IEEE-International Conference on Advanced Materials for Sustainable Clean Energy and Healthcare Technologies 2026 (AMSCEHT-2026)

(Conference with IEEE Record Number **#69651**)

11-13 September 2026

(Hybrid Mode)

Special Session on

Special Session 07: AI-Driven Smart Materials for Sustainable Clean Energy and Advanced Healthcare Technologies

Organized & Co-Chaired by:

Dr. Mukesh Kumar

Associate Professor (Research), CGC University Mohali, Punjab, INDIA.

mukesh.j3204@cgcuniversity.in

CALL FOR PAPERS:

This special session aims to bring together researchers, academicians, industrial professionals, and technologists to exchange recent advancements in AI-enabled smart materials that contribute to a sustainable energy ecosystem and next-generation healthcare technologies. The session encourages submissions focused on computational modeling, machine learning guided material design, digital twins, biosensing platforms, eco-friendly materials, and real-world deployment challenges. It also welcomes innovative research demonstrating cross-domain applications integrating energy solutions with biomedical breakthroughs. The rapid convergence of Artificial Intelligence (AI), advanced materials, and sustainable technologies is opening new frontiers in clean energy and healthcare innovation. Smart materials designed using AI-driven computational techniques enable improved functionality, reduced environmental impact, and enhanced performance across diverse applications.

TOPICS OF INTEREST, BUT NOT LIMITED TO:

This special session invites original research papers, case studies, and review articles on, but not limited to, the following topics:

- AI-driven discovery of advanced functional materials
- Machine learning in nanomaterial synthesis and optimization
- Smart biomaterials for tissue engineering and regenerative medicine
- Wearable and implantable sensors for digital healthcare
- Intelligent material interfaces for biosensing and diagnostics
- Battery, fuel cell, and supercapacitor materials enhanced by AI
- Quantum and 2D materials for emerging energy and medical devices
- Bio-inspired and self-healing materials for healthcare and energy
- Digital twin applications in materials performance prediction
- Smart drug delivery and therapeutic nanomaterials

IMPORTANT DATES:

- Paper submission opens: November 1, 2025
- Paper submission closes: June 10, 2026
- Paper acceptance notification: July 10, 2026
- Registration deadline: July 20, 2026
- Last Date of Camera-ready paper submission: August 10, 2026 Conference Date: 11-13 September 2026
  (Note: Authors can register only after their papers have been accepted)

The detailed information can be found here:

Conference URL: https://amsceht2026.opju.ac.in/

Paper Submission Link: https://cmt3.research.microsoft.com/AMSCEHT2026

(Submit Under **Special Session 07: AI-Driven Smart Materials for Sustainable Clean Energy and Advanced Healthcare Technologies**)

For query mail: - mukesh.j3204@cgcuniversity.in