Collaborations and Global Engagement

Through collaborations with Universities, Research Centres, and Industry Organisations across the globe, RISE continues to strengthen its interdisciplinary research ecosystem and expand its international scientific engagement. These collaborations either involve direct research activities or visits. They provide valuable opportunities for knowledge exchange, joint innovation, and the development of long-term scientific partnerships across disciplines. Such engagements also enable researchers at RISE to access diverse expertise, advanced infrastructure, and emerging research perspectives from across the international scientific community. Collectively, these partnerships contribute to advancing high-impact research while enhancing the global visibility and collaborative reach of the institute.

Knowledge Exchange and Scientific Engagement

RISE actively contributes to the global scientific community through international conferences, research symposia, academic exchanges, and interdisciplinary knowledge-sharing platforms focused on sustainable energy and advanced materials research.










AAPALI PSI-K 2025
International Conference on
Electronic-Structure Theory and Applications
May 19 – 21, 2025
Aapali Pune 25
Organizing Institutes


VIT CHENNAI






Data Science
21 JULY
NSRC
NSRC
MIT WORLD PEACE UNIVERSITY

International Conference on Sustainable Batteries (ICSB)

February 24-27, 2025, Venue: Bishwa Bangla Convention Centre, Kolkata

Jointly Organized by TCG-CREST Kolkata & Battery Research Society

tcg crest — Inventing Harmonious Future

IESA — Indian Energy Storage Alliance

Convenors: Abhik Banerjee (Chair, RISE -TCG CREST), Satishchandra B. Ogale (Co-Chair, RISE -TCG CREST), Amartya Mukhopadhyay (Co-Chair, IIT Bombay), Urmimala Maitra (IACS, Kolkata),
International Convenor: Jagjit Nanda (Stanford University), **Supported by Battery Research Society**

Inaugural Speakers



Purnendu Chatterjee
Chairman, TCG CREST



Arumugam Manthiram
University of Texas



Swapan Bhattacharya
MD, TCG LS
Director, TCG CREST



Michael Berube
Department of Energy
USA



Kathy Giles-Diaz
U.S. Counsil General in Kolkata

Confirmed Keynote/Invited/Panel Speakers



M. Berube
DoE, USA



A. Manthiram
University of Texas



L. Nazar
University of Waterloo



W. Weppner
University of Kiel



K. Zaghib
Concordia University



B. Cunningham
DoE, USA



J. Sakamoto
Uni. Of California



Raghunathan K
IIT Madras
Ex.GM Technical



T. Duong
DoE, USA



M. Bianchini
Universität Bayreuth



K. Ramesha
CSIR-CECRI



K. Amine
Argonne National Laboratory



J. Nanda
Stanford University, SLAC



Y. S. Jung
Yonsei University



N. P. Balsara
UC Berkeley



V. K. Pillai
IISER Tirupati



P. Liu
UC San Diego



H. K. Kashyap
IIT Delhi



S. Allu
Oak Ridge National Laboratory



J. Parikh
Rincell Corporation
USA



R. Kostecki
LBNL



T. N. Rao
IIT Hyderabad



A. Burrell
NREL



Alex Yu
Factorial Energy
USA



V. D. Noto
University of Padova



S. K. Pati
JNCASR
Bangalore



P. Kumta
Univ. of Pittsburgh



S. K. Martha
IIT Hyderabad



R. Walawalkar
Indian Energy Storage Alliance



Sreekanth Pannala
SABIC



Suman Basu
Reliance



V. Aravindan
IISER Tirupati



V. Samudrala
Amara Raja Energy & Mobility Ltd



M. Dixit
CLRI, Chennai



C. Gopal
Mitra Chem

M. Singh
QuantumScape

B. Suthar
IIT Bombay

P. Barpanda
IISC Bangalore

N. P. B. Aetukuri
IISc Bangalore

V. Srinivasan
Argonne National Lab, USA

G. Dadheech
Exide Energy

D. H. S. Tan
Unigrid Battery
USA

Bill Tumas
NREL

V. Subramanian
University of Texas

V. Kalra
Cornell University

R. Bugga
Lyten, USA

S. G. Gopalakrishnan
IISc Bangalore

R. MEKKAT
Ola Electric

Y. Gokhale
JSW Energy

S. Parashar
Reliance Industry

D. Kundu
UNSW Sydney

A. Singhal
Log9

V. Kumar
Adani group

D. K. Singh
RISE
TCG CREST

P. Senguttuvan
JNCASR

Rosy
IIT-BHU

Website link: https://www.icsb25.com

SOME MOMENTS from ICSB-2025







RISE organized International Conference on Advanced Energy Materials and Interfaces (AEMI-2024)

