

SCMST-PH, DOST-ITDI, NUST Pakistan host 4th APCoMS 2025



NUST Pakistan and DOST-ITDI, through SCMST-Philippines, hosted the 4th International ASEAN Pakistan Conference on Materials Science (APCoMS 2025) on May 5 to 8, 2025. *Upper left frame: ITDI Director, SCMST-Philippines Focal Person, and conference co-host Dr. Annabelle V. Briones (lady to the right) poses for posterity with Dr. Persia Ada De Yro of the Materials Science Division (ITDI-MSD). Upper right frame: Dr. Briones stood in attention with APCoMS officials and guests during the Opening Ceremony. Lower most*



left frame: Dr. De Yro was one of 14 international speakers from Brunei, Cambodia, Canada, China, Indonesia, Malaysia, Vietnam, and the United Arab Emirates; national speakers were from Pakistan. Dr. Briones (lower most right frame) officially ended the conference during the closing ceremony. Photo credit: APCoMS 2025.

Pakistan, through the School of Chemical and Materials Engineering (SCME) at the National University of Sciences and Technology, in collaboration with DOST-ITDI hosted the 4th ASEAN-Pakistan Conference on Materials Science (APCoMS) 2025 on May 5 to 8 in Islamabad, Pakistan.

Endorsed by the Subcommittee on Materials Science and Technology (SCMST) and the ASEAN Committee on Science, Technology and Innovation (COSTI), the conference was funded by the ASEAN-Pakistan Cooperation Fund (APCF).

Dr. Mukhtar Ahmed, Chairman of the Higher Education Commission of Pakistan, was the chief guest at the opening ceremony. He was joined by ambassadors and representatives from Malaysia, Brunei Darussalam, Myanmar, Vietnam, and Indonesia.

APCoMS aims to enhance ASEAN's global leadership in materials science by fostering sustainable regional collaboration, boosting research visibility and capacity, and strengthening industry-academia partnerships, thereby contributing to the region's intellectual and sustainable development.

This year the scientific event focused on thematic areas such as Energy Materials, Bio-inspired Materials, Advanced Structural Materials, Sustainable Practices, AI, and Digital Manufacturing reflecting the cutting-edge research conducted at the School of Chemical and Materials Engineering at NUST.

It brought together nearly a hundred renowned experts, researchers, and students from Pakistan as well as representatives from Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar the Philippines, Singapore, Thailand, and Vietnam. Other participants were from Canada, China, the European Union, and the United Arab Emirates.

Some 14 international and 14 national speakers engaged participants during paper presentations, three-minute lightning talks, and panel discussions. Dr. Persia Ada De Yro, representing DOST-ITDI and serving as one of the international speakers, presented her paper "Nitrogen Doped Carbon Quantum Dots (CQDs) for Bio-imaging Applications."

Her paper explores the unique optical and electrical properties of CQDs derived from pineapple leaves and calamansi rind, making them ideal for improving the efficiency of solar cells, batteries, and LED lighting. In energy storage, they enhance the performance of batteries, providing longer-lasting, fastercharging solutions. In lighting

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systems, CQDs enable brighter, more energy-efficient LEDs, reducing electricity consumption and costs.

Other international speakers were from Brunei, Cambodia, Canada, China, Indonesia, Malaysia, Vietnam, and the United Arab Emirates. National speakers were from Pakistan.

Selected papers presented during the conference will be considered for publication in prestigious SCI (Science Citation Index) and SCIE (Science Citation Index Expanded) journals in order to intensify the impact of the international gathering. (AMGuevarra\TSD-ITDI)

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