001) 216-217, Upper Ground Floor, Shankar Road, DDA Site No. 1, New Rajinder Nagar, New Delhi - 110 060 rcsaksena@rediffmail.com | MEMBER [028] P-052130 45 | 28745953; 28741954; 9868675268 (Mobile) |
| 158 1087 | Saksena, Tribhuwan Kumar (Dr.) [01. 11. 34] Scientist 'F' (31. 10. 1994) C/o Wg. Cdr. Rajiv Saxena, Apt. No. 128/2, Golden Jubilee Air Force Colny, Artillery Road, Next to Command Hospital, Bangalore - 560 007 (Karnataka) skand.saksena@unilever.com ; drrajivsaxena@yahoo.com | MEMBER [137] P-017731 79 | [EXPIRED on 23. 12. 08] |
| 159 1985 | Sarkar, Ajit Kumar (Dr.) [01. 11. 43] Scientist 'F' (31. 10. 2003) Flat No. 11, NPL Apartments, H-3 Block, Vikas Puri, New Delhi - 110 018. | MEMBER [115] P-069523 45 | 28545750; 9810672330 (Mobile) |
| 160 0218 | Sarma, Kuchibhatla Subrahmanya [05. 06. 26] Scientist 'E II' (30. 06. 1986) 3251, Vintage Acres Way, San Jose, CA 95148, U S A. ramyanjali@aol.com | MEMBER [090] | (001)-408-223-9069; (001)-408-274-3286 |
| 161 1013 | Sastri, Vemuri Durga Prasad (Dr.) [13. 06. 30] Scientist 'E II' (30. 06. 1990) 1-1-5/3 Ravikunj, Jawahar Nagar, Hyderabad - 510 020, (Andhra Pradesh). vdpsastri@hotmail.com | MEMBER [100] P-018295 74 | (040)-27620179 (Hyderabad) |
| 162 2259 | Saxena, Mithlesh (Mrs.) [26. 02. 44] Scientist 'E II' (29. 02. 2004) 101, Trishul Terraces, Plot No. 36-37, Sector 20, Kopper Khairone, Navi Mumbai - 400 709, (Maharashtra). Also: 148, Doctor's Apartments, Vasundara Enclave, Delhi - 110 096. | MEMBER [119] P-071741 85 | 9522-27540793 (Mumbai - Direct from Delhi) ; 22632849 (Local); 9810139579 (Mobile Contact - Delhi) |
| 163 2095 | Saxena, Rajan Babu [20. 06. 49] Scientist 'G' (31. 06. 2009) 287-B, Pocket C, Mayur Vihar, Phase II, Delhi - 110 091. rbsaxena50@gmail.com | MEMBER [231] | 22780112; 9810334804 (Mobile) |
| 164 2995 0020 | Segal, Swami Nath [06. 03. 23] Admin Offer (31. 03. 1981) 291, First Floor, Neelgiri Apartments, Alaknanda, New Delhi - 110 019. | MEMBER [188] P-003309 75 | 26031085 |
| 165 0954 | Sehgal, Madan Gopal [01. 03. 34] Tech Offer (C) (28. 02. 1994) I-15, Kirti Nagar, New Delhi - 110 015. | MEMBER [120] P-002467 53 | 25428287 |
| 166 2600 | Seth, Roshan Lal (Dr.) [20. 03. 34] Scientist 'F' (30. 03. 1994) 141 A, Shivkala Apartments, Sector 51, NOIDA - 201 301, (Uttar Pradesh). drkiran71@yahoo.com | MEMBER [056] P-049108 85 | 0120-2482140; 9811561030 (Mobile Contact) |
| 167 1491 | Shah, Vilaschandra Vithaldas (Dr.) [05. 07. 31] Scientist 'E II' (31. 07. 1991) 132-A, MIG (DDA) Flats, Rajouri Garden, New Delhi - 110 027 | MEMBER [057] P-011551 53 | 25971651; 25110048; 9899303024 (Mobile Contact) |
| 168 2607 | Sharan, Pramod Chandra [06. 01. 43] Tech Offer (C) (31. 01. 2003) C/2/143, Janak Puri, New Delhi - 110 058. pramod_2003@yahoo.com | MEMBER [058] P-063528 61 | 25504561; 9811521020 (Mobile); 9810271810 (Mobile Contact) |