International Conference on Advanced Energy Materials and Interfaces (AEMI-24)

December 9-11, 2024, Venue: PMMM Hall, IISER Pune

Jointly Organized by IISER Pune, TCG-CREST Kolkata, and Wiley

tcg crest — Inventing Harmonious Future

IISER PUNE

WILEY

Convenors: Satishchandra Ogale (TCG-CREST, IISER Pune), Angshuman Nag (IISER Pune), Rohini Kitture (Wiley)

IISER Pune Co-Convenors: Nirmalya Ballav, Srabanti Chaudhury, Moumita Majumdar, Sujit Ghosh, Arun Venkatnathan

Supported by Wiley Editors: Sujeet Dutta, Subhabrata Mukhopadhyay, Partha Pratim Pal

Plenary Speakers



A. Manthiram
Univ. of Texas at Austin



P. Ajayan
Rice Univ. Houston



P. Kamat
Univ. of Notre Dame, Indiana



D. D. Sarma
IISc, Bengaluru



T. Saha Dasgupta
SNBNCBS, Kolkata



A. Mohite
Rice Univ., Houston



A. Vinu
Univ. of Newcastle, Australia



K. Biswas
JNCASR, Bengaluru

Invited Speakers



S. Bhattacharya
IISER Kolkata



D. Dubal
QUT, Brisbane



M.M. Shaijumon
IISER TVM



D. Kabra
IIT Bombay



M. Majumdar
IISER Pune



A. Mukhopadhyay
IIT Bombay



T. N. Narayanan
TIFR Hyderabad



P. Pillai
IISER Pune



J. Kundu
IISER Tirupati



P. Roy
CSIR-CMERI



M. Shelke
CSIR-NCL, Pune



A. Banerjee
TCG-CREST, Kolkata



V. G. Rao
IIT Kanpur



A. Singh
CeNS, Bengaluru



S. Kelkar
KPIT, Pune



U. Maitra
IACS, Kolkata

Gold Sponsor — ICON Analytical

Gold Sponsor — LASER SCIENCE



K. Raidongia
IIT Guwahati



D. Ghosh
IIT Delhi



S. Rondia
IISc, Bengaluru

Bronze Sponsor — Gnano

Abstract Submission

Abstract Submission Deadline: September 20, 2024 (Posters only, Acceptance limited to 50)

Abstract Submission Link: https://forms.office.com/r/yuM5eskJ3x

Registration Charges (covering all the Conference Materials, Banquet, All Meals, Tea/Coffee)

Professors/Scientists: INR 7500, Postdocs/Students: INR 4000, Industry: INR 15000

(Limited Hostel Accommodation may be available for Presenting Students/Postdocs on Payment Basis)

Selected participants will be invited to submit to Wiley-AEMI2024 Special Collection featuring Advanced Energy Materials, Small, Batteries & Supercapacitors, Chemistry An Asian Journal, ChemPhysChem

