

**33<sup>rd</sup> DAE SAFETY & OCCUPATIONAL HEALTH PROFESSIONALS MEET  
AT IPR, GANDHINAGAR**

**NOVEMBER 23 - 25, 2016**

**Day 1: November 23, 2016 (Wednesday)**

**Inaugural Session – (0930 Hrs. – 1130 Hrs.)**

**Welcome Address:** Dr. D. Chenna Reddy, Member Secretary, Steering Committee

**About the Meet & Release of Monograph on “Safety in High Power and High Energy Advanced Technologies” & “Clinical Applications of Lasers”:** Shri D. K. Shukla, Distinguished Scientist, Executive Director, AERB, Mumbai

**Prize Distribution for Logo Competition & Introductory Address:** Dr. Shashank Chaturvedi, Director, IPR, Gandhinagar

**AERB Award, Release of CD of “POSTER-BARC”, Release of Technical Proceedings & Inaugural Address:** Shri S. A. Bhardwaj, Chairman, AERB, Mumbai

**Dr. S.S. Ramaswamy Memorial Endowment Lecture on “Energy and Environment: Plasma Processes for Decarbonization”.** – Prof. P. I. John, Ex. Sr. Professor, IPR, Gandhinagar

**Vote of Thanks:** Shri K. Ramprasad, Head, RMS, R&DD, AERB and Chairman, Technical Programme Committee

**Inauguration of Exhibition:** Shri S. A. Bhardwaj, Chairman, AERB, Mumbai

**High Tea (1130 Hrs. – 1200 Hrs.)**

**Technical Session – I Invited Talks on “Safety in High Power and High Energy Advanced Technologies” (1200 Hrs. – 1320 Hrs.)**

**Chair Panel :** 1. Dr. Pradeep Kumar K.S., Outstanding Scientist, Associate Director (HS&EG), BARC  
2. Shri D. C. Srivastava, Outstanding Scientist, Sr. GM(Operation), HWB

1. **Invited Talk on “Safety Aspects in Particle Accelerators”**– Shri. P. V. Bhagwat, Outstanding Scientist, Head, Ion Accelerator Development Division, BARC, Mumbai

2. **Invited Talk on “An Overview of NPCIL Technological Development Activities for Enhanced Safety, Reliability and Execution Excellence of Upcoming NPPs”** – Shri S.F. Vhora, Outstanding Scientist, ED(TDG), NPCIL

**Lunch (1320 Hrs. – 1415Hrs.)**

**Technical Session – II Invited Talks on “Safety in Evolving & Advanced Technological Applications” (1415 Hrs. – 1530 Hrs.)**

**Chair Panel:** 1. Shri R. S. Sunder, Distinguished Scientist, Site Director, KKNPP  
2. Shri S. F. Vhora, Outstanding Scientist, ED(TDG), NPCIL

1. **Invited Talk on “Challenges in Safety Regulation of R&D Activities for Advanced Technologies in DAE Units “** – Shri D. K. Shukla, Distinguished Scientist, Executive Director, Atomic Energy Regulatory Board, Mumbai

2. **Invited Talk on “Safety in High Power RF and Microwave Sources for Fusion Reactor”** – Dr. Sanjay Kulkarni, Scientist-H, Institute for Plasma Research, Gandhinagar

**Tea (1530 Hrs. – 1600 Hrs.)**

**Technical Session – III Invited Talks on “Clinical Applications of Lasers”:**  
**(1600 Hrs. – 1730 Hrs.)**

**Chair Panel:** 1. Shri D.K. Shukla, Distinguished Scientist, Executive Director, AERB  
2 Dr. P.T.V. Nair, Former Head, Medical Division, BARC & Chairman, ACOH

1. **Invited Talk on “Lasers in Medicine - Ophthalmology”** – Dr. Shashank Rathod, Eye Surgeon, M.S. (Ophth.), FICO, FJMF(Japan)

2. **Invited Talk on “Issues Related to Occupational Health and Safety of Workers”** – Dr. Sunil Kumar, Director In-charge, NIOH, Ahmedabad

