



*Twenty First*

## National Convention of Electrochemists (NCE-21)

30-31 January 2020

Vellore Institute of Technology (VIT), Chennai

### TECHNICAL PROGRAMME

DAY-1 ... 30 January 2020 (Thursday)

Venue: Nethaji Auditorium (Academic Block – 1; 7<sup>th</sup> floor)

08.30 - 09.30	<b>Registration</b>	
09.30 - 10.15	<b>Inauguration</b>	
10.15 - 11.00	<b>Prof. S. K. Rangarajan Memorial Lecture</b> Two Avatars of Anomalous Diffusion <i>Prof. K.L. Sebastian, Indian Institute of Technology, Palakkad</i>	
11.00 - 11.15	<b>Tea Break</b>	
11.15 - 12.00	<b>Prof. S. Sathyanarayana Memorial Lecture</b> Energy Storage and e-Mobility Opportunities in India in 21 <sup>st</sup> Century <i>Dr. N. Sugumaran, International Battery Consultant, Coimbatore</i>	
12.00 - 12.30	<b>Invited Lecture 1 (IL-1)</b> Electrocatalysis and In-situ Techniques <i>Prof. S. Sampath, Indian Institute of Science, Bangalore</i>	
12.30 - 13.00	<b>Invited Lecture 2 (IL-2)</b> Oxygen Electrocatalysis: Principles and Practice (Towards Rechargeable Metal-Air Batteries) <i>Prof. C. R. Raj, Indian Institute of Technology, Kharagpur</i>	
13.00 - 14.00	<b>LunchBreak</b>	
14.00 - 14.30	<b>Invited Lecture 3 (IL-3)</b> Numerical Modeling of Electrochemical Process and its Application Towards Designing of an Engineering Scale Electrefiner for Pyrochemical Reprocessing <i>Dr. Sourabh Agarwal, Indira Gandhi Centre for Atomic Research, Kalpakkam</i>	
14.30 - 15.00	<b>Invited Lecture 4 (IL-4)</b> Design & Fabrication of Indigenous Aerogel Supercapacitor Module for Specific Power Electronic Applications <i>Dr. N.C. Pramanik, C-MET, Thrissur</i>	
15.00 - 16.00	<b>Nethaji Auditorium</b> Oral Presentations (OP-17 to OP-21)	<b>Room No. 701 (7<sup>th</sup> floor)</b> Oral Presentations (OP-01 to OP-08)
16.00 - 17.00	<b>Tea Break / Poster Presentation 1 (PP 01 to PP 75)</b>	
17.00 - 17.30	<b>Invited Lecture 5 (IL-5)</b> Synthesis of Nanostructured Materials and Thin-films by Pulse Electrodeposition for Energy Conversion and Storage Applications <i>Dr. B. V. Sarada, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad</i>	
17.30 - 18.00	<b>Invited Lecture 6 (IL-6)</b> Overview of Stabilized Landfill Leachate Treatment by Advanced Oxidation Process Using Heterogeneous Catalyst <i>Dr. R. Gandhimathi, National Institute of Technology, Tiruchirappalli</i>	
18.00 - 19.00	<b>Nethaji Auditorium</b> Oral Presentations (OP-22 to OP-27)	<b>Room No. 701 (7<sup>th</sup> floor)</b> Oral Presentations (OP-09 to OP-16)
19.00 - 20.00	<b>Cultural Programme</b>	
20.00	<b>Dinner</b>	

DAY-2 .... 31 January 2020 (Friday)

Venue: Nethaji Auditorium (Academic Block – 1; 7<sup>th</sup> floor)

09.00 - 10.00	Nethaji Auditorium Oral Presentations (OP-28 to OP-33)	Room No. 701 (7 <sup>th</sup> floor) Oral Presentations (OP-34 to OP-40)
10.00 - 10.45	<b>Prof. K. S. G. Doss Memorial Lecture</b> Stimuli Responsive Soft Materials <i>Dr. A. Ajayaghosh, CSIR – National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram</i>	
10.45 - 11.00	<b>Tea Break</b>	
11.00 - 11.30	<b>Invited Lecture 7 (IL-7)</b> Analysis of Electron Transfer Processes at Electrochemical Interfaces - An Unified Perspective <i>Prof. M.V. Sangaranarayanan, Indian Institute of Technology Madras, Chennai</i>	
11.30 - 12.00	<b>Invited Lecture 8 (IL-8)</b> Battery Technology: Trends and Challenges <i>Dr. N. S. Raman, Indian Oil Corporation Limited, Faridabad</i>	
12.00 - 12.30	<b>Invited Lecture 9 (IL-9)</b> Novel Corrosion Assessment Tool and Metallic Nanowire Synthesis using Electrochemical Principles <i>Prof. Lakshman Neelakantan, Indian Institute of Technology, Chennai</i>	
12.30 - 13.00	<b>Invited Lecture 10 (IL-10)</b> Electrochemistry Benefitting Society: Research Investigations into PEM Fuel Cell Cathode to Enhance Fuel Cell Life <i>Dr. K. Chockalingam, Vetri Labs, Electrochemical Research, Consulting &amp; Testing Services, USA</i>	
13.00 - 13.30	<b>Lunch Break</b>	
13.30 - 14.30	<b>Poster Presentation 2(PP-76 to PP-151)</b>	
14.30 - 15.00	<b>Invited Lecture 11 (IL-11)</b> Hydrogen and Fuel Cell Technology Development Program at ARCI-CFCT and the Way Forward for Green Energy Sector Applications <i>Dr. R. Balaji, Centre for Fuel Cell Technology (CFCT), Chennai</i>	
15.00 - 15.30	<b>Invited Lecture 12 (IL-12)</b> Recent Advances in Catalysts Development for Fuel Cells and Water Electrolysis <i>Dr. Sangaraju Shanmugam, Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea</i>	
15.30 - 16.00	<b>Invited Lecture 13 (IL-13)</b> Designing Task Specific Ionic Liquids for Effectual Electrochemical Sensing <i>Dr. S. Senthil Kumar, Vellore Institute of Technology, Vellore</i>	
16.00 - 16.30	Felicitation by lead sponsors	
16.30 - 17.00	<b>Tea Break</b>	
17.00 - 18.00	<b>Valedictory Function</b>	

