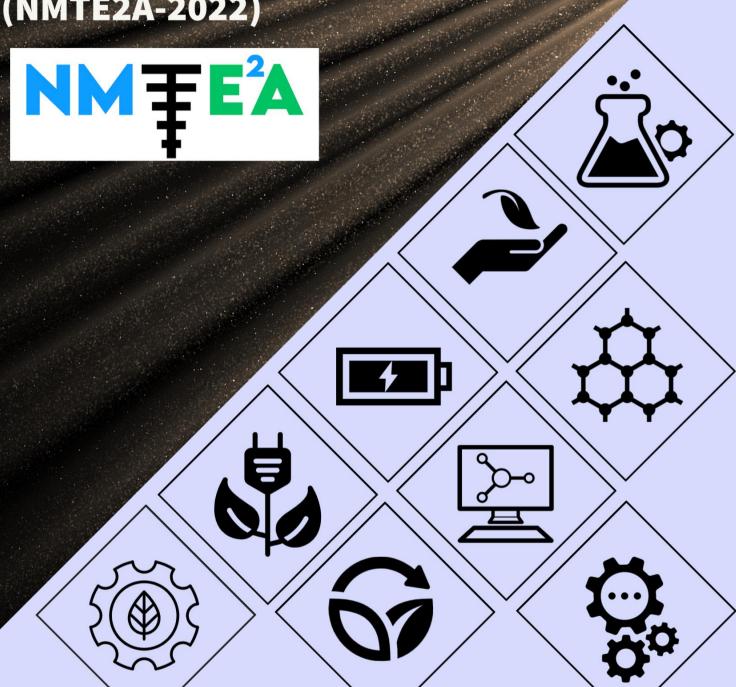
International Conference on Novel Materials and Technologies for Energy and Environment Applications (NMTE2A-2022)



Organised by: Department of Chemical Engineering BITS Pilani - Hyderabad Campus

18th & 19th February 2022



About the Conference

BITS Pilani Hyderabad Campus invites students, researchers, and delegates from academia and industry to participate in the two day International Conference on Novel Materials and Technologies for Energy and Environment Applications (NMTE2A-2022). The NMTE2A-2022 aims to bring together Material scientists, researchers, and students to engage in fruitful discussions on their latest research ideas and progress. This conference will cover fundamental aspects and technologies developed to target the open questions in energy and environment applications. The conference will have oral and poster presentations from delegates from academia, R & D organizations, and Industries.

All abstracts accepted for presentation will be considered for publication in Materials Today - Proceedings journal

Focus Areas

- Nanomaterials for Energy and Environment Applications
- Waste to Energy
- Functional Materials for Energy and Environment
 Applications
- Modelling and Simulation
- Catalysis
- Energy Storage
- Energy and Sustainability
- Phase Change Materials
- Green Materials
- Recycling Materials

For more details about the conference, please visit our website: https://universe.bits-pilani.ac.in/hyderabad/nmtea/home

For queries, contact us: nmtea2022@hyderabad.bits-pilani.ac.in

Speakers

Chief Guest and Keynote speaker

Prof. Ashutosh Sharma

Institute Chair Professor, IIT Kanpur and Former Secretary at Department of Science and Technology, Government of India

Invited speakers

Prof. John Hu

Statler Chair Professor & Director, Center for Innovation in Gas Research and Utilization (CIGRU), West Virginia University

Prof. Sibudjing Kawi

Associate Professor, Department of Chemical and Biomolecular Engineering, National University of Singapore

Dr. Benjaram Mahipal Reddy

Senior Professor Emeritus, BITS Pilani - Hyderabad Campus

Dr. S. Venkat Mohan

Senior Principal Scientist, Department of Energy and Environmental Engineering, CSIR-Indian Institute of Chemical Technology, Hyderabad

Prof. Kanishka Biswas

Associate Professor, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)

Prof. Abhijit Chatterjee

Professor, Chemical Engineering, IIT Bombay

Prof. Rajnish Kumar

Professor, Chemical Engineering, IIT Madras

Dr. Vanchiappan Aravindan

Assistant Professor, Indian Institute of Science Education and Research, Tirupati

Prof. Sangaraju Shanmugam

Professor, Department of Energy Science & Engineering, Daegu Gyeongbuk Institute of Science and Technology (DGIST)

Dr. Tejasvi K.

