8TH INTERNATIONAL SYMPOSIUM ON

MATERIALS, ELECTROCHEMISTRY & ENVIRONMENT

CALL FOR ABSTRACTS/PAPERS

8th International Symposium on Materials, Electrochemistry and Environment (CIMEE 2026)

September 24– 26, 2026 | Lebanon

THE LARGEST GATHERING OF EXPERTS IN MATERIALS, ELECTROCHEMISTRY & ENVIRONMENT



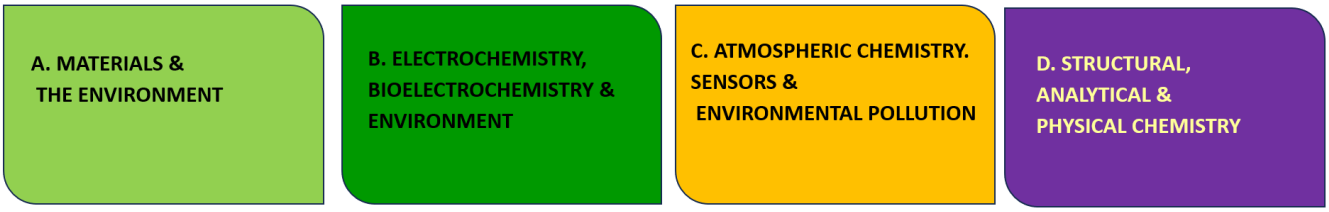
The organizing committee of the CIMEE26 conference cordially invites you to participate in this edition, devoted to the areas of Materials, electrochemistry and Environment and adjacent disciplines organized by Lebanese university. The International Conference will be held in Lebanon on 24th - 26th September 2026. The theme of the 8th international conference is "Materials and electrochemistry for clean energy and environmental sustainability". It aims to bring together researchers, scientists, academicians, policymakers, and industry experts to share their experiences and knowledge in their respective fields. This conference will provide a platform for attendees to exchange ideas, discuss research findings, and network with one another. (CIMEE 26) offers a valuable opportunity for attendees to learn about the latest advancements and developments in their field. The conference is dedicated to showcasing the latest innovations, trends, and concerns in a variety of fields, making it a premier interdisciplinary platform for attendees.
The 8th International Symposium, CIMEE 2026 is organized by academics and researchers belonging to different scientific areas of the Lebanese University in partnership with 5 universes in the world. The conference will be held as online event. https://cimee-science.org/cimee26/

The conference is organized by the Faculty of Public Health, Doctoral school for science and technology, Lebanese university in partnership with:

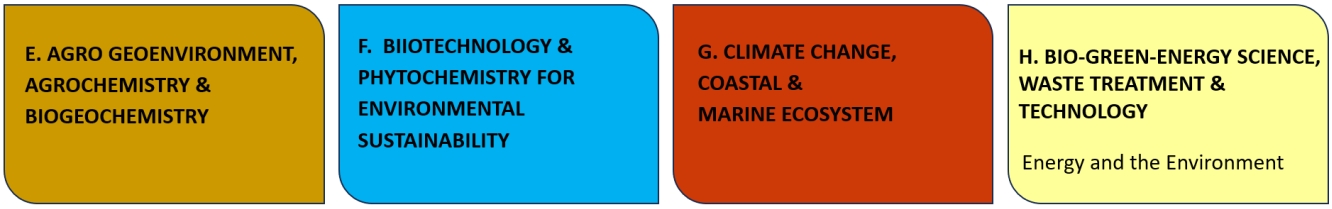
- Laboratory of Electrochemistry, LEIMCR, Faculty of Technology, University of Ferhat Abbas Sétif-1, Algeria
- Center of Materials Technology and Photonics, Hellenic Mediterranean University, Heraklion, Crete, Greece
- Laboratory of Applied Chemistry & Environment, ENSA, University of Ibn Zohr, Morocco
- Laboratory of Environmental Engineering & Ecotechnology, ENIS, University of Sfax, Tunisia.
- Department of analytical Chemistry, Faculty of Pharmacy, Ankara University, Turkey .

Topics

CIMEE26 will run on the following topics:



Theme: Materials & Electrochemistry for Clean Energy & Environmental Sustainability



Abstracts can be submitted by email through the conference website for either an oral or poster presentation. If you are interested in submitting a paper for consideration to present at the conference, please prepare and submit an abstract before **first September 2026.** (https://cimee-science.org/cimee26/)

Scientific sessions

Photochemistry and Electrochemistry
Photocatalysis and Electrocatalysis
Catalysis for Renewable Sources
Catalysis for Energy
Environmental Catalysis

I - Photochemistry and Electrochemistry

Photochemistry and electrochemistry are the two pillars of green chemistry. By harnessing light or renewable electricity, they enable clean, decentralized, and atom-efficient transformations, significantly reducing waste and dependence on fossil fuels.

