

PROGRAMME SCHEDULE for ISMC-2018

Venue: DAE Convention Centre, ANUSHAKTI NAGAR,
Mumbai-400 094

(December, 04-08, 2018)

Day-1: 04-12-2018, Tuesday		
	13:00-14:00	LUNCH
	14:00-14.30	REGISTRATION
INAUGURATION		
60m	14:30-15:30	Inauguration Prof. Srikumar Banerjee <i>Chancellor, HBNI and Former Chairman, DAE, India</i>
45m	15:30-16:15	Keynote address Prof. P. R. Vasudeva Rao <i>Vice Chancellor HBNI and Former Director IGCAR, Kalpakam</i>
30m	16:15-16:45	Tea
Session-I: Material Chemistry in Energy, Environment and Health care Chairman: Dr. J. P. Mittal <i>INSA Honorary Scientist and Former Director, Chemistry Group, BARC</i>		
40m	16:45-17:25	PL-I: Prof. B. Bhargava <i>Director General, ONGC Energy Centre</i> Development of hydrogen production technologies in India: opportunities and challenges
40m	17:25-18:05	PL-II: Prof. Murali Sastry <i>CEO, IITB-Monash Research Academy</i> Nanotechnology and consumer products : my Tata Swach experience
40m	18:05-18:45	PL-III: Prof. Kuldeep Raj Kohli <i>Director, AYUSH, Govt. of Maharashtra</i> A Review Of Herbal And Herbo-metallic Materials In The Management Of Type 2 Diabetes Mellitus.
30m	18:45-19:15	IT-1: Prof. S. Natarajan <i>Professor, SSCU, Indian Institute of Science, Bangalore</i> Acids, Bases and Compounds
15m	19:15-19:30	Shri. Dheeraj Jain <i>Chemistry Division, BARC</i>

		Materials as Precursors of Technologies: An Overview of Activities at Chemistry Division, BARC
30m	19:30-20:00	Break
60m	20:00-21:00	Dinner
Day-2: 05-12-2018, Wednesday		
	08:00-09:15	Breakfast
Session-II: Nuclear Materials		
30m	09:15-09:45	IT-2: Prof. N. Clavier <i>Scientist, CNRS, France and Professor at Univ of Montpellier, France</i> From synthesis to chemical durability : a transverse approach to ThO ₂ -based ceramics lifecycle
30m	09:45-10:15	IT-3: Prof. S. Anthonysamy <i>IGCAR, Kalpakkam, India</i> Development of Nuclear Materials for Fast Reactors at Kalpakkam
30m	10:15-10:45	IT-4. Prof. Rajesh Ganesan <i>IGCAR, Kalpakam, India</i> Thermodynamic study and phase diagram investigation of materials for nuclear applications
15m	10:45-11:00	SL-1. Dr. Mohamed RuwaidRafiuddin <i>Univ of Montpellier, France</i> Synthesis, Crystal Structure, and Thermochemical Properties of Churchite-type LnPO ₄ .2H ₂ O Materials
30	11:00-11:30	Tea
Session-III: Materials Under Extreme Conditions		
30m	11:30-12:00	IT-5: Prof. Alfonso Muñoz <i>Universidad de La Laguna, Tenerife, Spain.</i> Theoretical study of materials under extreme conditions from <i>ab initio</i> methods. Some examples and applications.
30m	12:00-12:30	IT-6: Prof. D. Errandonea <i>Universitat de València, Valencia, Spain</i> Exploring the High-Pressure Behaviour of Polymorphs of AMO ₄ Ternary Oxides: Crystal Structure and Physical Properties
30m	12:30-13:00	IT-7: Prof. Ravindra Pandey <i>Michigan Technological University, Houghton, USA</i> Phosphorene-based 2D Materials for Device Applications
15m	13:00-13:15	Presentation from RSC Publication
45m	13:15-14:00	LUNCH
120m	14:00-16:00	POSTER SESSION-I (Tea within session)

Session-IV: Structural and electronic properties of Materials

30m	16:00-16:30	IT-8: Prof. Akira Terasaki <i>Kyushu University, Japan</i> Finite-Size Effect in Dilute Magnetic Alloy of Silver in the Small Cluster Regime
30m	16:30-17:00	IT-9: Prof. Ranjan Mittal <i>BARC, Mumbai, India</i> Anomalous Thermal Expansion Behaviour in Framework Solids
30m	17:00-17:30	IT-10: Prof. Tapas Ganguli <i>RRCAT, Indore, India</i> Structural and Electronic properties of FeGa ₃
30m	17:30-18:00	IT-11: Prof. G. Vaitheswaran <i>ACRHEM, University of Hyderabad, India.</i> Pressure induced phase transitions in urea: A detailed investigation through first principles calculations
15m	18:00-18:15	Tea
75m	18:15-19:30	AGM of SMC
90m	19:30-21:00	BANQUET