**Cultural Programme (1900 Hrs. – 2000 Hrs.)**

**Dinner (2000Hrs – 2100 Hrs.)**

**Day 2: November 24, 2016 (Thursday)**

**Plenary Session I – (0900 Hrs. to 1100Hrs.)**

**Topic : Presentation on Injury & Occupational Health Statistics, Fatal Accidents and Near miss Accidents**

**Chair Panel: 1. Shri V. V. Pande, Head, IPSD, AERB      2. Shri Alope Varshney, CE (IS&F), NPCIL**

1. Injury Statistics – Shri Phani Kartik, SO/E, IPSD, AERB, Mumbai
2. Occupational Health Statistics – Shri N. M. Chodankar, SO/D, IPSD, AERB
3. Presentations on Fatal Accidents:
  - i. Fatal Accident of a contractor worker from M/s Hindustan Construction Company Limited, RAPP 7&8 while erecting the landing platform on Scaffolding on 28<sup>th</sup> December 2015.- Shri S.S.Khinchee, SO/E (IS&F) & Sr. Safety Officer, RAPP-7&8 and Dr. S.Ganesan, Certifying Surgeon, RAPS Hospital
  - ii. Fatal accident at ZFP building expansion site, NFC due to collapse of roof slab on February 08, 2016 - Shri B. Lakshman Babu, Sr Supdt.Engr, CED & Dr. J. Vijay Rao, Certifying Surgeon, NFC
  - iii. Fatal Accident at Scrap Yard, Tube Plant, NFC due to blunt injury & chest injury during unloading the transformer on 27<sup>th</sup> September, 2016 – Shri V. V. Mahesh Kumar, AGM, Safety & Dr. J. Vijay Rao, Certifying Surgeon, NFC
4. Presentation on H<sub>2</sub>S Gas Exposure to Employee of HWP (Kota) due to Leakage of Gas during the Maintenance Work. – HWP(Kota)
5. Reporting & Analysis of NMAs - A Tool for Accidents Prevention (Case Studies) – S/Shri A.Chougaonkar, M.U. Vincy, N.N. Pisharody, Alope Varshney, Pankaj Khot, NPCIL, Mumbai

**Tea (1100 Hrs. – 1130 Hrs.)**

**Plenary Session II – (1130 Hrs. – 1300 Hrs.)**

**Topic : Industrial & Occupational Health Safety**

**Chair Panel: 1. Shri S. G. Belokar, GM(S,H&E), HWB  
2. Dr. Hemant Haldavnekar, Medical In charge, Trombay Dispensary, BARC**

1. Life Style Management - Dr. M.L. Parihar, HWP, Kota
2. Occupational Stress Disorders - Dr.(Mrs) Jyoti A Purendare, MOIC, KAPS Hospital, Kakrapar
3. Human Error Reduction Techniques Encompassed in Personal Monitoring Services at TLD Lab, - Shri K.B. Jashi, Ashok Kumar A, Pandaram P, Rakesh R.B., KKNPP
4. Occupational Skin Disorders – Dr. Vivek Dabade, BRIT, Mumbai
5. Safety Climate Mapping In a Nuclear Power Plant- An Experience Sharing – Shri M.U. Vincy, Alope Varshney, Pankaj Khot, NPCIL, Mumbai

**Lunch (1300 Hrs to 1400 Hrs)**

**Parallel Session IA – (1400 Hrs. – 1530 Hrs.)**

**Topic: Contributory papers on “Chemical & Fire Safety”**

**Chair Panel:**

1. Dr. Sanjay Kulkarni, Scientist-H, IPR
2. Dr. K.K. Satpathy, Head, E&S, IGCAR

1. Assessment of Fire Hazard Potential within a Hot Cell – Seik Mansoor Ali, Tejaswi Abburi, V. Balasubramanian, IGCAR, Kalpakkam
2. Optical Fiber Based Temperature Sensors for Fire Detection in High Electric and Magnetic Field Environment – S. Kher, Manoj Kumar Saxena, Smita Chaubey, S.D.V.S. Jagannadha Raju, K.S. Bindra, RRCAT, Indore
3. Experience With Cryogenics Safety, Problems and Solutions - Rajiv Sharma, V.L. Tanna, IPR, Gandhinagar
4. Chemical Safety Management in WIP, Kalpakkam - An Overview – Biplab Das, K.V. Ravi, Nuclear Recycle Board, BARC, Kalpakkam
5. Advanced Fire Prevention Techniques for ITER-India Laboratory Building, IPR – D.V. Modi, D. Chenna Reddy, IPR, Gandhinagar

