

SCICON '19 - 2nd INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS		
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, Kolkatta	
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 $\pi$ -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

	<i>Dr. B. Subramanian - CECRI, Karaikudi</i>	<i>Dr. Neppolian B, SRM, Chennai</i>
	<b>Nanostructured Materials for Catalytic and Biomedical Applications</b> <i>Dr. Nandan Erathodiyil - A*STAR, Singapore</i>	<b>Development of fluorescent chemosensors for cations/anions towards their applications in water treatment</b> <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	
	<b>Plenary Session 4 (Amritheshwari Hall)</b>	
02.00 pm to 02.45 pm	<b>Engineering materials against environmental degradation-key for their successful applications in advanced technologies</b> <i>Prof. V. S. Raja - IIT, Mumbai</i>	
02.45 pm to 03.30 pm	<b>Quantum dots for SERS biosensing</b> <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	<b>Parallel Session 4</b>	
Invited Talks (25 minutes each)	<b>NANOMATERIALS</b> <i>(Amritheshwari Hall)</i>	<b>BASIC SCIENCES</b> <i>(Acharya Hall)</i>
	<b>Future of Nano Materials in Sensor Development</b> <i>Dr. Sujatha Devi - NIIST, Trivandrum</i>	<b>A sustainable microwave assisted catalytic transformation of waste vegetable oils into glycerol-free Biodiesel (Through Skype)</b> <i>Dr Carmelo Drago, CNR, Italy</i>
	<b>Engineering of Vertically Aligned ZnO based Core-Shell Heterostructures for Efficient Photocatalytic and Photosensing</b> <i>Dr Rajendra Kumar - Bharathiar University, Coimbatore</i>	<b>Functional Ortho-Structured Materials for Memory Application</b> <i>Dr. C. Venkateswaran, Madras University</i>
	<b>Dye-sensitized Solar Cells: Creating an Effective Value Chain from Lab to Market</b> <i>Dr Suraj Soman - NIIST, Trivandrum</i>	<b>Advanced joining Techniques for composites, ceramics, nano and advanced materials</b> <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	Banquet Dinner (Guest House Lawn)	
	<b>DAY 3 : 17 DECEMBER, 2019</b>	
07.30 am to 08.45 am	Breakfast	
	<b>Plenary Session 5 (Amritheshwari Hall)</b>	
09.00 am to 09.45 am	<b>Computational Tools and Vibrational Spectra of Large Polycyclic Systems</b> <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	<b>Parallel Session 5</b>	
Invited Talks (25 minutes each)	<b>NANOMATERIALS</b> <i>(Amritheshwari Hall)</i>	<b>BIOMATERIALS</b> <i>(Acharya Hall)</i>
	<b>Metallic nanoparticles @ carbon dots for dual sensing application</b> <i>Dr. S. Abraham John - Gandhigram Rural Institute, Gandhigram</i>	<b>Lab-on-a-chip device for multi organ functional analysis</b> <i>Dr Satheesh Babu, Amrita Vishwa Vidyapeetham, Coimbatore</i>
	<b>Heavy metal ion sensing using Semiconductor quantum dots and carbon dots</b> <i>Dr. D. Vasudevan, CECRI, Karaikudi</i>	<b>Quantitative Phase Retrieval using Transport of Intensity Equation for Optical Metrology and Biomedical Applications</b> <i>Dr Rosmin Elsa Mohan, NUS, Singapore</i>
	<b>Memory in nanomaterials</b> <i>Dr. Kallol Mohanta, PSGIAS, Coimbatore</i>	<b>Valorisation of 1st and 2nd generation bio-ethanol industry waste water using catalytic and thermochemical methods</b> <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	<b>Parallel Session 6</b>	
Invited Talks (25 minutes each)	<b>MATERIALS FOR ENERGY / COMPUTATIONAL MATERIALS</b> <i>(Amritheshwari Hall)</i>	
	<b>A detailed approach to photovoltaic Cells : Dye sensitized solar cells to Perovskite Solar Cells</b> <i>Dr. K.S.Sreelatha - GAC, Kottayam</i>	
	<b>Materials for additive manufacturing in health, energy and strategic sectors</b> <i>Dr. U Chandrasekar (WIPRO 3D)</i>	
	<b>Functional materials design guided by first-principles calculations and machine learning</b> <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	