

2nd International Conference on Novel Materials and Technologies for Energy and Environment Applications (NMTE²A) on 17-18 February, 2024 **Department of Chemical Engineering, BITS-Pilani, Hyderabad Campus**

Special Issue Title: Proceedings of 2nd International Conference on **Novel Materials and Technologies** for Energy and Environment Applications (NMTE²A-2024)

This volume presents select the proceedings of second edition of International Conference on

Novel Materials and Technologies for **Energy and Environment Applications** (NMTE 2 A-2024).

The volume focuses on the recent developments in materials science in energy, environment applications. The present book aims to showcase the latest research outcomes and discuss

probable solutions for global energy and environmental challenges using advanced materials and the way forward. The content recent topics on novel applications of polymer and their composites, new polymers development, advanced materials for water treatment, new developments in structural materials, waste recycling, valuable extraction of metals. nanoparticles for sensing, catalysts for energy and environment, fuel cells, analysis statistical and Lattice-Boltzmann approach to investigate the porous media.

This volume will be of interest to the students, researchers and professionals in the diverse disciplines of chemical, mechanical, civil, polymer engineers, materials scientists working on energy and environment.

USPs of this book:

- The first book to cover multidisciplinary approach in consolidating diverse themes.
- This is the only book dealing with the advanced modelling simulation aspects to address the materials applications using fundamental principles.
- This book brings the top scientists of the field to highlight on water remediation and polymer composites.

We invite contributions from experts and encourage researchers to submit their original research, reviews, and case studies to this special issue on a wide range of topics but not limited to:

- Computational Materials
- Polymers and Composites
- Sensors
- Green Hydrogen
- Hydrogen storage
- Green Materials
- Recycling Materials
- Water Treatment
- AI & ML in material design

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- Biotechnology
- Utilization Carbon Capture & Sequestration (CCUS)

Selected from the papers conference will be published by Springer as a proceedings book volume.

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