Day-3: 06-12-2018, Thursday

08:00-09:15

Breakfast

Session-V: Hydrogen Energy and Catalysis

30m	09:15-09:45	IT-12: Prof. Mahendra K. Sunkara <i>University of Louisville, Louisville, USA</i> High Performance Catalysts, Adsorbents and Electrocatalysts by Design
30m	09:45-10:15	IT-13. Prof. Rajiv Ahuja <i>Uppsala University, Uppsala, Sweden</i> Role of Catalysts & Nano Structuring in Hydrogen Storage Materials
30m	10:15-10:45	IT-14: Prof. Wolfgang Weigand <i>Friedrich Schiller University Jena, Jena, Germany</i> [FeFe]-Hydrogenase Mimics: Bio-inspired Hydrogen Production
15m	10:45-11:00	SL-2: Dr. Salil Varma <i>Chemistry Division, BARC, India</i>
15m	11:00-11:30	Tea

Session-VI: Optical Properties of materials

30m	11:30-12:00	IT-15: Prof. Benjamin Dietzek <i>Leibniz Institute of Photonic Technology, Jena, Germany</i> Photoinduced Electron- and Energy-Transfer in (Polymer) Materials
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30m	12:00-12:30	IT-16. Prof. Wolfgang Kaim <i>Universität Stuttgart, Stuttgart, Germany</i> Materials with Electronic Transitions in the Near Infrared
30m	12:30-13:00	IT-17. Prof. S. Mahamuni <i>S.P. Pune University, Pune, India</i> Stimulated Radiation From Cesium Lead Halide Quantum Dots at Cryogenic Temperature
15m	13:00-13:15	SL-3: Dr. Pushpal Ghosh <i>Harisingh Gour University, Sagar, India</i> Smart Materials via Ionic Liquids
45m	13:15-14:00	LUNCH
120m	14:00-16:00	POSTER SESSION-II (Tea within session)
Session-VII: Materials in Health Care		
30m	16:00-16:30	IT-18: Prof. Venkata Vamsi Krishna Venuganti <i>BITS Pilani, Hyderabad Campus, Hyderabad, India.</i> Dissolvable Microneedle Patch for Co-delivery of Doxorubicin and Docetaxel to Treat Breast Cancer
30m	16:30-17:00	IT-19: Prof. Sri Sivakumar <i>Indian Institute of Technology Kanpur, India</i> Development of Nanoengineered Targeted Theranaustic Vehicles
30m	17:00-17:30	IT-20: Prof. Sameer V. Dalvi <i>Indian Institute of Technology Gandhinagar, India</i> Engineering Stable and Biocompatible Microbubble Formulations for Biomedical Applications
15m	17.30-17:45	SL-4. Dr. Beena G. Singh <i>Radiation & Photochemistry Division, BARC, India</i> Protein based drug delivery materials
15m	17:45-18:00	SL-5: Dr. RajibGanguly <i>Chemistry Division, BARC, India</i>
15m	18:00-18:15	SL-6: Dr. Anuj Tripathi <i>Nuclear Agriculture and Biotechnology Division, BARC, India</i> Cryostructuring of Polymers for Developing MacroporousCryogels as a Foundational Framework in Bioengineering
15m	18:15-18:30	Tea
60m	18:45-19:45	CULTURAL PROGRAM
75m	19:45-21:00	Dinner
Day-4: 07-12-2018, Friday		
	08:00-09:15	Breakfast

Session-VIII: Materials for nuclear technology

30m	09:15-09:45	IT-21: Prof. S. Kannan <i>BARC, Mumbai, India</i> Steric effect on complex and separation chemistry of actinide ions
30m	09:45-10:15	IT-22: Prof. Manmohan Kumar <i>BARC, Mumbai, India</i> Applications of polymers in the separation of precious/toxic metals and radionuclides
30m	10:15-10:45	IT-23: Prof. A.K. Nayak <i>BARC, Mumbai, India</i> Evolution of Safety in Light Water Reactor Designs – A Historical Review
30m	10:45-11:15	IT-24: Prof. Hrudananda Jena <i>IGCAR, Kalpakkam, India</i> Materials for nuclear waste immobilization: synthesis and their properties at elevated temperatures
15m	11:15-11:30	Tea

