



*International Conference on Materials for the Millennium*



## MATCON 2019

March 14-16, 2019

Venue: Seminar Complex, Cochin University of Science and Technology, Kochi-22, Kerala

### PROGRAMME SCHEDULE

DAY 1 (14-03-2019)		
08.30-09.30	Registration	
09.30-10.30	Inauguration	
10.30-11.00	High Tea	
SESSION 1		
Chair – Dr. Parameswaran Pattiyil, National Institute of Technology, Calicut, India		
11.00-11.45	Keynote Address	<b>Prof. K. George Thomas, Indian Institute of Science Education and Research Trivandrum, India</b> <i>‘Excitons and Plasmons: A Tale of Two Elementary Excitations and their Interaction’</i>
11.45-12.15	I.L.1	<b>Dr. Syoji ITO, Osaka University, Japan</b> <i>‘Mesoscopic Photo-Mechanical Motion of Small Particle Achieved by Switching of Radiation Force through Photochemical Reaction’</i>
12.15-12.45	I.L.2	<b>Prof. Salma Al Kindy, Sultan Qaboos University, Muscat, Oman</b> <i>‘Photocatalytic Degradation of Chlorophenols Present in Aqueous Solution Under Visible/Solar Light Irradiation’</i>
12.45-13.00	S.P.1	<b>Prof. Vinay Bhandari, CSIR-National Chemical Laboratory, Pune, India</b> <i>‘Developing Sustainable Methodologies for Wastewater Treatment’</i>
13.00-14.00	Lunch	
SESSION 2		
Royal Society of Chemistry (United Kingdom) Sponsored Lecture		
Chair – Prof. Wolfgang Kaim, University of Stuttgart, Germany		
14.00-14.30	I.L.3	<b>Prof. E. D. Jemmis, Indian Institute of Science, Bangalore, India</b> <i>‘Borophenes: A New Material on the Block?’</i>
14.30-15.00	I.L.4	<b>Prof. Herbert W. Roesky</b> <b>University of Gottingen, Germany</b> <i>‘Recent Advances in Aluminium and Silicon Chemistry’</i>

15.00-15.15	S.P.2	<b>Dr. Vijaykumar C. Nair, CSIR- National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, India</b> <i>‘Engineered Doping of Thiophene based Semiconductors for Thermoelectric Application’</i>
15.15-15.30	S.P.3	<b>Dr. Santanu Bhattacharyya, Indian Institute of Science Education and Research, Berhampur, Odisha, India</b> <i>‘N-doped Carbon Dots: Optimization for Photocatalytic Solar Water Splitting’</i>
15.30-15.45	Tea	
15.45-16.00	Conference Photo	
<b>SESSION 3</b> Chair – Prof. K. K. Mohammed Yusuff, Cochin University of Science and Technology, Kochi, India		
16.00-16.30	I.L.5	<b>Dr. Rengaraj Selvaraj, Sultan Qaboos University, Muscat, Oman</b> <i>‘Metal Free Semiconductors: A Green Material for Environmental Remediation’</i>
16.30-17.00	I.L.6	<b>Prof. Edwin Yeow, Nanyang Technological University, Singapore</b> <i>‘Sensors that Sense in Sensible Ways’</i>
17.00-17.10	S.P.4	<b>Mr. Masafumi Koga, Osaka University, Japan</b> <i>‘Photoionization Dynamics of a Phenylenediamine Derivative in Solution Phase Induced by Simultaneous and Stepwise Two-Photon Excitation’</i>
17.10-17.20	S.P.5	<b>Mr. Tatsuhiro Nagasaka, Osaka University, Japan</b> <i>‘Elucidation of Cyclization and Cycloreversion Reaction Dynamics of a Dithiazolylarylene Derivative’</i>
17.30-18.30	Poster Session	
18.30-19.30	Cultural Programme <i>‘Kathakali’ by Kalamandalam Rajashekharan &amp; Team’</i>	
19.30	Dinner	
DAY 2 (15-03-2019)		
<b>SESSION 4</b> Chair – Prof. Abdulaziz Bagabas King Abdulaziz City for Science and Technology, Riyadh, Saudi Arabia		
09.30-10.00	I.L.7	<b>Prof. Hanna Radecka, Polish Academy of Science, Poland</b> <i>‘Gold and Silver Nanoparticles in Electrochemical Sensors for Ultrasensitive DNA Analysis’</i>
10.00-10.30	I.L.8	<b>Prof. Ramasamy Ramaraj, Madurai Kamaraj University, Madurai, India</b> <i>‘Nanostructured Materials Modified Electrodes and their Applications in Catalysis and Sensors’</i>