Photochemistry and electrochemistry are two complementary fields that are crucial in the quest for clean energy and sustainable chemical processes. Photochemistry explores the chemical changes that occur when molecules absorb light, leading to reactions that can be harnessed for energy production and materials synthesis. For instance, photocatalysis, driven by light energy, has gained attention for its potential in environmental cleanup and renewable energy production, such as in the degradation of pollutants or the conversion of sunlight into chemical fuels. Electrochemistry, by contrast, focuses on the study of chemical reactions driven by electricity, playing an essential role in energy storage and conversion technologies like batteries, fuel cells, and electrochemical capacitors. Recent advancements in electrochemical systems have enabled more efficient energy storage devices with higher capacity and longer lifespans, which are crucial for supporting the global shift to electric vehicles and renewable energy grids. When combined, photochemistry and electrochemistry offer exciting new possibilities. Photoelectrochemical cells, which integrate light-absorbing materials with electrochemical systems, provide a means to directly convert solar energy into chemical energy, paving the way for more efficient solar fuel production. These hybrid systems are being explored for applications such as artificial photosynthesis and the development of efficient solar-powered hydrogen production systems. Furthermore, by understanding and manipulating the interactions between light and electricity at the molecular level, researchers are designing new materials and catalysts that could lead to breakthroughs in both energy conversion and sustainable manufacturing processes.

These synergistic technologies drive sustainability through several critical applications will be discussed in this session:

1. Artificial Photosynthesis & Green Fuels
(i) Water Splitting: Mimicking biological photosynthesis, photoelectrochemical (PEC) systems use sunlight to directly split water into oxygen and hydrogen, creating a clean energy carrier (green hydrogen).
(ii) CO_2 Reduction: Both electrochemical and photochemical pathways utilize renewable electricity or solar photons to transform atmospheric carbon dioxide into valuable hydrocarbon fuels and feedstocks.

2. Circular Economy & Waste Upcycling
(i) Plastic Valorization: Photo- and electrocatalysis provide a pathway for upcycling plastic waste (like PET) into value-added commodity chemicals or precursors, functioning at ambient conditions and powered by renewable energy.
(ii) Biomass Conversion: Photo- and electrochemical oxidation processes can convert biomass waste—such as glycerol or glucose from industrial byproducts—into useful, high-value commodity chemicals and fuels.
3. Environmental Remediation
(i)Wastewater Treatment: Innovative electrochemical and photochemical processes are utilized for the targeted degradation of persistent organic pollutants (POPs) in aquatic environments.
(ii) Photoelectrocatalytic Sensors: These are employed for real-time, non-toxic environmental monitoring (e.g., measuring chemical oxygen demand, COD) without the need for costly and toxic reagents

II - Photocatalysis and Electrocatalysis

Photocatalysis and electrocatalysis are cornerstone technologies for a sustainable future. They drive green chemical reactions—such as splitting water for hydrogen or converting carbon dioxide into valuable fuels—by harnessing renewable energy (sunlight and electricity, respectively) to break down toxic pollutants

Photocatalysis and Electrocatalysis are innovative fields that utilize external energy sources, such as light and electricity, to drive chemical reactions, offering significant potential for sustainable technologies. Photocatalysis involves the use of light to activate a catalyst, enabling reactions such as water splitting and pollutant degradation. Semiconductors like titanium dioxide (TiO_2) are often employed as photocatalysts due to their ability to absorb light and generate electron-hole pairs, which facilitate redox reactions.

Photocatalytic processes have gained attention for their potential in renewable energy applications, particularly in hydrogen production from water, where solar energy can be harnessed to drive the reaction. In contrast, electrocatalysis involves the application of an electrical current to promote redox reactions, and it plays a vital role in processes like fuel cells, batteries, and carbon dioxide reduction.

Main Sustainability Applications
(i) Green Hydrogen Production: Both processes can split water into hydrogen and oxygen to produce clean, zero-emission fuel.
(ii) CO_2 Upcycling: Catalysts can capture and convert harmful greenhouse gases into value-added chemicals, promoting a circular carbon economy.
(iii) Pollution Remediation: Photocatalysts generate reactive oxygen species to degrade organic dyes, volatile organic compounds (VOCs), and other toxic pollutants in water and air.

The Intersection: Photo-electrocatalysis: Combining both technologies—such as using solar panels to power electrocatalytic systems or merging them into photoelectrocatalytic cells—maximizes solar energy storage and overall green conversion efficiency. To explore how these innovations are actively reducing emissions and transforming waste (like plastics) into fuels, this session will focus on the latest developments and Recent advancements in catalytic processes for plastic upcycling into fuels.

