

| SCICON '19 - 2nd INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS | | |
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| DAY 1: 15 DECEMBER, 2019 | | |
| Time | Details of the Programme | |
| 07.30 am to 08.45 am | Registration and Breakfast | |
| 09.00 am to 09.45 am | Inauguration (Amritheshwari Hall) | |
| Plenary Session 1 (Amritheshwari Hall) | | |
| 09.45 am to 10.30 am | 2D Materials for Energy Storage: An emerging paradigm Prof. Gour Prasad Das, IIT, Kharagpur | |
| 10.30 am to 11.15 am | Heterojunction Solar Cells: Band Diagram and Domains through Scanning Tunneling Spectroscopy Prof. Amalan J Pal, IACS, Kolkata | |
| 11.15 am to 11.35 am | Tea Break | |
| 11.35 am to 12.45 pm | Parallel Session 1 | |
| Invited Talks (25 minutes each) | ELECTRONIC AND MAGNETIC MATERIALS (Amritheshwari Hall) Tuning the electrical property of graphene field effect transistors (GFETs) by molecular doping withlanthanide complexes Dr. Maheswaran Shanmugam - IIT, Mumbai | MATERIALS FOR ENERGY (Acharya Hall) Hydrogen generation by thermocatalytic method using rare-earth materials Dr. G. Ranga Rao - IIT, Chennai |
| | Mesoscale Junctions: From Catalysis to Electronics Dr. T. N. Narayanan - TIFR, Hyderabad | Novel hybrid composites from NASICONs and composite polymers: Investigations on electrical transport, structure and application potential in energy storage devices Dr. Anshuman Dalvi - BITS, Pilani |
| | Oral Presentation (10 minutes each) | Oral presentation: Abstracts: 41, 74 |
| 12.45 pm to 01.45 pm | Lunch | |
| Plenary Session 2 (Amritheshwari Hall) | | |
| 01.45 pm to 02.30 pm | Engineered Nanoscale Materials for High Power and High Capacity Battery Applications Prof. Shanthi Nair, Amrita Vishwa Vidyapeetham | |
| 02.30 pm to 03.15 pm | Spontaneous Emergence of Chirality in Achiral Systems Prof. Mohan Srinivasa Rao, GATECH, USA | |
| 03.15 pm to 4.00 pm | State of the art Recycle Technology of Thermoplastic Wastes to Thermoplastic Composite Products Dr. Shantanu Bhowmik, Amrita Vishwa Vidyapeetham | |
| 04.00 pm to 05.15 pm | Tea Break / Poster Session: Abstractsr: 1 - 100 (Sudhamani Hall) | |
| 05.15 pm to 06.45 pm | Parallel Session 2 | |
| Invited Talks (25 Minutes Each) | BIOMATERIALS (Amritheshwari Hall) An Overview of Additive Manufacturing of Bio-implants- Challenges and Future Developments Dr. Ashish Kumar Nath - IIT, Kharagpur | MATERIALS FOR ENERGY (Acharya Hall) Flexible and Compressible Energy Devices Dr. K. Krishnamoorthy - NCL, Pune |
| | Reversible Control of Properties and Functions of Molecules by Light Dr. Sugumar V - ISER, Mohali | Development of Batterieies Dr. Pathanjali G, High Energy Batterieies |
| | Oral Presentations (10 minutes each) | Oral presentation: Abstracts: 27, 64, 66, 91 |
| 06.45 pm to 07.00 pm | Tea | |
| 07.00 pm to 08.00 pm | Cultural Events (Amritheshwari Hall) | |
| 08.00 pm to 09.30 pm | Dinner | |
| DAY 2 : 16 DECEMBER, 2019 | | |
| 07.30 am to 08.45 am | Breakfast | |
| Plenary Session 3 (Amritheshwari Hall) | | |
| 09.00 am to 09.45 am | Electrodes and electrolytes for Lithium and beyond Lithium batteries: The next generation energy storage devices Dr. Kalai Selvi, Director, CECRI | |
| 09.45 am to 10.30 am | Beyond Nanoscale – A Next Generation Biocompatible Pathway for Analytical Bio-sensing, Cancer Diagnostics and therapy (Quantum Theranostics) Dr. Krishnan Venkatakrishnan, Ryerson University, Canada | |
| 10.30 am to 10.50 am | Tea Break | |
| 10.50 am to 01.05 pm | Parallel Session 3 | |
| Invited Talks (25 minutes each) | BIOMATERIALS (Amritheshwari Hall) Ruthenium-Catalyzed Cyclization of Substituted Aromatics or Alkenes with CarbonCarbon π -Components: an Efficient Route to Heterocycles Dr. M. Jeganmohan, IIT, Chennai | BASIC SCIENCES (Acharya Hall) Femtosecond Laser Materials Processing and Applications in Defense Dr. Venugopal Rao Soma - Hyderabad Central University, Hyderabad |
| | Fabrication of Thin Film Biointerfaces for Bio Implants | Ultrasound Assisted Photocatalysis for Environmental Remediation |

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| | <i>Dr. B. Subramanian - CECRI, Karaikudi</i> | <i>Dr. Neppolian B, SRM, Chennai</i> |
