# 32<sup>nd</sup> DAE SAFETY & OCCUPATIONAL HEALTH PROFESSIONALS MEET AT RRCAT, INDORE

### 5 - 7 OCTOBER, 2015

## **Day 1: October 05, 2015 (Monday)**

### Inaugural Session – 0930 hrs. – 1130 hrs.

Welcome Address: Dr. S. M. Oak

Chairman, Apex Safety Committee & Head, Solid State Laser Division

Raja Ramanna Centre for Advanced Technology, Indore

**About the Meet:** Shri K. Ramprasad

Head, Industrial Plants Safety Division Atomic Energy Regulatory Board, Mumbai

## Release of Monograph on "Safety in Evolving & Advanced Technological Applications" & "Positive Health Management" and Address:

Shri R. Bhattacharya

Shri R. Bhattacharya Vice Chairman

Atomic Energy Regulatory Board, Mumbai

### Prize Distribution for Logo Competition & Introductory Address:

Dr. P. D. Gupta Director

Raja Ramanna Centre for Advanced Technology, Indore

## Release of CD of Technical Proceedings and Address by Guest of Honour:

Shri K.C. Purohit

Chairman & Managing Director

Nuclear Power Corporation of India Ltd., Mumbai

### Release of Technical Proceedings, Environment Protection Award Presentation & Inaugural Address:

Shri S.A. Bhardwaj

Chairman

Atomic Energy Regulatory Board, Mumbai

## Dr. S.S. Ramaswamy Memorial Endowment Lecture on "Safety in Evolving & Advanced Technological Applications":

Dr. A.E. Muthunayagam

Former Secretary, Ministry of Earth Sciences

Government of India

Vote of Thanks: Shri S. Jalali

Head, Fire & Safety Section

Raja Ramanna Centre for Advanced Technology, Indore

### Inauguration of Exhibition:

Shri S.A. Bhardwaj

Chairman,

Atomic Energy Regulatory Board, Mumbai

&

Dr. P. D. Gupta

Director

Raja Ramanna Centre for Advanced Technology, Indore

## High Tea (1130 hrs. – 1200 hrs.)

### **Day 1: October 05, 2015 (Monday)**

Chair Panel: Dr. D. K. Srivastava

Director, VECC, Kolkata

Shri N. S. Gabhane, Director, DCSEM, Mumbai

1. Invited Talk on "Laser Safety Aspects in Research, Development & Applications"

Dr. P. A. Naik

Head, Laser Plasma Division & Indus Synchrotrons Utilization Division, RRCAT, Indore

2. Invited Talk on "Safety systems for Cyclotrons at VECC, Kolkata"

Dr. Subimal Saha

Outstanding Scientist, Project Director, Medical Cyclotron Project, Head, ATG & CPIESG,

VECC, Kolkata

### Lunch (1300 hrs. - 1400 hrs.)

## Technical Session – II Invited Talks on "Safety in Evolving & Advanced Technological Applications" (1400 hrs. – 1500 hrs.)

Chair Panel: Dr. P.D. Gupta

Director, RRCAT, Indore

1. Invited Talk on "Safety aspects of Generations III+ Beyond Reactors" -

Shri Ashok Chauhan

Director (Technical), NPCIL, Mumbai

2. Invited Talk on "Seismic Hazards and Structural Safety Evaluations for Nuclear Installations, post Fukushima Accident" -

Shri L. R. Bishnoi

Director, Siting & Structural Engineering Division (SSED), AERB, Mumbai

### Poster Session & Tea (1500 hrs. – 1630 hrs.)

# Technical Session – III Invited Talks on "Positive Health Management" (1630 hrs. – 1800 hrs.)

#### **Chair Panel:**

Shri R. Bhattacharya Vice-Chairman, AERB

&

Dr. P.T.V. Nair

Chairman, ACOH, AERB

1. Invited Talk on "How to take care of your back" -

Dr D. K. Taneja

Orthopaedician, Arihant Hospital, Indore

2. Invited Talk on "Pre-hospital management of Coronary artery disease"

Dr Idris Ahmed Khan

Cardiologist, Bombay hospital Indore

3. Invited Talk on "Stress Management through Yog"

Dr.(Mrs) Shirley Telles

Director, Patanjali Research Foundation, Patanjali Yogpeeth, Haridwar

Presentation by Exhibitor 1800 hrs to 1830 hrs in Lecture Hall No.1 Cultural Programme (1900 hrs. – 2000 hrs.) Dinner (2000 hrs – 2100 hrs.)