**Parallel Session IB – (1400 Hrs. – 1530 Hrs.)**

**Medical Session: Contributory papers on “Occupational Health”**

**Chair Panel:**

1. Dr. P.T.V. Nair, Chairman, ACOH
2. Dr. (Mrs.) M. S. Daniel, CS, TAPS

1. Invited Lead talk on Lasers for Medical Diagnostics - Dr. Shovan K. Majumder, Hemant Krishna, RRCAT
2. Emotional Intelligence: Occupational Pressure Management among Employees - Dr. J. Vijay Rao, K.Chandraiah
3. Laser Treatment for Eye - Dr (Mrs.) Santhi Ganesan, Certifying Surgeon, RAPS Hospital
4. Therapeutic Applications of CO<sub>2</sub> Laser – Dr. Umesh Naikaware and Dr. Z. B. Mirza, RRCAT, Indore

**INTERACTIVE & POSTER AND TEA SESSION (15:30 HRS. TO 16:30 HRS.)**

<b>Parallel Session IIA – (1630 Hrs. – 1800 Hrs.)</b>	<b>Parallel Session IIB (1630 Hrs. – 1730 Hrs.)</b>
<p><b>Topic: Contributory papers on “Industrial Safety”</b>  <b>Chair Panel:</b></p> <ol style="list-style-type: none"> <li><b>Dr. D. Chenna Reddy, Scientist-H, IPR</b></li> <li><b>Shri K. Srivasista, Director, R&amp;DD, AERB</b></li> </ol>	<p><b>Medical Session: Contributory papers on “Occupational Health”</b>  <b>Chair Panel:</b></p> <ol style="list-style-type: none"> <li><b>Dr. D. S. Kathuria, CMS, NPCIL</b></li> <li><b>Dr. J. Vijay Rao, CMO, NFC</b></li> </ol>
<ol style="list-style-type: none"> <li>Case Study on Unusual Occurrence of Wire Rope Failure of 15/5t EOT Crane at One of the Plant - P.V. Siddhu, A. Subhakar, D. Devender Rao, T.T. Srichandan, S. Harilingam, V.V. Mahesh Kumar, I. Kiran Kumar, Sudhir Thakur, Nuclear Fuel Complex, Hyderabad</li> <li>Case Study on Enhancement of Electrical Safety of a Staff Bus by Preventing Electric Short Circuit on Mechanical (Fuel Modulation) Lever Failure – E. Thanigaivel, B. Rajesh, GSO, IGCAR, Kalpakkam</li> <li>High Power Density Systems Used in Advanced Metallurgical Applications and Safety Aspects - K.V. Mirji and N. Ramesh, Nuclear Fuel Complex, Hyderabad</li> <li>High Voltage Discharge Switch for operational safety of Neutral Beam High Voltage Power Supply System - L.N. Gupta, Paresh Patel, C.B. Sumod, Dipal Thakkar, N.P. Singh, Ujjwal Baruah, Institute for Plasma Research, Gandhinagar</li> <li>Safety aspects in Particle Irradiation Facility- Dharmendra Singh, P. Magudapathy, S. Kandaswamy, IGCAR, Kalpakkam</li> <li>Safety and Operational Aspects in In-Situ Electrical Baking of Large Vacuum Systems of Indus Accelerators – Prateek Bhatnagar, Nilesh Bhange, Sujata Joshi, R. Sridhar, RRCAT, Indore</li> </ol>	<ol style="list-style-type: none"> <li>Case Presentations – Dr. P.T.V. Nair, Former Head, Medical Division, BARC</li> <li>Health Surveillance and Industrial prosperity - a retrospective analysis at Tarapur Maharashtra Site (TMS) – Dr. P.K.Yadav, Dr.(Mrs.) M.S.Daniel, Dr. Sweta Agrawal, Kalpana Devi</li> <li>Lasers in Ophthalmology – Dr. Anjali Godse, MO, Dr. Hemant Haldvanekar, OHC Trombay, BARC</li> <li>Evaluation &amp; Treatment of Erectile Dysfunction (Especially in Diabetic Patients) - Dr Ajay Dubey, Medical Officer, KKNPP, NPCIL</li> <li>Specific Types of Diabetes (LADA &amp; MODY) - Dr Ajay Dubey, Medical Officer, KKNPP, NPCIL</li> </ol>

