2nd International Conference
on
Advanced Materials for Green Chemistry and Sustainable Environment, 2025
(AMGSE - 2025)
March 20-21, 2025

About the Conference:

The AMGSE - 2025 conference committee would like welcome you for the 2nd International Conference on "Advanced Materials for Green Chemistry and Sustainable Environment" (AMGSE - 2025).

The **AMGSE-2025** will be organized in joint collaboration of K R Mangalam University, Gurugram (India) and Shivaji College, University of Delhi with International Association of Advanced Materials (IAAM), Sweden and Vijnana Bharti on March 20-21, 2025, at K R Mangalam University, Gurugram campus.

Advanced Materials for Green Chemistry and Sustainable Environment refers to advancement and application of novel, innovative and eco-friendly nanomaterials that contribute toward sustainability by supporting twelve principles of green chemistry. These advanced materials are synthesized in such a way so that their impact on the environment should be minimized through reduction of emission of hazardous substances and their emission in the environment. The creation of advanced materials, distinguished by their unique physical and chemical characteristics and structures, has captured the attention of active researchers worldwide and used for various applications such as energy storage, water purification, sustainable packaging and many more. The integration of advanced materials into different industries contributes for sustainable development through reduction of ecological footprints and promotion of resource efficiencies.

The alignment of green materials with Sustainable Development Goals (SDGs) highlights their importance adopting global sustainability and resisting climate change.

About K. R. Mangalam University:

K. R. Mangalam University is a State Private University established in 2013 under Haryana Private Universities Act and is empowered to award degrees under section 2f of the UGC Act, 1956. The university is located at wonderful location with magnificent view of Aravalli hills and spread over 26 acres where students breathe in a pollution-free, healthy, and sustainable environment. The University has been striving to fulfil its prime objective of transforming young lives through ground-breaking pedagogy, global collaborations, and world-class infrastructure.

Along with advanced learning, the university gives paramount importance to co-curricular activities such as vibrant festival celebrations, social responsibility activities, tech training, research and many more activities. The university has 12 schools and offers more than 78 undergraduate, postgraduate, doctoral and diploma programs in various disciplines, including Basic and Applied Science, Engineering, Pharmacy, Journalism and Mass Communication, Agricultural Science, Management and Course, Legal Studies, Hotel Management, Humanities, and Education.

Recognized for its virtues of quality, equality, inclusiveness, sustainability, and professional ethics, KRMU is synonymous to academic excellence and innovation.

About Shivaji College, University of Delhi:

Shivaji College, located in West Delhi, is a premier institution accredited with an 'A' grade by NAAC and ranked 49th among colleges in the NIRF Rankings 2024. Established in 1961 by Dr. Panjabrao Deshmukh, it was initially aimed at providing higher education to students in the rural area of Matiala. Later, it came under the trusteeship of the Delhi Government, relocating to its current campus in Raja Garden in 1976.

The college offers 20 undergraduate courses across Science, Commerce, and Humanities, a self-financed bachelor’s in business economics, three postgraduate programs, and a German add-on course. It is actively engaged in research, with faculty supervising Ph.D. scholars and participating in UGC-sponsored projects. Shivaji College supports gender equality, offering admissions relaxations for female students and honoring achievements in women's empowerment through the Jijabai Achievers Award.

Committed to sustainability, the campus implements eco-friendly initiatives such as banning plastics, promoting solar energy, and managing waste through vermi-composting, e-waste disposal, and sanitary waste incineration. Its green campus also boasts tree plantations and water-harvesting systems. Shivaji College's dedication to holistic education, community service, and environmental responsibility makes it a standout institution in Delhi University's academic landscape.

About International Association of Advanced Materials (IAAM), Sweden:

IAAM is a well-known non-profit international scientific research organization that operates in the realm of advanced materials. The organization actively fosters a highly interactive community of advanced material researchers and seeks to promote partnerships, collaboration, and joint ventures to accelerate developments in the scientific world. Through global research and education forums, IAAM aims to stimulate progress in the fields of advanced materials science, engineering, and technology. As a scientific organization, IAAM is dedicated to advancing the world of materials science with the ultimate goal of achieving global excellence.

About Vijnana Bharti (Vibha):

Vijnanabharati, a science movement with swadeshi spirit has a greater role to play. Swadeshi Science Movement was started in Indian Institite of Science- (Bengaluru) by a few eminent scientists under the guidance of Prof. K I Vasu. This movement gradually gained momentum and emerged as an organization with national presence. In 1991(Oct 20-21) at the Nagpur meet, it was decided, to launch the Swadeshi Science Movement at all India Level and named it as Vijnana Bharati. Vijnana Bharati has units in 22 states across the country and contacts in 4 states. It is working in 11 different areas through autonomous institutions, independent organizations & also as project entities.