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| 169 2538 | Sharma, Chhatra Pal (Dr.) [13. 10. 46] Scientist 'F' (31. 10. 2006) 276, Kadambary Apartments, Sector, 9, Rohini, Delhi - 110 085. sharmacp276@gmail.com | MEMBER [179] P-091384 86 | 27563069; 9811161972 (Mobile) |
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| 178 1865 | Sharma, Sham Lal [15. 10. 43] Tech Offer (E-1) (31. 10. 2003) BE-116, Street No 2, Hari Nagar, New Delhi - 110 064. | MEMBER [126] P-069297 48 | 25127706; 25129437; 9891149943 (Mobile) |
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| 186 3134 | Singh, Dharam Pal (Dr.) [15. 06. 49] Tech Offer (E-1) (30. 06. 2009) DA-474 MIG Flats, First Floor, Sheesh Mahal Apartment, Shalimar Bagh, New Delhi - 110 088. dpsingh@mail.nplindia.ernet.in ; dpsingh49@gmail.com | MEMBER [227] | 9871142270 (Mobile); 9312550756 (Mobile Contact); 9899284266 (Mobile Contact) |
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| 206 0879 | Tomer, Tej Ram [26. 12. 36] Tech Offer (B) (31. 12. 1996) E-12, Naraina, New Delhi – 110 028 | MEMBER [121] P-041541 98 | 25794301 |
| 207 1389 | Trehan, Jagdish Chander (Dr.) [26. 11. 37] Scientist 'F' (30. 11. 1997) PP-40, Maurya Enclave, Pitam Pura, New Delhi – 110 088. | MEMBER [011] P-000265 81 | 27327705 |
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| 210 0018 | Upadhyaya, Baij Nath [01. 10. 19] Section Officer (18. 12. 1958) – Transferred on promotion as Administrative Officer to NEERL, Nagpur) 43, Vaishali, Dabri-Palam Road, New Delhi – 110 045. | MEMBER [141] | [EXPIRED on 27. 11. 05] |
| 211 2153 | Uppal, Gian Singh (Dr.) [25. 12. 31] Scientist 'E I' (31. 12. 1991) SD-292, Tower Apartments, Pitam Pura, New Delhi – 110 088. gian.uppal@hotmail.com | MEMBER [212] | 27313095; 9871459234 (Mobile) |
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| 214 0715 | Vashisht, Avadh Raj Singh [01. 06. 34] Tech Offer (B) (30. 05. 1994) 28/ 113-114, West Patel Nagar, New Delhi – 110 008. | MEMBER [082] P-046214 45 | 25881612 |
| 215 1643 | Vasishth, Satish Chandra [21. 10. 26] Scientist 'E I' (30. 10. 1986) Flat No. 20, Block No. C-13, Vikas Nagar, Shimla – 171 009, Himachal Pradesh. Also: 24, Siddharth Enclave, New Delhi – 110 014. sarojvasishth@rediffmail.com | MEMBER [065] P-016247 37 Permanent Card in Wife's Name | (0177)-2621215 (Shimla); 26340046 (Local Contact) |
| 216 3806 | Ved Singh (Dr.) [15. 05. 40] Scientist 'E II' (31. 05. 2000) A16 E, DDA Flats, Munirka, New Delhi – 110 067. | MEMBER [133] P-087807 69 Permanent Card in Wife's Name | 26163012; 26105169 |
| 217 1934 | Venkatachari, Raghavachari (Dr.) [06. 06. 36] Scientist 'E-II' (30. 06. 1996) F-3, Temple View Apartments, 18, West Tank Street, Tiruvannamur, Chennai – 600 041, (Tamil Nadu). | MEMBER [136] | (044)-24422235 (Chennai) |

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| 1771 4267 | 160, Deepali, Pitam Pura, New Delhi – 110 034. | P-025554 54 | |
| 219 1096 | Verma, Chiranjit Lal [16. 11. 33] Scientist 'E-I' (30. 11. 1993) 40, Harit Niketan, West Enclave, Pitam Pura, Delhi – 110 034. | MEMBER [062] P-022711 82 | 27010121 |
| 220 0355 | Verma, Mulk Raj [04. 01. 09] Asst Director (03. 01. 1969) C-157, MIG (DDA) Flats (Golf-View Apartments), Saket, New Delhi – 110 017. | MEMBER [085] P-060719 65 | [EXPIRED on 10. 01. 07] |
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Live in the Present

[Drawn from the Article by Anuradha Gupta appearing in the Hindustan Times dated September 22, 2009, Page 10]

The way to live life is to live in the present. Albert Einstein was once asked the secret of his success, and his answer was that when he combed his hair, he was only combed his hair and was totally engrossed in it. The essence of the answer underlines the ability of being focused and living and enjoying the present.

There is life, energy, movement and enthusiasm in the present. In the present moment only, we have the privilege to smell the fragrance of a rose, here the chirping of restless birds going back to their nests, touch the rosy cheeks of a chubby little child, feel the freshness of wet green grass under our feet while enjoying a morning walk, palpate the stillness of dense forests.

The present is the only reality, where we can actually see and experience the whole play of existence. But, if we contemplate on our mind, we find either it is brooding upon our past or is busy planning about future; we forget to live in our present. We forget the hard fact that all of us do have a limited life span and sooner or later death is a reality. All religions how to live the present life.

Then why don't we care to find joy in small pleasures life offers?
why are we busy collecting wealth more than required for living a decent life?
why can't we take the same delight in giving and sharing as we get in receiving?

