

DAE-BRNS

**Conference on Electrochemistry in Advanced Materials,
Corrosion and Radiopharmaceuticals**

CEAMCR-2018

February 15-17, 2018

DAE Convention Centre, Anushaktinagar, Mumbai – 400094, India

Organised by



In association with



Government of India

AERB

Atomic Energy Regulatory Board

and Academic Partners



February 14, 2018; Wednesday

- 15:00 - 18:30 : **Registration** at *DAE Convention Centre*
20:30 Onwards : **Dinner** at *Training School Hostel on Ground Floor*

February 15, 2018; Thursday

- 08:00 – 09:15 : **Registration** at *DAE Convention Centre*
09:30 – 10:45 : **Welcome Address;** Dr. A. K. Satpati
(Auditorium A) **Presidential Address;** Dr. P. D. Naik
Release of Book of Abstract of CEAMCR-2018 and ISEAC Souvenir cum Bulletin
Inaugural Lecture; Dr. U. Kamachi Mudali
Titanium based Electrodes for Electrochemical Processes Relevant to Reprocessing and Waste Management
10:45 - 11:30 : **High Tea and Group Photograph** at *Lobby*
11:30 - 13:35 : **Session 1; Chairperson:** Dr. P. D. Naik
(Auditorium A) **PT-6; Dr. P. Vadgama**
A Novel Molecular Imprinted Electrochemical Sensor for Determination of the Antidepressant Drug Fluoxetine in Blood Serum
PT-9; Dr. T. N. Narayanan
Combining Theory & Experiment in Two-Dimensional Electrocatalysis
PT-8; Dr. S. Sampath
Transition Metal Nitrides, Carbides and Chalcogenides for Electrocatalysis
13:35 – 14:30 : **Lunch** at *Dining Hall*
14:30 – 16:50 : **Session 2A; Chairperson:** Dr. S. K. Ghosh
(Auditorium A) **IT-8; Dr. Chinmoy Ranjan**
Investigating Water Oxidation Through in situ Raman Spectroscopy
IT-9; Dr. Deepa Khushalani
Coupling Energy Capture and Storage – Endeavoring to Make a Solar Battery
IT-10; Dr. J. N. Behera
High Energy Supercapacitors based on Vanadium Chalcogenides-RGO/CNTs Hybrids

IT-22; Dr. Pravin S. Walke

Functional Multilayered Carbon Nanostructures for Intercalated Pseudocapacitive Energy Storage

IT-23; Dr. Raj Ganesh S. Pala

Climbing Up the Volcano through Support-Electrocatalyst Interaction in Thin Metal Oxides for Oxygen Evolution Reactions

IT-34; Dr. Subir Kumar Ghosh

Role of Electrochemistry in Surface Modification and Functional Applications

IT-22; Dr. T. Maiyalagan

Bifunctional Electrocatalysts for Rechargeable Alkali Metal Air Batteries

14:30 – 16:50 : **Session 2B; Chairperson: Dr. A. V. R. Reddy**

(Auditorium B) IT-5; Dr. B. S. Sreeja

Chitosan Functionalized Graphene Oxide Nanocomposite as Electrochemical Sensor in Cervical Cancer Diagnosis

IT-19; Dr. Nagaraj P. Shetti

Application of Nanoparticles Based Electrochemical Sensors

IT-28; Dr. Sanghamitra Chatterjee

The Electrochemical Performance of Carbon Nanomaterial Modified Sensors: An Analytical Perspective

IT-31; Dr. Saurav K. Guin

Eccentric Graphene Quantum Dots for Amphibianatic Sensor

IT-18; Dr. Muhammed Musthafa

Tailoring Electrochemical Interfaces for Environmental and Security Applications

IT-35; Dr. Suman Singh

Electrochemical Chemo/Biosensors for Environment Monitoring and Diagnostics

IT-37; Dr. Susheel Mittal

NP Modified Microbial Biosensors for Heavy Metals and Pesticides

16:50 – 17:10 : **Tea at Lobby**

17:10 – 18:10 : **Session 3A; Chairperson: Dr. K. I. Priyadarsini**

(Auditorium A) Oral Presentations: OP-1 to OP-6

- 17:10 – 18:10 : **Session 3B; Chairperson:** Dr. M. Sudarsanan
(Auditorium B) **Oral Presentations: OP-7 to OP-12**
19:00 – 20:00 : **Special General Body Meeting of ISEAC at Auditorium B**
20:00 Onwards : **Dinner at Mohana Lawn, Anushaktinagar**