Scientist-F, Advanced Systems Laboratory, DRDO, Hyderabad

Conference Committee

Chief Patron

Prof. Souvik Bhattacharya, Vice-Chancellor, BITS-Pilani

Patron

Prof. G. Sundar, Director, BITS Pilani, Hyderabad Campus

Chairman

Prof. I. Sreedhar, Head, Department of Chemical Engineering, BITS Pilani, Hyderabad Campus

Convenors

- Dr. Nandini Bhandaru, Assistant Professor, BITS Pilani, Hyderabad Campus
- Dr. Ramendra Kishor Pal, Assistant Professor, BITS Pilani, Hyderabad Campus

Advisors

- Prof. Ajit Pratap Singh, Dean Academic Undergraduate Studies, BITS Pilani
- Prof. M. B. Srinivas, Dean Academic Graduate Studies & Research, BITS Pilani
- Prof. S. P. Regalla, Dean Practice School, BITS Pilani
- Prof. S Gurunarayanan, Dean Work Integrated Learning Programmes BITS Pilani
- Prof. Souri Banerjee, Dean Faculty Affairs, BITS Pilani
- Prof. Sunil Bhand, Dean Sponsored Research and Consultancy Division, BITS Pilani
- Prof. Arya Kumar, Dean Alumni Relations, BITS Pilani
- Prof. Niranjan Swain, Dean Admin, BITS Pilani
- Mrs. Sunitha Suresh, Head Accounts and Finance, BITS Pilani, Hyderabad Campus

Conference Committee

International Advisory Committee

- Prof. Devang Khakhar, IIT- Bombay
- Prof. Ram B. Gupta, Associate Dean for Research School of Engineering, Virginia Commonwealth University
- Prof. Sirshendu De, Professor, IIT- Kharagpur
- Prof. Yogesh Joshi, Professor, IIT- Kanpur
- Prof. Puspavanam, Professor, IIT- Madras
- Prof. K. Krishaniah, Professor, IIT- Tirupati
- Prof. Dipankar Bandyopadhyay, Professor, IIT- Guwahati
- Prof. Saptarshi Majumdar, Professor, IIT- Hyderabad
- Shri. S. Seetharaman, Scientist 'F', Technology director -ACC, ASL, DRDO, Hyderabad
- Dr. Manoj Kumar Buragohain, Scientist 'G', Director CPDC, ASL, DRDO, Hyderabad
- Prof. Aaron Mazzeo, Associate Professor, Rutgers University
- Prof. Subhas C. Kundu, European Resreach Area Chair and Full Professor, University of Minho
- Prof. Luis Pereira, Associate Professor, Universidade Nova de Lisboa, Portugal
- Dr. Santanu Sarkar, Principal Research Scientist, Tata Steel

Local Technical Committee

- Dr. D. Purnima
- Prof. Vikranth Kumar Surasani
- Dr. Pankaj Kumar
- Dr. Afkham Mir
- Dr. Satyapaul A. Singh
- Dr. Arnab Dutta

Local Organising Committee

- Prof. Jaideep Chatterjee
- Prof. Srikanta Dinda
- Prof. Balaji Krishnamurthy
- Prof. A. Ramesh Babu
- Prof. Karthik Chetan V
- Dr. Debirupa Mitra
- Dr. lyman Abrar

Materials Today: Proceedings NMTE2A 2022 Editorial Team

Managing Guest Editor

Dr. Radha Kishan Motkuri, Senior Research Scientist, Pacific Northwest National Laboratory, USA

Additional Guest Editors

Prof. Sangaraju Shanmugam, DGIST, South Korea

Prof. Z. V. P. Murthy, SVNIT, Surat

Dr. Nandini Bhandaru, BITS Pilani, Hyderabad Campus

Dr. Ramendra K. Pal, BITS Pilani, Hyderabad Campus

Dr. Arnab Dutta, BITS Pilani, Hyderabad Campus

About BITS Pilani

Birla Institute of Technology and Science, Pilani (BITS) is one of India's premier science and technical institutes of higher learning. BITS-Pilani was among the first institutes to be awarded the Institute of Eminence status. The BITS Pilani Hyderabad campus (BPHC) was established in 2008 as the fourth campus of BITS-Pilani. The sprawling campus is built amidst lush greenery spreading over 200 acres of land at Jawahar Nagar, Shameerpet, Hyderabad, surrounded by natural beauty. The campus is built with state-of-the-art infrastructure without affecting the area's scenic beauty. Modern laboratories, well-furnished classrooms, lecture theatre complexes, student activity center, auditorium, playground, and modern ICT infrastructure all come together to make BITS Pilani, Hyderabad, a well-equipped campus.

About the Department of Chemical Engineering

Department of Chemical Engineering at BITS Pilani, Hyderabad campus is determined to develop new talents, leaders, researchers and entrepreneurs who can bring high-level value addition to the Chemical and Allied industries. Our mission is to drive excellence in Chemical Engineering education and training thereby lead to the creation of a common platform for connecting academia and industry in the exchange of knowledge. Chemical Engineering department comprises of highly experienced and qualified faculty who have received PhDs/Postdocs from IIT's or universities abroad. The Department offers robust programs in three tiers of Chemical Engineering i.e Bachelors (B.E Honors), Masters (M.E) and Ph.D. We also train our students in doing research in thrust areas as part of the curriculum. We have well-equipped state of the art laboratories for students to gain extensive practical knowledge.