National Advisory Committee:

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Member: Dr. A. J. Prasad, CMD, M/s. HBL, Hyderabad
Member: Dr. G. A. Patanjali, MD, M/s. HEB, Trichy

Key note / Invited Speakers:

Dr. Vijayamohanan K. Pillai, Chair Prof., IISER, Tirupati Rear Admiral AY Sardesai, FOSM Dr. (Mrs) N. Kalaiselvi, Director, CECRI, Karaikudi Prof. S. Basu, Director, IMMT, Bhubaneswar Prof. S. Sampath, IISc, Bengaluru Prof. Sagar Mitra, IIT Bombay, Mumbai Dr. A J Prasad, CMD, M/s. HBL Power Systems, Hyderabad

Organizing Committee:

Convenor: Dr. A. Srinivas Kumar, Scientist-H Organizing Secretary: Dr. TVSL Satyavani, Scientist-F Co-Organizing Secretary: Dr. Kirtan Sahoo, Scientist-E Joint Organizing Secretary: Dr. M. Srinivas, Scientist-E Treasurer: Shri I.R. Abhishek Raj, Scientist-E Co-Treasurer: Shri K.U. Gokul, Scientist-D

About Visakhapatnam:

Visakhapatnam is a port city also known as the "City of Destiny" and "Jewel of the East Coast". This city is home to the oldest shipyard and is the only natural harbour on coast. Headquarters of Eastern Naval Command. Refinery, Steel Plant, Pharma and several IT industries. The city is famous for its natural beauty which is decorated beaches several (Ramakrishna Beach, Yarada, Bheemili Rishikonda beach etc.), home to a preserved submarine at the Kursura Submarine Museum, an old Dutch Bungalow housing local maritime. historical exhibits, tourist places and Simhachalam. Narasimha Swamy temple. Borra Caves is another tourist destination, 100 km from the city.

Climate:

Visakhapatnam presents a moderate climate in the month of September. The average day temperature is around 32 °C and night temperature is around 22 °C.















Objective / Aim of Seminar:

Naval Science & Technological Laboratory (NSTL), under the aegis of Defence Research and Development Organization (DRDO), Ministry of Defence is organising a National Seminar on Electrochemical Energy Conversion and Storage (ECoS-2022) on 28th and 29th September 2022. This seminar is aligned towards India's National Mission on AatmaNirbhar eco-friendly e-mobility and energy storage. This Seminar also aims to bring together the leading Scientists, Academicians, Technocrats and Researchers from various laboratories, universities, institutions, industries and armed forces to exchange ideas, share experiences and research results regarding all aspects including latest developments of electrochemical energy conversion and storage, and related fields. This seminar will provide the multidisciplinary forum for innovators, researchers, educators, industrialists to present and discuss the recent innovations, trends, concerns, practical challenges encountered and various solutions adapted to address the issues. This improves professional networking at national level thereby achieving convergence of scientific knowledge and pave ways to develop efficient energy storage and conversion systems to meet the needs of the day / requirements of the nation. This Seminar will focus on topics of relevance to Armed Forces, DRDO, ISRO and other civilian applications.

Call for Papers:

The main theme of the seminar is Electrochemical Energy Conversion and Storage Systems, their development, present status and future endeavours in this field. Original research contributions are solicited for presentation at ECoS-22. The topics of interest include (but not limited to):

- a) Electric mobility
- b) Advances in energy conversion and storage systems
- c) Advanced materials for energy storage systems
- d) Aqueous & Non-aqueous batteries
- e) Fuel cells
- f) Electrical Double Layer Capacitors
- g) Lithium based batteries
- h) Metal-ion and Metal-air batteries
- i) Hybrid battery systems
- Redox flow batteries
- k) Electrochemical Instrumentation
- 1) Emerging trends in non-aqueous and aqueous electrolytes
- m) Cell fabrication processes (wafer thin pouch, prismatic, cylindrical, blade, etc.)
- n) Energy management systems
- o) Quality, Safety and reliability study
- p) Hazards and end of life treatment of cells

Guidelines for Submission of Abstracts/ Full Papers

Title (Times New Roman, Bold, Size-14)

Name of authors (Presenting author must be underlined)

Affiliation (Times New Roman, Size-12, Italic)

Email address (Presenting and corresponding author)

Abstract: (Times New Roman, Size-12, Bold)

Main text and references of the abstract must be typed using font 'Times New Roman' with size 12 and 1.5 line spacing. The text must not contain more than 300 words. Representative pictures may be placed. Figures must be numbered and centered to page.

References:(Times New Roman, Size-12, Bold)

Standard reference patterns of Journal of Power Source may be adapted.

*The abstract needs to be written on A4 size paper with standard margins (Left, Right, Top & Bottom margin of 2.54 cm each).

Abstract and full paper in word and PDF format shall be forwarded to the Convenor/ Organising Secretary. Full paper should not exceed 4 pages.

Important Dates:

Abstract submission & Acceptance Intimation Full paper submission Registration 31st May 2022 to 15th June 2022 30th June 2022 to 15th July 2022 16th July 2022 to 15th Aug 2022

Abstracts may be submitted to <u>ecos-2022@gov.in</u>. Registration for the Seminar must be as per the details given below.

Registration:

Universities / Govt. institutes from India

Faculty/Scientist/Officers
Research Scholars/Students
Accompanying person

Rs.3000/-NIL

Employee

Rs. 2000/-Rs.4000/-

Industries / Public Sectors

Registration fee includes seminar proceedings and other hospitalities during the seminar. Proceedings will be provided to the primary registered delegates.

Registration fee is to be paid only by Online Fund Transfer to the following account:

Account number: 37802715539

IFSC code: SBIN0011161 Branch code: 11161

Beneficiary name: Organising Committee, ECoS-2022

State Bank of India, NSTL Branch, Visakhapatnam-530027

Fund transfer details may be submitted separately to ecos-2022@gov.in mail id.

Accommodation:

Delegates may arrange their own accommodation and transport. Accommodation will be arranged in nearby hotels on payment basis, based on requests and availability.

Contacts:

Convener / Organising Secretary, ECoS-2022

Directorate of Batteries and Explosives,

Naval Science and Technological Laboratory

Visakhapatnam-530027, India

Contact: +91-891-258 6267/6129/6130

FAX: 0891-2559464 Email: ecos-2022@gov.in

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Mini Expo:*

A mini expo is planned during the Seminar for display of products. Limited stalls will be available.

* For more details, interested industries are requested to contact the Convenor or Organizing Secretary.