**Laboratory Visit (1800 Hrs. – 1900 Hrs.)**

**Dinner (1930Hrs ONWARDS)**

**Day 3: NOVEMBER 25, 2016 (Friday)**

**Plenary Session III – (0900 Hrs. – 1100 Hrs.)**

**Contributory papers on “Industrial Safety & Occupational Health”**

**Chair Panel :**

1. **Shri S. Thakur, GM(S,HPU,TLD & EPC), NFC**
2. **Shri K. S. Ramprasad, Head, RMS, R&DD, AERB**

1. Lead Talk on “Occupational Hazards with Experimental High Voltage Systems” – Dr. Ujjwal Kumar Baruah, Engineer-H, Institute for Plasma Research, Gandhinagar
2. Laser Safety – A Growing Concern - Ms. Swati Jadav, Sure Safety, Vadodara
3. Stress and Work Life – Dr. D. M. Pestonjee, Chair Professor (GSPL), School of Petroleum Management, PDPU, Gandhinagar
4. Hyperlipidemia - Dr. P.T.V. Nair, Former Head, Medical Division, BARC & Chairman - ACOH

**Tea (1100Hrs – 1130 Hrs)**

**Valedictory Session – (1130 Hrs. – 1300 Hrs.)**

**Chair Panel :**

1. **Shri D. K. Shukla, Distinguished Scientist, Executive Director, AERB**
2. **Shri K. S. Ramprasad, Head, RMS, R&DD, AERB**

- Briefing on Parallel Session I & II : Safety Professionals & Occupational Health Professionals
- Briefing on POSTER Session
- Presentations by Exhibitors
- Prize Distribution for Winners of Various Competitions
- Feedback on 33<sup>rd</sup> DAE Safety & Occupational Health Professionals Meet
- Felicitations
- Venue & Theme: 34<sup>th</sup> DAE Safety & Occupational Health Professionals Meet

**Lunch (1300 Hrs to 1400 Hrs)**

**1415 hrs –Onwards ----- Sight Seeing**

**PAPERS FOR POSTER PRESENTATION:**

Poster No.	Title of Paper with authors details
PP-1	Fire and Explosion Prevention in Nuclear Power Stations – R. Suresh Kumar, R Y Khasnis, M P Hansora, NPCIL
PP-2	HVWS Fire Protection System for power Transformer at 132 KV Sub-Station – Prakash Parmar, Institute for Plasma Research, Gandhinagar
PP-3	Importance of Composition of Material – Insight of an unusual occurrence during decontamination of solid radioactive waste – B. Haldar, R Jaycee, R S Amborkar, K Mahesh Babu, V V Mahesh Kumar, Sudhir Thakur, NFC, Hyderabad
PP-4	Physical Hazards (Noise, Heat, Vibration, Illumination) – Control at Work Place, Methods and Strategies – M. Bose, P. Srivastava,, BRIT, Mumbai
PP-5	Recent Advances in MEMs Radiation Detectors for improving Radiation Safety in Nuclear Reactors – Abhay Bhisikar, RRCAT, Indore
PP-6	Safety Legislation and Regulations for Electron Beam Welding – Gautam Vadolia, K P Singh, D.V. Modi, Institute for Plasma Research, Gandhinagar
PP-7	Case Study on Human Error Techniques – V K Sehgal, NPCIL, Mumbai
PP-8	Safety Management System during Rock Blasting at FRFCF Construction Site – Vijayakumaran C, Kandasamy S, Satpathy K K, IGCAR, Kalpakkam
PP-9	Safety Management and Safe Handling of Materials in Lithium Ceramic Development Process – Mayank Makwana, P Patel, M Panchal, B. Riscob, A. Srivastava, P Chaudhari, Institute for Plasma Research, Gandhinagar
PP-10	Safety Management in Research and Development Organisation – T Nivedha, IGCAR, Kalpakkam
PP-11	Safety and Shielding Management for Pulse Power Laboratory at IPR – Shweta Upadhyay, Akash Fidu, Rahul Koshti, Rajesh Kumar, Institute for Plasma Research, Gandhinagar
PP-12	Safety Aspects in a Chemical Exchange Process Plant – B K Sharma, IGCAR, Kalpakkam
PP-13	Regulatory Role & Approach of BARC Safety Council in Safety & Occupational Health in BARC - Shri Rajdeep, Scientific Officer-G, BARC Safety Council Secretariat
PP-14	Health and Safety Management for Confined Space Work – Jayaprakash Hegde, R Y Khasnis, M P Hansora KGS 3&4, NPCIL