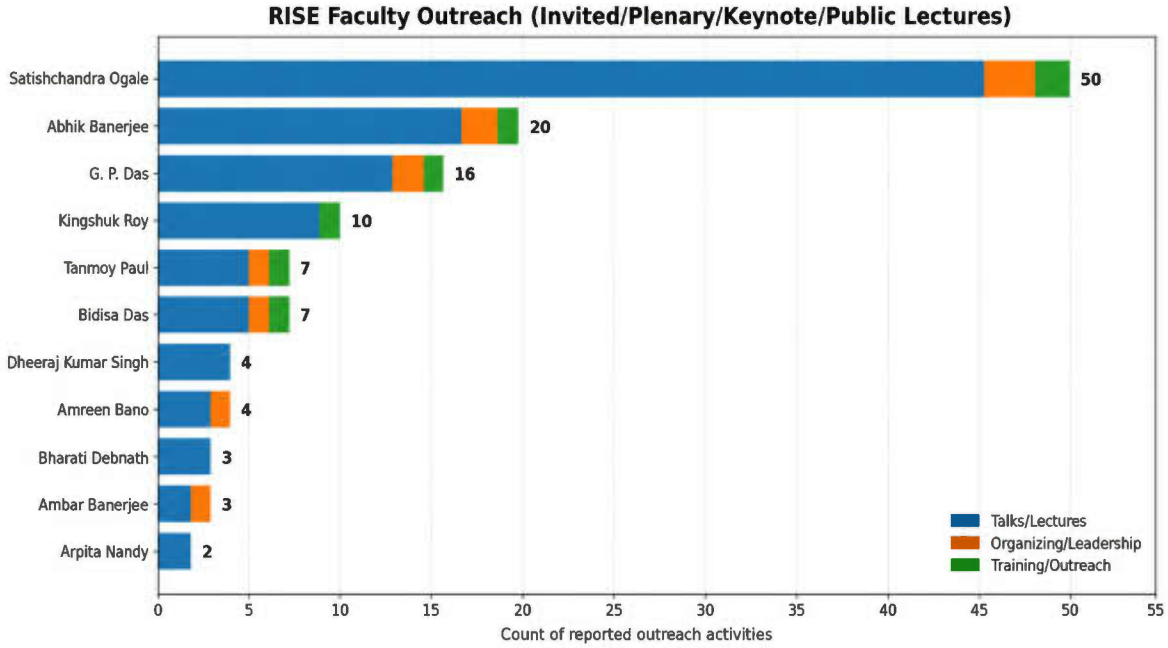
SOME MOMENTS from AEMI-2024





Plenary, Keynote, Invited and Public Lectures





The examples presented here are illustrative and not intended to be an exhaustive list of activities and outcomes.

Academic Engagements and Research Visits

Prof. Satishchandra Ogale delivered many Plenary/ Keynote talks in **National and International Conferences over the past five years.** These include ICMCTF 24 (USA), RICE University (USA), ICMAT 22 and 24 (Singapore), Queensland University AMSCA 24 (Australia), Swansea University UK (STRIKE 23), as well as several energy and battery related conferences in IIT Ropar, IIT Chennai, IIT Bombay, IISc and JNCASR Bangalore, Shiv Nadar University, SRM University, MIT WPU Pune University, Shivaji University, DIAT Pune, and several others.



Prof. G. P. Das was invited to present a talk at **ACCMS–11 (2025) held in Yokohama,** where he was also honoured with the **Lifetime Achievement Award for his contributions to computational materials science.**



Dr. Abhik Banerjee, an expert in next-generation battery technologies and solid-state batteries, presented a talk titled **"Translating Learnings from Lithium Metal Anode to Sodium Technology"** at the **2026 Gordon Research Conference on Batteries.**



Prof. Bidisa Das, whose research focuses on the theoretical understanding of materials for energy conversion and storage, delivered a talk at the **International Conference on Materials for Advanced Technologies 2025 (ICMAT 2025), held in Singapore.**



The academic engagements, research visits, and outcomes presented here are representative highlights and are not exhaustive.

Dr. Dheeraj Kumar Singh, whose research focuses on solid-state batteries, delivered an invited lecture at the **International Conference on Sustainable Batteries (ICSB–2025) hosted by Research Institute for Sustainable Energy (RISE), Kolkata.**



Dr. Arpita Nandy, specialising in microbiology, electrochemistry, and environmental biotechnology, delivered a lecture at **FEMS Micro Milan 2025 held in Milan.**



Dr. Bharati Debnath was an invited speaker for the Empowering Women Award Lecture at the **Global Conference for Decarbonization of Energy and Materials (GCDEM 2025), held in Singapore** in October 2025, where she was **honoured with the Empowering Women Award.** She also spoke at the **International Conference on Emerging Materials for Energy and Sustainability (EMES 2025), held at VIT Chennai** in February 2025, where she delivered a talk on her research in sustainable energy materials.



Dr. Tanmoy Paul, who works on the application of artificial intelligence and machine learning in battery technologies, delivered an invited talk at the two-week training programme on **"High Performance Computing and its Applications in Materials Science (HPC-AMS)" held at Delhi Technological University, Delhi.**



Dr. Ambar Banerjee, whose research focuses on quantum chemistry, delivered an invited lecture at the conference on **"Recent Advances in Physical Chemistry Research – 2025" held at the Indian Association for the Cultivation of Science, Kolkata.**



Dr. Amreen Bano delivered an invited talk on "Machine Learning Assisted Design and Validation of High Entropy Layered Cathodes for Li and Na-Ion Batteries" **at the Psi-k Conference 2025, held at IISER Pune from 19–21 May 2025.**



The academic engagements, research visits, and outcomes presented here are representative highlights and are not exhaustive.