### **Day 2: October 06, 2015 (Tuesday)**

Plenary Session I –

(0900 hrs. to 1100 hrs.)

## Topic: Presentation on Injury & Occupational Health Statistics, Fatal Accidents and Near miss Accidents Chair Panel:

Dr. P.K. Gupta, Associate Director, RRCAT, Indore

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Shri C.K. Asnani, Director (T), IREL

• Lead Talk "Time tested good practices for strengthening of Safety Culture" –

Shri D.K. Shukla, Group Director (RR), AERB

1. Injury Statistics –

Shri A. K. Panda, SO/F, IPSD, AERB

2. Occupational Health Statistics –

Shri S.R. Bhave, SO/F, IPSD, AERB

### **Presentations on Fatal Accidents:**

1. Fatal Accident of a contractor worker during material handling by crane on 06/11/2014 a Steel Yard of M/s Hindustan Construction Company Limited, RAPP 7&8 -

Shri J.R. Khatsuriya, Head, I & FS, RAPP 7 & 8, Dr. S. Ganesan, Certifying Surgeon, RAPS

2. Fatal Accident of a worker on 21/11/2014 due to fall in the dyke of  $D_2O$  storage tank from boundary wall at RAPS 1&2 –

Shri Ajay Bansod, Head, I&FS, RAPS 1 & 2, Dr. S. Ganesan, Certifying Surgeon, RAPS

 Fatal Accident at the construction Site of Pyro Process Research & Development Facility (PPRD) on June 09, 2014 –

Shri S.S. Prasad Gogu and Dr. M.K. Mohammed Razeek, Certifying Surgeon, IGCAR

### **Presentation on Near Miss Accidents**

4. Reporting and Analysis of NMAs – A tool for Accident Prevention (case Studies) –

Shri R. Thirumurgan, Sukhveer Singh, Aloke Varshney & Pankaj Khot, NPCIL, Mumbai

. Case Studies of Near Miss Incidents Occurred at Heavy Water Plants –

Shri A.K.Sahu, N.L.Malaikar, B.T. Shesasai & S.G. Belokar, HWB, Mumbai

6. Case Studies on Near Miss Accidents Occurred at BHAVINI-

Smt. N. Kanagalakshmi, Shri R. Yuvarajan & K. Rajagopalan, PFBR, BHAVINI, Kalpakkam

## TEA (1100 hrs. – 1130 hrs.)

## Plenary Session II – (1130 hrs. – 1330 hrs.)

## Topics: Contributory papers on "Safety in Evolving & Advanced Technological Applications" Chair Panel:

Shri Subimal Saha, Project Director, Medical Cyclotron & Chairman, VECC Safety Committee VECC, Kolkata

&

Dr. S.M. Oak, Head, Solid State Laser Division

RRCAT, Indore

- Advanced Safety Measures Implemented in Negative Neutral Beam (Nnb ) HVPS Facility at IPR Shri A.Gahlaut, V.Mahesh, A.K. Chakraborty & K.G. Parmar, IPR, Gandhinagar
- 2. Implementation of Safety Measures of New High Heat Flux Test Facility at IPR Shri Sunil Belsare, Rajamannar Swamy, Tushar Patel & Samir Khirwadkar, IPR, Gandhinagar
- 3. Electropolishing of Superconducting RF Cavities –

Shri S.Raghavendra, S.K. Suhane, P.Ram Sankar, A.P.Singh, Amar Singh, K.K.Das, S.K.Chauhan, S.V.Kokil, D.S.Rajpoot and S.C.Joshi, RRCAT, Indore