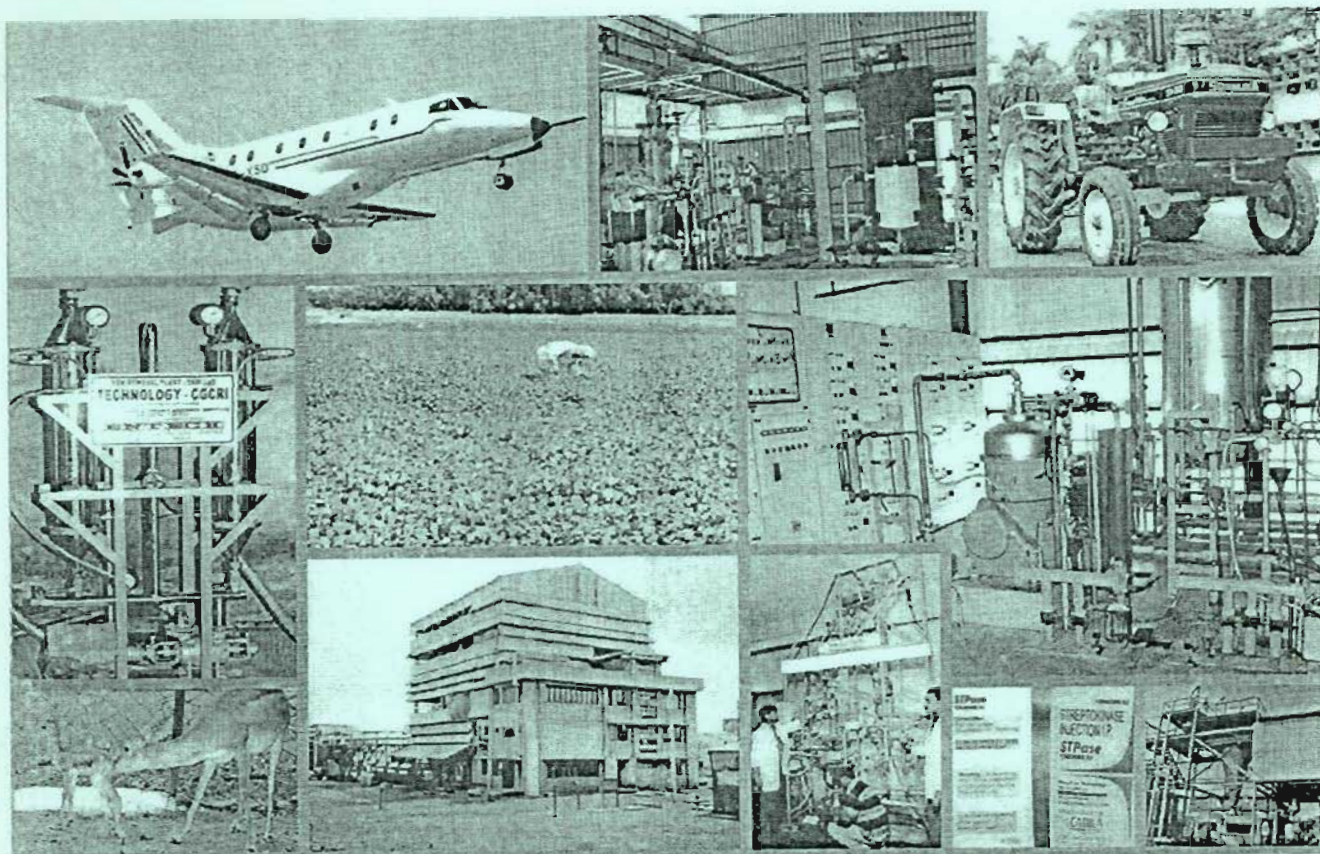
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A Few Selected Quotations from the Booklet "Wisdom Quotations by Dr. P C Jain

Retirement is the ugliest word in the language - Ernest Hemingway

The trouble with retirement is that you never get a day off - Abe Lemons

A man is not old until the regrets take the place of dreams - John Barrymore



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- b) To identify and conduct, after due consideration, research in areas of Physics, which are most appropriate to the needs of the nation and for the advancement of the field
- c) To assist industries, national and other agencies in their developmental tasks by precision measurements, calibration, development of devices, processes and other allied problems related to physics.

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- Apex level calibration of Physico-mechanical and Electrical & Electronic Standards
- Chemical Metrology including CRM's

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- Advanced Carbon Products
- Cryogenics, Superconductivity and Superconducting devices
- Conducting Polymers & Composites
- Organic Electronics – OLEDs, OPVs
- Liquid Crystals & Display Devices
- Luminescent Materials
- Nano materials including nano-composites
- Photovoltaics
- Sensors (Bio, Gas, Chemicals & MEMS)
- Advanced Characterization

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