Session-IX: Organic and organo-metallic chemistry

30m	11:30-12:00	IT-25: Prof. Partha Sarathi Mukherjee <i>Indian Institute of Science, Bangalore, India.</i> Chemistry in Molecular Flasks
30m	12:00-12:30	IT-26: Prof. David G. Churchill <i>Korea Advanced Institute of Science and Technology (KAIST), KAIST, Republic of Korea</i> Enlisting the help of chalcogens in analysis of neurodegenerative disease and aging research
30m	12:30-13:00	IT-27: Prof. Bhalchandra M. Bhanage <i>Institute of Chemical Technology, Mumbai, India</i> Greener Methods for the Synthesis of Metal and Metal Oxide Nanomaterials and its Catalytic Applications
15m	13:00-13:15	SL-7: Dr. Adish Tyagi <i>Chemistry Division, BARC, India</i>
45m	13:15-14:00	LUNCH
105m	14:00-15:45	POSTER SESSION-III (Tea within session)

Session-X: Luminescent Materials

30m	15:45-16:15	IT-28: Prof. Venkataramanan Mahalingam <i>IISER-Kolkata, India</i> Colloidal Lanthanide-doped luminescent nanocrystals for phosphor and photodynamic applications
30m	16:15-16:45	IT-29: Prof. Neeraj Agarwal

		<i>UM DAE Centre for Excellence in Basic Sciences, Mumbai, 400098, India</i>
		Thermally Activated Delayed Fluorescence in Acridone derivatives and their applications in OLEDs
30m	16:45-17:15	IT-30: Prof. Sivakumar Vaidyanathan <i>National Institute of Technology Rourkela, India</i>
		Rational design and synthesis of organic fluorophores for blue organic light emitting diodes
15m	17:15-17:30	SL-8. Dr. Sandeep Nigam <i>Chemistry Division, BARC, India</i>
15m	17:30-17:45	Tea
Session-XI: Functional Materials		
30	17:45-18:15	IT-31: Dr. T. Sharada <i>Innovative Material Technologies Pvt. Ltd., Jaipur, India</i>
		CVD Diamond and Advancements in Technologies
15m	18:15-18:30	IT-32: Prof. A. Dutta <i>VIT, Chennai, India</i>
		Lanthanum Gallate: A Versatile Electrolyte for High Temperature Applications
15m	18:30-18:45	SL-9: Dr. Sanghamitra Chatterjee <i>Institute of Chemical Technology, Mumbai, India</i>
		Carbon Nanostructured Based Biosensor for Sensitive Determination of Brucine in Human Physiology
15m	18:45-19:00	Tea
60m	20:00-21:00	Dinner
Day-5: 08-12-2018, Saturday		
	08:00-09:15	Breakfast
Session-XII: Materials for energy conversion and sensors		
30m	09:15-09:45	IT-32: Prof. Amartya Mukhopadhy <i>IIT Bombay, Mumbai, India</i>
		Insights into a few Anode Materials for Advanced Alkali Metal-ion Batteries
30m	09:45-10:15	IT-33. Prof. Aninda J. Bhattacharyya <i>Indian Institute of Science, Bengaluru, India</i>
		Maximizing Electrochemical Energy via Systematic Chemical Design of Electroactive Materials
30m	10:15-10:45	IT-34: Prof. T. N. Narayanan <i>TIFR - Hyderabad, Hyderabad, India</i>
		Engineered Mesoscopic Interfaces for Energy Conversion
15m	10:45-11:00	SL-10: Dr. Jayappa Manjanna <i>Rani Channamma University, Belagavi, India</i>

		Recovery of Co and Li from cathode materials of spent Li-ion batteries towards the resources recycling
15m	11:00-11:15	SL-11: Dr. Dimple Dutta <i>Chemistry Division, BARC, India</i> Designing Novel Electrode Materials for Na-ion Batteries: Potential Alternatives to Current Li-ion Batteries
15m	11:15-11:30	Tea
Session-XII: Hydrogen Energy		
30m	11:30-12:00	IT-36. Prof. Sreedevi Upadhyayula <i>IIT Delhi, New Delhi, India.</i> Evaluation of Materials of Construction for the Sulfuric Decomposition Section in the Sulphur-Iodine Cycle for Hydrogen production
30m	12:00-12:30	IT-37. Prof. A Shrinivas Rao <i>BARC, Mumbai, India</i> Study of Materials for Hydrogen Energy: Sulfur cycles
30m	12:30-13:00	IT-38. Prof. K. Ramachandra Rao <i>Crystal Growth and Nano Science Research Center, Rajamahendravaram, India</i> High grain boundary porous tin nanowires for Photo electrochemical reduction of CO ₂ -into- HCOOH Conversion
30m	12:45-13:15	IT-39: Dr. Somnath Banerjee SPMCIL, Dewas
45m	13:15-14:00	LUNCH
60m	14:00-15:00	VALEDICTORY FUNCTION
30m	15:00-15:30	Tea