4. Challenges Faced in Mastering Sodium Technology during the Operation of Fast Breeder Test Reactor – Shri M. Thangamani , G.Shanmugam, K.V. Suresh Kumar, IGCAR, Kalpakkam

## **Day 2: October 06, 2015 (Tuesday)**

- 5. Safety Aspects in the Fabrication of Nitride Metal Organic Vapour Phase Epitaxy System Shri G. Jayapraksh, Tapas Ganguli, V. Agnihotri, and S. M. Oak, RRCAT, Indore
- 6. Handling of Self Powered Neutron Detectors from Reactor Core Shri Anant Kumar Singh and Amit Roy, TAPS-3&4
- 7. Advanced Technique for Estimating Frequency of Failure in Nuclear Facilities –

Shri Diptendu Das, Ms. Sadhvi Srinivasan, K Ramprasad and Ramdas Bhattacharya, IPSD, AERB

## Lunch (1330 hrs to 1430 hrs)

Parallel Session IA – (1430 hrs. – 1600 hrs.)	Parallel Session IB – (1430 hrs. – 1600 hrs.)
Topic: Contributory papers on "Industrial Safety" Chair Panel: Shri K. Ramprasad, Head, IPSD, AERB Shri S. Soundararajan, Head, IHSS, BARC	Medical Session: Contributory papers on "Positive Health Management" Chair Panel:  Dr. R. T. Sachdeo, CMS, NPCIL Dr. Hemant Haldavnekar Incharge Trombay, Vashi & Kalyan Dispensary, BARC
<ol> <li>Performance of Indus-2 Machine Safety Interlock System – Shri A.M.Gupta, Pankaj Gothwal Bhavna Merh, P. Fatnani, RRCAT, Indore</li> <li>Safety and Environment (S&amp;E) Aspects of Tokamak-Type Fusion Power Reactors - An Overview – Shri Bharat Doshi and D. Chenna Reddy IPR, Gandhinagar</li> <li>Evolution of Intelligent Fire Detection and Alarm Technology – Shri A.K. Panda and Ms. Paridhi Aggarwal, IPSD, AERB</li> <li>Ozone Generation in Synchrotron Radiation Beamlines of Indus-2 and its Safety Measures – Shri Saleem Khan, Vijay Kumar, Haridas.G., A.K.Sinha, T.A.Puntambekar, RRCAT, Indore</li> <li>RF &amp; MW Radiation Hazards, Safety and Measurements at RRCAT – Shri M.K.Nayak &amp; Haridas.G, HPU, RRCAT(HPD, BARC)</li> <li>Fire Hazard Analysis of 30 MeV Medical Cyclotron Project (MCP), VECC – Shri M. K. Pathak, ERRC, AERB</li> </ol>	<ol> <li>Clinical Case Discussion – Dr. P.T.V. Nair, Chairman, ACOH</li> <li>A deadly incident at home after mixing household chemicals - A case study at TAPS Hospital - Dr. (Mrs.) M. S. Daniel, Dr. (Mrs.) Sweta Agrawal, Dr. P. K. Yadav, Medical Superintendent, TAPS</li> <li>Does Diabetes Cause Depression? – Dr Ajay Dubey, Medical Officer In Charge, KKNPP Hospital, NPCIL</li> <li>Medical Examination for working in Heights- Dr D.S.Kathuria , Medical Superintendent , RAPS Hospital, Dr S.Ganesan , Certifying Surgeon , RR Site.</li> <li>Medical Applications of Laser – Dr Umesh Naiknaware, MO, Dr P K Gupta, Associate Director &amp; Head, LBAID, Dr Z B Mirza, I/C MO</li> </ol>