| | Nanostructured Materials for Catalytic and Biomedical Applications | Development of fluorescent chemosensors for cations/anions towards their applications in water treatment |
| | <i>Dr. Nandan Erathodiyil - A*STAR, Singapore</i> | <i>Dr. Mosae Selvakumar - Asian university for women, Bangladesh</i> |
| Oral Presentation (10 minutes each) | Oral presentation: Abstracts: 7, 109, 136, 145, 9, 29 | Oral presentation, Abstracts: 165, 176, 184, 189, 107, 110 |
| 01.05 pm to 02.00 pm | Lunch Break | |
| Plenary Session 4 (Amritheshwari Hall) | | |
| 02.00 pm to 02.45 pm | Engineering materials against environmental degradation-key for their successful applications in advanced technologies <i>Prof. V. S. Raja - IIT, Mumbai</i> | |
| 02.45 pm to 03.30 pm | Quantum dots for SERS biosensing <i>Dr Bo Tan, Ryerson University, Canada</i> | |
| 03.30 pm to 04.45pm | Tea Break / Poster Session: Abstracts: 101 - 200 (Sudhamani Hall) | |
| 04.45 pm to 6.40 pm | Parallel Session 4 | |
| Invited Talks (25 minutes each) | NANOMATERIALS <i>(Amritheshwari Hall)</i> | BASIC SCIENCES <i>(Acharya Hall)</i> |
| | Future of Nano Materials in Sensor Development <i>Dr. Sujatha Devi - NIIST, Trivandrum</i> | A sustainable microwave assisted catalytic transformation of waste vegetable oils into glycerol-free Biodiesel (Through Skype) Dr Carmelo Drago, CNR, Italy |
| | Engineering of Vertically Aligned ZnO based Core-Shell Hetetrostructures for Efficient Photocatalytic and Photosensing <i>Dr Rajendra Kumar - Bharathiar University, Coimbatore</i> | Functional Ortho-Structured Materials for Memory Application <i>Dr. C. Venkateswaran, Madras University</i> |
| | Dye-sensitized Solar Cells: Creating an Effective Value Chain from Lab to Market <i>Dr Suraj Soman - NIIST, Trivandrum</i> | Advanced joining Techniques for composites, ceramics, nano and advanced materials <i>Dr Govindaraju, Amrita Vishwa Vidyapeetham</i> |
| Oral Presentation (10 minutes each) | Oral presentation: Abstracts: 42, 155, 156, 163 | Oral presentation: Abstracts: 24, 34, 90, 135 |
| 07.15 pm to 09.00 pm | Banque Dinner (Guest House Lawn) | |
| DAY 3 : 17 DECEMBER, 2019 | | |
| 07.30 am to 08.45 am | Breakfast | |
| | Plenary Session 5 (Amritheshwari Hall) | |
| 09.00 am to 09.45 am | Computational Tools and Vibrational Spectra of Large Polycyclic Systems <i>Dr. Mangal Sundar, IIT, Chennai</i> | |
| 09.45 am to 10.30 am | <i>Dr Bipin Nair, Amrita Vishwa Vidyapeetham</i> | |
| 10.30 am to 10.50 am | Tea Break | |
| 10.50 am to 12.35 pm | Parallel Session 5 | |
| Invited Talks (25 minutes each) | NANOMATERIALS <i>(Amritheshwari Hall)</i> | BIOMATERIALS <i>(Acharya Hall)</i> |
| | Metallic nanoparticles @ carbon dots for dual sensing application <i>Dr. S. Abraham John - Gandhigram Rural Institute, Gandhigram</i> | Lab-on-a-chip device for multi organ functional analysis <i>Dr Satheesh Babu, Amrita Vishwa Vidyapeetham, Coimbatore</i> |
| | Heavy metal ion sensing using Semiconductor quantum dots and carbon dots <i>Dr. D. Vasudevan, CECRI, Karaikudi</i> | Quantitative Phase Retrieval using Transport of Intensity Equation for Optical Metrology and Biomedical Applications Dr Rosmin Elsa Mohan, NUS, Singapore |
| | Memory in nanomaterials <i>Dr. Kallol Mohanta, PSGIAS, Coimbatore</i> | Valorisation of 1st and 2nd generation bio-ethanol industry waste water using catalytic and thermochemical methods <i>Dr. Churchil Antonyraj, PSGCAS, Coimbatore</i> |
| Oral Presentations (10 minutes each) | Oral presentation: Abstracts: 120, 130, 162 | Oral presentation: Abstracts: 23, 138 |
| 12.35 pm to 01.30 pm | Lunch Break | |
| 01.30 pm to 03.10 pm | Parallel Session 6 | |
| Invited Talks (25 minutes each) | MATERIALS FOR ENERGY / COMPUTATIONAL MATERIALS <i>(Amritheshwari Hall)</i> | |
| | A detailed approach to photovoltaic Cells : Dye sensitized solar cells to Perovskite Solar Cells <i>Dr. K.S.Sreelatha - GAC, Kottayam</i> | |
| | Materials for additive manufacturing in health, energy and strategic sectors <i>Dr. U Chandrasekar (WIPRO 3D)</i> | |
| | Functional materials design guided by first-principles calculations and machine learning <i>Dr. Saurabh Ghosh, SRM Chennai</i> | |
| 03.10 pm to 03.45 pm | Tea Break | |
| 03.45 pm to 04.45 pm | Valedictory and Prize Distribution | |