10.30-11.30	Poster Session	
11.30-11.45	Tea	
SESSION 5		
Chair – Prof. K. Girish Kumar, Head of the Department of Applied Chemistry, Cochin University of Science and Technology, Kochi, India		
11.45-12.15	Felicitation to Dr. P.A. Unnikrishnan, Cochin University of Science and Technology, Kochi, India by Prof. K. Sreekumar, Cochin University of Science and Technology, Kochi	
12.15-12.45	I.L.9	Dr. Kajal Chakraborty, Central Marine Fisheries Research Institute, Kochi, India <i>‘Bioactive Compounds from Marine Organisms as Novel Molecular Scaffolds for Future Pharmacophore Discovery’</i>
12.45-13.00	S.P.6	Dr. Joshy Joseph, CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, India <i>‘Mutually Assisted Self-Assembly of Fullerene Clusters and Short DNA Strands’</i>
13.00-14.00	Lunch	
SESSION 6		
Chair – Dr. Rengaraj Selvaraj, Sultan Qaboos University, Muscat, Oman		
14.00-14.30	I.L. 10	Prof. Wolfgang Kaim, University of Stuttgart, Germany <i>‘Materials with Electronic Transitions in the Near Infrared’</i>
14.30-15.00	I.L.11	Prof. Abdulaziz Bagabas, King Abdulaziz City for Science and Technology, Riyadh, Saudi Arabia <i>‘Novel Green Route for the Synthesis of Isopropyl Alcohol’</i>
15.00-15.15	S.P.7	Dr. Sreejith Shankar, CSIR - National Institute for Interdisciplinary Sciences and Technology (CSIR-NIIST), Thiruvananthapuram, India <i>‘Electrochromism - From Molecules to Materials and Devices for Smart Energy Utilization’</i>
15.15-15.30	S.P.8	Dr. Pravin G. Ingole, CSIR-North East Institute of Science and Technology, Assam, India <i>‘Thin Film Nanocomposite Polymer Membranes - Recent Development for the Sustainable Future’</i>
15.30-15.45	Tea	
SESSION 7		
Chair – Prof. Jerzy Radecki, Polish Academy of Science, Poland		
15.45-16.15	I.L.12	Prof. Heinrich Lang, Technische Universitat Chemnitz, Germany <i>‘From: Small Tailor-made Molecules To: New Materials’</i>

16.15-16.45	<i>I.L.13</i>	<b>Dr. Reji John, Defence Research and Development Organisation, Kochi, India</b> <i>‘Smart Materials and Devices’</i>
16.45-17.00	<i>S.P.9</i>	<b>Dr. Paulomi Ghosh, CSIR-Indian Institute of Chemical Biology, Kolkata, India</b> <i>‘3D Printed Construct Incorporating Decellularized Chondral Matrix for the Treatment of Large Cartilage Defects’</i>
17.00-17.10	<i>S.P.10</i>	<b>Ms. Bhagyalakshmi S.B., Hokkaido University, Japan</b> <i>‘Charge Carrier Dynamics in Microscale and Nanoscale Perovskite Structures’</i>
18.00	<i>Conference Dinner at ‘Nihara Resort’</i>	
<b>DAY 3 (16-03-2019)</b>		
<b>SESSION 8</b> Chair – Prof. S. Prathapan, Cochin University of Science and Technology, Kochi, India		
9.30-10.00	<i>I.L.14</i>	<b>Prof. Vasudevanpillai Biju, Hokkaido University, Japan</b> <i>‘Incessant and Intermittent Photoluminescence from Semiconductor Nanocrystals: Challenges and Prospects’</i>
10.00-10.30	<i>I.L.15</i>	<b>Prof. Jerzy Radecki, Polish Academy of Science, Poland</b> <i>‘Redox Active Monolayers for Exploring of Anion Recognitions Processes in Aqueous Phase’</i>
10.30-11.30	<i>Poster Session</i>	
11.30-11.45	<i>Tea</i>	
<b>SESSION 9</b> <b><i>Prof. K.K. Mohammed Yusuff Endowment Lecture</i></b> Chair – Prof. S. Sugunan, Cochin University of Science and Technology, Kochi, India		
11.45-12.15	<i>I.L.16</i>	<b>Dr. Parthasarathi Chakraborty, Indian Institute of Technology, Kharagpur, India</b>
12.15-12.45	<i>Valedictory Function</i>	
12.45	<i>Lunch</i>	