## Tea (1600 hrs. – 1630 hrs.)

Day 2: October 06, 2015 (Tuesday)	
Parallel Session IIA – (1630 hrs. – 1745 hrs.)	Parallel Session IIB – (1630 hrs. – 1745 hrs.)
Topic: Contributory papers on "Industrial Safety" Chair Panel: Shri S.G. Belokar, GM(S,H & E), HWB Shri Aloke Varshney, CE (IS&F), NPCIL	Medical Session: Contributory papers on "Positive Health Management"  Chair Panel:  Dr. A.V. Kulkarni, Head, Medical Division, BARC Dr. (Mrs.) M. S. Daniel, Certifying Surgeon, TAPS, NPCIL
<ol> <li>Safety Audit from KGS-Shri Jayaprakash Hegde, KGS, Kaiga</li> <li>Safety Aspects in Fabrication of Radiation Hard Semiconductor Detector – Shri V.K.Dixit, S.K.Khamari &amp; A. Chatterjee, RRCAT, Indore</li> <li>Safety Aspects of Ultra Short Ultrahigh Intensity LASER Matter Interaction Experimental Facilities – Shri B.S. Rao, J.A.Chakera &amp; P.A. Naik, RRCAT, Indore</li> <li>On the Safety Measures for Hydrogen Bromide Gas in Copper-Hydrogen Bromide (Cu-HBr) Laser Facility at RRCAT – Shri R. Biswal, S. Talwar, G. K. Mishra, S. K. Dixit &amp; S. V. Nakhe, RRCAT, Indore</li> <li>Safety Issues in LASER Cutting of nuclear reactor component – Shri B.N. Upadhyaya, K.S.Bindra, S.M.Oak and P.D. Gupta, RRCAT, Indore</li> <li>Challenges in Massive Excavation Work at FRFCF Site in Kalpakkam Complex-Shri C.Vijayakumaran, P. Venkatanarayana, S. Kandasamy &amp; K.K.Satpathy, FRFCF, IGCAR</li> </ol>	<ol> <li>Case Studies –         Dr. Arindam Chatterjee, Certifying Surgeon, VECC, Kolkata</li> <li>Occupational Pressure Management among Employees –         DrJ. Vijay Rao, K.Chandraiah, Dr.R.J.Srinivas Rao, NFC</li> <li>Positive Health - A Mirage? –         Dr. Prasad M. Agavane, Certifying Surgeon, KAPS</li> <li>Cancer Prevention in India –         Dr. Achintya Bhattacharyya, Medical Officer, VECC, Kolkata</li> </ol>

Visits to Laboratories (1800 hrs – 1900 hrs)

Cultural Programme (1900 hrs. – 2000 hrs.)

Dinner (2000 hrs – 2100 hrs.)

### Day 3: October 07, 2015 (Wednesday)

### Plenary Session III – (0900 hrs. – 1015 hrs.)

Contributory papers on "Industrial & Occupational Health Safety" Chair Panel:

Dr. K.K. Satpathy, Head, E&ISS, IGCAR Shri Sudheer Thakur, G M (Safety & Projects), NFC

- 1. Ventilation Requirement Optimization: A Case Study
  - Shri S. Soundararajan, Nishith Ghosh, J.D. Sharma, G. Haridas, Pradeepkumar K.S., BARC
- 2. Challenges & strategies for promoting safety during construction of Nuclear Power Project at RR Site Shri B.C.Pathak & J.R. Khatsuriya, RAPP 7&8
- 3. Ergonomics Assessment for Improving the Working Conditions at IGCAR, Kalpakkam M.V.R. Prasad, K.K. Satpathy, K.R. Balasubramanianc, S.P. Sivapirakasamd & K. Sankaranarayanasamye, IGCAR, Kalpakkam
- 4. Obesity and Its Management Dr. P.T.V. Nair, Chairman, ACOH

## Tea (1015hrs – 1030 hrs)

### Valedictory Session – (1030 Hrs. – 1300 Hrs.)

#### **Chair Panel:**

Shri R. Bhattacharya, Vice Chairman, AERB, Mumbai

Shri K. Ramprasad, Head, IPSD, AERB

Briefing on Parallel Session I & II: Safety Professionals & Occupational Health Professionals

Presentations by Exhibitors

Prize Distribution for Poster, Slogans Competition among DAE Employees

Feedback on 32<sup>nd</sup> DAE Safety & Occupational Health Professionals Meet

Felicitations

Venue & Theme: 33<sup>rd</sup> DAE Safety & Occupational Health Professionals Meet

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

1400 hrs -Onwards ----- Sightseeing / Visit to Laboratories