Conference will focus on following tracks (but not limited to):

Advanced Materials for Green Chemistry

- Development of eco-friendly and biodegradable materials and their applications
- Sustainable polymers and composites.
- Nanomaterials for green catalytic processes.
- Bio-based and renewable feedstock materials.
- Materials for waste management and resource recovery

- Advanced Nanomaterials for Energy Solutions

Sustainable Environmental Technologies

- Materials for water and air purification systems.
- Innovations in renewable energy materials (solar, wind, bioenergy).
- Carbon capture, utilization, and storage (CCUS) materials.
- Sensors for environmental monitoring.
- Sustainable construction materials.
- Indian Knowledge System for achieving Environmental Sustainability

Green Chemistry Approaches

- Atom economy and waste minimization in chemical processes.
- Green solvents and reaction media.
- Photocatalysis and electrocatalysis for environmental applications.
- Mechanochemistry and alternative energy sources for green synthesis.
- Green technologies for chemical manufacturing.
- Forensic toxicology and environmental forensic

Applications of Advanced Materials in Sustainability

- Advanced materials in sustainable agriculture.
- Energy-efficient materials for buildings and infrastructure.
- Materials for sustainable transportation (e.g., lightweight composites).
- Advanced batteries and energy storage systems.
- Functional materials for environmental sensors and remediation.

Analytics for Sustainable Development through Optimization and Modelling

- Green Logistics and Sustainable Inventory/ production Management
- Multi-Objective Optimization for Sustainable Manufacturing Systems
- Fuzzy and Stochastic Models for Uncertain Demand and Sustainability
- Waste to energy nexus, technology for future industries
- Additive manufacturing IOT and Information and Communications Technology (ICT) in Industries

Policy, Education, and Innovation for Sustainable Development

- Role of advanced materials in achieving the UN Sustainable Development Goals (SDGs).
- Strategies for implementing green chemistry in academia and industry.
- Environmental impact and regulatory frameworks for advanced materials.

- Public-private partnerships for innovation in sustainable materials.
- Innovation with Sustainable Development goals for quality education

Important Dates:

- Last date of abstract submission: 10th February 2025
- Notification of Acceptance/ Rejection: 15th February 2025
- Registration Start: 15th February 2025
- Early bird registration Ends: 25th February 2025
- Last date of registration: 10th March 2025
- Last Date of Full-Length Paper submission: 25th March 2025

Registration:

- At least one author is must to get registered after acceptance of the abstracts.
- The paper must be presented by any of the registered author only as oral/ poster presentation.
- Certificate will be provided to only registered participants/ presenter.
- The registration fee covers a conference kit, access to domain-specific sessions, a certificate for paper presentation/attendee, nomination for best paper/poster award, refreshment and lunch.
- There will be a best oral/ poster presentation award for each session.
- The paper will be accepted after double-blind peer review process for publication in Scopus and WoS indexed journal and conference proceedings.

Call for abstracts

Interested participants can apply online for registration to the AMGSE-2025 conference by submitting the duly filled form latest by 10th March 2025. Limited seats are available for early bird registrations at discounted fees. Please note that no refund of fees shall be made after registration.

Guide- lines for oral/poster presentation:

- Word limit for the abstract is 250-300 words.
- Mention the area under which the abstract should be considered.
- Abstract must be written using MS-Word with the following specifications:

Title (Times New Roman, 14 pt), Authors' Name (Times New Roman, 12 pt and underline the

name of presenting author), Institution Name (in *Italics*, Times New Roman, 11 pt), Email-ID (in *Italics*, Times New Roman, 11 pt), Text (Times New Roman, 12 pt) and Line Spacing of 1.5 pt.

For Posters

Participants will be provided with a display board (1.2 m X 1.2 m dimension).

- Only one participant is allowed per poster.
- The maximum time for oral presentation will be of 5 minutes and 2 minutes for questions--answers.
- A participant can apply either for oral and/or poster presentation.

Steps for Registration

- Proceed with the registration only after receiving the abstract acceptance notification, along with the Paper ID.
- Identify your registration category based on the registration fee table.
- Select the "Pay Here" button, as indicated below, to be directed to the payment page of Research Plateau Publishers. Complete the required details (Billing Information is necessary for receipt issuance in your name) and submit the registration fee.
- Save the payment details as an image or PDF file and upload it using the "Upload Registration Fee Proof" button.
- After uploading the registration fee proof, please allow 2-3 days to receive the payment receipt, as only then will your registration be considered complete.

Call for papers

Papers are invited based only on the focus areas of this conference. Author(s) can submit abstract only or full paper(s). Early submission of full paper(s) is encouraged. The abstract must be submitted as per the template. Conference abstract book (with ISBN No.) will be released during the conference. All papers will be peer-reviewed and selected papers will be published in Scopus Indexed journals. Separate fees may be applied for publication in Scopus indexed journal as per the requirement of journals.

Categories	National	International
Students (PG/ Research Scholar)	INR 1,500/-	USD 18
Faculty/ Scientist/Invited Speaker (With presentation)	INR 3,000/-	USD 35
Industry Person	INR 4,000/-	USD 45
Attendees/ Listeners (Without presentation and kit)	INR 500/-	USD 6

Make the payment in INR (for all Indian Nationals) and in USD (for all Non-Indian nationals and NRIs) only.

Account Details:

Beneficiary name: K R Mangalam University
Account no.: 245101001065
Bank Name: ICICI Bank Ltd.
IFSC Code: ICIC0002451
Branch: Dronacharya Branch, Gurgaon

Conference Team

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Shivaji Collage,
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Co-Patron
Dr. Ashutosh Tiwari,
Director, Institute of Advanced Materials (IAAM), Sweden

Chief Guest
Prof. (Dr.) S. K. Mehta
Vice Chancellor
University of Ladakh

Guest of Honour
Shri Arvind Kumar,
Director NPL,
New Delhi

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Keynote Speaker:

Prof. Sabu Thomas, Vice Chancellor, Mahatma Gandhi University, Kottayam, Kerla

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