February 16, 2018; Friday

- 09:30 - 11:35 : **Session 4; Chairperson:** Dr. B. S. Tomar
(Auditorium A) **PT-2; Dr. F. Marken**
Polymers of Intrinsic Microporosity in Electrochemistry
PT-4; Dr. L. Gorton
Electrochemical Communication between Photosynthetic Membranes/Cells and Electrodes for Harvesting Solar Energy
PT-10; Dr. V. Jayaraman
Some Electrochemical Sensors - Development and Applications in DAE
- 11:35 – 11:45 : **Tea at Lobby**
- 11:45 – 13:25 : **Session 5A; Chairperson:** Dr. C. P. Kaushik
(Auditorium A) **IT-3; Dr. A. Dash**
Role of Electrochemistry in Radiopharmaceuticals and Allied Sciences
IT-1; Dr. A. Chitharanjan Hegde
Effect of Artificial Convection on Structure and Properties of Electrodeposited Ni-based Alloy Coating
IT-10; Dr. Chinmoy Bhattacharya
Cu(I) – Oxide: An Efficient Photocatalyst for Generation of H₂ through Direct Splitting of Water using Visible Light
IT-13; Dr. Kothandaraman Ramanujam
Metal Organic Framework and Organic Framework Built on Carbon Nanotubes by π - π Interaction for Electrochemical Applications
IT-39; Dr. V. Udaya Kumar
Catalytic and Electrochemical Processes
- 11:45 – 13:25 : **Session 5B; Chairperson:** Dr. V. Venugopalan
(Auditorium B) **IT-29; Dr. Santosh K. Haram**
Investigation of Nanomaterials for Energy Harvesting and Storage Systems, Through Electrochemistry Perspective

IT-12; Dr. J. Seetharamappa

An Electrochemical Sensor Based on Beta Cyclodextrin-Porous Reduced Graphene Oxide Composite for the Determination of Dihydrochalcone: Phloretin

IT-32; Dr. Shilpa N. Sawant

Polymer Based Electrochemical Sensors for Detection of Cancer Biomarker

IT-25; Dr. Renu Agarwal

Electrochemistry of Actinides in Molten Salts

IT-27; Dr. S. Shukla

Iron Pyrite (FeS_2): A High Performance, Low-Cost Catalyst for Dye Sensitized Solar Cells (DSSC)

13:25 – 14:15 : **Lunch** at *Dining Hall*

14:15 – 15:15 : **Session 6A; Chairperson:** Shri M. L. Sahu

(Auditorium A) **IT-6; Dr. Bhaskar R. Sathe**

Development of Multifunctional Hybrid Electrocatalysts: Hydrogen Generation Reactions

IT-11; Dr. J. S. Melo

Role of Nanomaterials in Biosensors for Clinical Applications

IT-24; Dr. Raju Kumar Gupta

Metal Oxide Based Nanostructured Materials for High-Performance Supercapacitor Applications

14:15 – 15:15 : **Session 6B; Chairperson:** Dr. S. K. Aggarwal

(Auditorium B) **IT-26; Dr. S. Senthil Kumar**

Electrochemiluminescence (ECL): Fundamental Concepts and its Applications Towards Biosensors

IT-33; Dr. Smrutiranjana Parida

Electrochemistry of Undoped and Doped Onion Like Carbons

IT-40; Dr. Vellaichamy Ganesan

Non-platinum Based Oxygen Reduction Electrocatalysts for Fuel Cells: Emerging Trends

15:15 – 16:30 : **Tea** at *Lobby* and **Poster Presentations: P-1 to P-60** at *Hall*