III - Catalysis for Renewable Sources

Heterogeneous catalysis is critical for the advancement of renewable energy technology, which is currently one of the most pressing scientific and technological concerns. Designing efficient and economically feasible catalysts, such as active and selective catalysts and earth-abundant-element-made catalysts, is crucial to the solution. The need for renewable technologies opens up a plethora of catalytic prospects. Progress clearly necessitates a sustained coordinated effort involving many other disciplines in order to produce the devices and infrastructure required. So far, only fermented cellulose has been converted using molecular conversion technology for non-food biomass. Catalysis is clearly required in this field.

- Efficient use of non-renewable resources
- Waste valorization & management
- Waste reduction, waste capture and recycling
- Catalysis for water treatment and remediation

Key pathways for catalysis in renewable sources include:
• **Biomass Upgrading & Biofuels:** Catalysts (such as zeolites and metal-organic frameworks) help hydrolyze and decompose agricultural waste and plant oils into clean-burning biodiesel, bioethanol, and sustainable aviation fuel (SAF).
• **Green Hydrogen Production:** Electrocatalysts and photocatalysts split water H_2O into hydrogen and oxygen. While Platinum (Pt) remains the gold standard, cost-effective earth-abundant alternatives like nickel (Ni) and molybdenum disulfide MoS_2 are making this process highly efficient.
• **CO_2 Reduction & Solar Fuels:** Through catalytic hydrogenation, captured CO_2 and green hydrogen can be converted into synthetic methanol and hydrocarbons, actively reducing net carbon emissions.
• **Natural/Heterogeneous Catalysis:** Heterogeneous catalysts are highly favored due to their reusability and easy separation. These are increasingly sourced from sustainable byproducts like plant ashes, bones, and industrial wastes.
This session will focus on the green Hydrogen production and CO_2 reduction as well as all conversion technology.

IV - Catalysis for Energy

Energy availability is a key element of today's world, but energy must be transformed into usable form, whether it comes from fossil fuels or renewable (perennial) sources. Catalysis is crucial in driving both possibilities and mitigating related environmental impacts, such as greenhouse gas (GHG) emissions. Most activities in catalysis for solar fuels are now limited to H_2 production, which is an essential field for catalysis. For both direct alcohol fuel cells and SOFCs (solid oxide fuel cells), there is a need to produce more active and stable catalysts that do not contain rare materials. There is also a need to conceptualize novel catalysts based on easily accessible and inexpensive metals or nanocarbons. As a result, energy-related catalysis helps to identify novel solutions to societal problems and to build a more sustainable future.
• Renewable and sustainable energy
• Green energy and efficiency
Main Catalytic Technologies
(i) Electrocatalysis: Uses renewable electricity (solar, wind) to drive reactions, such as splitting water H_2O into clean hydrogen H_2 and oxygen.
(ii) Photocatalysis: Employs sunlight and specialized catalysts to break down water or convert captured carbon dioxide into liquid fuels and value-added chemicals.
(iii) Fuel Cells: Relies heavily on catalysts (like traditional platinum or emerging non-precious metals) to convert chemical energy from hydrogen directly into electricity, yielding only water as a byproduct.
(iv) Biomass Conversion: Utilizes tunable catalysts to transform agricultural or municipal waste into viable biofuels and circular economy feedstocks.
In this session we discuss current innovations in sustainable catalysis that prioritize Earth-abundant elements (like nickel, cobalt, and iron) in order to make these technologies globally scalable, affordable, and less reliant on toxic or finite resources