16:30 – 17:30 : **Session 7A; Chairperson:** Shri K. T. Shenoy

(Auditorium A) **Oral Presentations: OP-13 to OP-18**

- 16:30 – 17:30 : **Session 7B; Chairperson:** Dr. Tapan Ghanty
(Auditorium B) **Oral Presentations: OP-19 to OP-24**
- 17:30 – 18:00 : **Session 8; Chairperson:** Dr. S. Amemiya
(Auditorium A) **Vendor's Presentations**
Metrohm India Pvt. Ltd.
Sinsil International Pvt. Ltd.
- 18:30 – 20:00 : **Cultural Programme** at *Auditorium A*
- 20:00 Onwards : **Dinner at Mohana Lawn, Anushaktinagar**

February 17, 2018; Saturday

- 09:30 - 11:35 : **Session 9; Chairperson:** Dr. B. N. Jagatap
(Auditorium A) **PT-1; Dr. C. Schwandt**
Solid State Electrochemical Gas Sensor for the Quantitative Determination of Carbon Dioxide
- PT-5; Dr. P. Balaya**
Introducing Non-flammable Sodium-ion Battery Technology for Stationary Applications
- PT-7; Dr. S. Amemiya**
Nanoscale Scanning Electrochemical Microscopy of Carbon Materials
- 11:35 – 11:45 : **Tea at Lobby**
- 11:45 – 13:25 : **Session 10A; Chairperson:** Dr. P. K. Pujari
(Auditorium A) **IT-15; Dr. M. Kar**
Ether-Functional Ionic Liquids for Magnesium Batteries
- IT-16; Dr. M. Neergat**
The Electrochemistry of Metal-Free Carbon-Based Materials in Aqueous Electrolytes
- IT-16; Dr. Manjusha V. Shelke**
Nanoengineering of Silicon based Anode for Lithium Ion Battery
- IT-41; Dr. D. Parvatalu**
Contribution of Electrochemical Applications in Development of Energy Efficient Thermochemical Hydrogen Generation Processes
- IT-42; Dr. Sanket Goel**
Pencil Graphite Electrodes (PGE) for Enzymatic Biofuel Cells (EBFCs): Towards Microfluidic Platform

- 11:45 – 13:25 : **Session 10B; Chairperson:** Dr. H. Pal
(Auditorium B) IT-2; Dr. A. K. Satpati
Oxide and Sulphide Based Materials for Supercapacitors, PEC and EC Catalysis: Probing Through Scanning Probe Electrochemical Techniques
- IT-4; Dr. Ashwini K. Srivastava**
High Performance Supercapacitors Based on Graphene Based Composite Materials
- IT-20; Dr. P. Barpanda**
Fe- and Ti-based Polyanionic Electrodes for Sodium-ion Batteries
- IT-36; Dr. Surojit Pande**
Graphitic-Carbon Nitride ($g\text{-C}_3\text{N}_4$): A Stable Substrate for Decoration of Metal and Sulphide Nanoparticles for Hydrogen Evolution
- IT-14; Dr. M. K. Sharma**
Simultaneous Determination of U and Pu in FBTR Fuel at PEDOT: PSS Modified Glassy Carbon Electrode
- 13:25 – 14:15 : **Lunch** at *Dining Hall*
- 14:15 – 15:15 : **Session 11A; Chairperson:** Dr. Sunil K. Ghosh
(Auditorium A) Oral Presentations: OP-31 to OP-36
- 14:15 – 15:15 : **Session 11B; Chairperson:** Dr. S. Kannan
(Auditorium B) Oral Presentations: OP-25 to OP-30
- 15:15 – 16:30 : **Tea** at *Lobby* and **Poster Session: P-61 to P-120** at *Hall*
- 17:15 – 17:45 : **Valedictory Function** at *Auditorium A*

Breakfast Arrangements for Delegates from outside BARC

(15/02/2018 to 18/02/2018):

Delegates staying in New Bachelor Hostel and Training School Hostel-Guest House:

07:30 AM – 8:30 AM: *The Canteen on the Ground Floor of Training School Hostel-Guest House*

Delegates staying in Convention Centre:

07:30 AM – 8:30 AM: *Dining Hall at the Convention Centre*