V - Environmental Catalysis

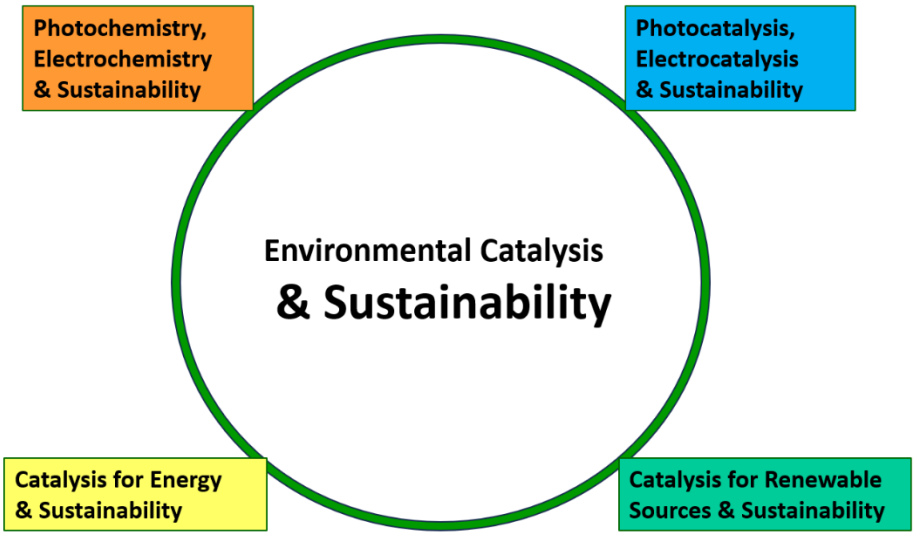
Sustainability and environmental catalysis represent the application of catalytic processes to minimize waste, reduce energy consumption, and eliminate toxic pollutants. It plays a crucial role in tackling climate change and transitioning to a circular economy by driving breakthroughs in renewable energy, carbon capture, and green chemical manufacturing. Moreover, environmental catalysis is multidisciplinary research subject to which an increasing number of chemists, materials scientists, and environmentalists have dedicated their attention due to its promising potential for enhancing human health and quality of life. Because of its numerous applications in carbon dioxide reduction, oxidation of volatile organic compounds (VOCs), removal of aqueous organic contaminants and disinfection, and water splitting, photocatalysis remains a research focus for the environmental catalysis community. Environmental Catalysis combines analysis, theory, computation and synthesis to enable the most cutting-edge applications in biocatalysis, green chemistry, environmental remediation, and our understanding of how pollutants interact with natural systems.

- Environmental pollution & Global warming
- Environmental chemistry and sustainability
- Pollution prevention, control and environmental safety
- Air and water depollution processes
- Energy issues and climate change

This session will focus on the general processes that promote carbon neutrality and sustainable development:
Renewable Energy & Hydrogen Economy: Accelerating water splitting for clean H_2production and advancing fuel cell technologies.
Carbon Capture & Utilization (CCU): Developing catalysts that convert harmful CO_2 and NO_x emissions from industrial exhaust into useful raw materials, synthetic fuels, or value-added chemicals.
Biocatalysis & Biomass: Utilizing enzymes (nature's catalysts) to perform organic synthesis in mild, water-based conditions, and converting agricultural or municipal waste into useful bioplastics and biofuels.
Circular Plastics Economy: Creating chemical recycling processes that break down complex plastic waste into reusable monomers without high-energy incineration.
More information on the official website: https://cimee-science.org/cimee26/

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cimee-science.org

Call for Abstracts

Important Dates

All participants are invited to submit abstracts for scientific communications. Please ensure your submission meets the conference's strict guidelines for accepting scholarly papers. Download the template abstract and abstract registration form at the website.
The submitted abstracts will bepeer-reviewed for acceptance by the Scientific Committee and, out of the submitted proposals.

Conference Dates	Abstract Deadline	Registrations Deadline
Abstract Submission Opens: March, 2026 **Authors notified of results** Within 10 days after the submission **Announcement of the conference program** First September 2026	**First Round Submission:** March 15, 2026 **Second Round Submission:** **June 30, 2026** **Final Round Submission:** September 15, 2026	**Early Bird Registration:** May 2026 **Mid Term Registration:** June 30, 2026 **On Spot registration:** September 2026



Speakers

CIMEE 2026

September 24-26, 2026

Materials, Electrochemistry & Environment

8th International Symposium On Materials, Electrochemistry and Environment



Benefits of Attending

- Establishing their academic and professional relationships
- Improving their morale and confidence of presenting research in an international platform
- Interacting with expertise in their respective departments
- Clearing your inhibitions of adjusting to the foreign environment
- Benefit by hearing from key speakers who will present detailed case studies.
- Gather important information on technical developments and equipment.
- Bring yourself up-to-date on current developments and future trends in Environmental chemistry.

Publications

After the peer reviewing process by at least 2-3 experts for the submission of CIMEE 2026, the accepted papers will be included into abstract Contributors to CIMEE26.Symposium have the opportunity to make their research known internationally through the CIMEE26. The Eight International Symposium on Materials, Electrochemistry and Environment has teamed up with some partner Journals. All submitted papers will have the opportunity to be considered for this Journals. The paper selection will be carried out during the peer review process as well as at the conference presentation stage. Submitted papers must not be under consideration by any other journal or publication. Full text template can be downloaded here.
The final decision for paper selection will be made based on peer review reports by the CIMEE26 Advisory and review committee and the Editor-in-Chief jointly.
Please find detailed information regarding abstract submission and registration on our website cimee-science.org

Ahmad El Moll
Conference General Chair

C I M E E

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