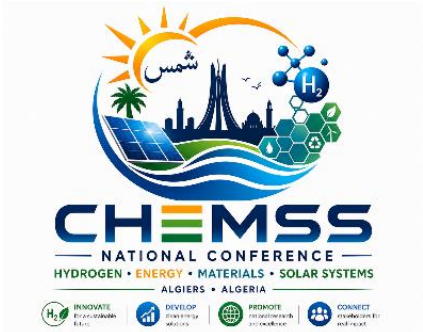
PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTERY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
DAHLAB SAADUNIVERSITY-BLIDA 1
FACULTY OF TECHNOLOGY
DEPARTMENT OF MECHANICS

SURFACE AND MATERIALS TREATMENT LABORATORY
WITH RENEWABLE ENERGY DEVELOPMENT CENTER CDER

ORGANIZES

National Conference on Hydrogen, Energy, Materials and Solar Systems CHEMSS 2026



Blida, on November 24-25, 2026

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Context and objectives

The global energy transition is now one of the main scientific, technological, and environmental challenges. Faced with rising energy demand, the gradual depletion of fossil resources, and the issues related to climate change, the development of sustainable energy solutions has become a strategic priority.

In this context, renewable energies, particularly solar energy, represent a promising alternative due to their abundance and low environmental impact. However, their intermittent nature requires the development of efficient technologies for energy conversion, storage, and management.

Green hydrogen thus appears as a major energy carrier capable of storing energy produced from renewable sources and contributing to the decarbonization of several industrial sectors and transportation. At the same time, advances in advanced materials play a decisive role in improving the performance of energy systems, notably photovoltaic cells, electrolyzers, fuel cells, and storage devices.

Within this framework, the CHEMSS 2026 conference constitutes a scientific platform intended to promote exchanges among researchers, faculty, doctoral students, and industry professionals working in the fields of hydrogen, energy materials, and solar technologies. The seminar serves as a forum for scientific exchange that fosters interdisciplinary collaboration and the dissemination of innovative research results.

Target audience

Faculty researchers, researchers, industry professionals, practitioners, doctoral students, project leaders, startups, and public or private institutional stakeholders.

THEMATIC SESSIONS

CHEMSS 2026 Topics:

TOPIC #1: Hydrogen production and technologies

- **Production of green hydrogen by electrolysis of water**
- **Coupling solar energy - hydrogen production**
- **Catalysts and materials for electrolyzers**
- **Emerging hydrogen production technologies**
- **Hydrogen and energy transition**

TOPIC #2: Advanced materials for energy systems

- Nanomaterials and functional materials for energy
- Materials for photovoltaic cells
- Materials for electrolyzers and fuel cells
- Materials for batteries and supercapacitors
- Physical properties and characterization of energetic materials

TOPIC #3: Solar energy and energy conversion

- Advanced photovoltaic technologies
- Thermal and hybrid solar systems
- Optimization and modeling of solar systems
- Integration of solar systems into energy networks
- Efficiency and reliability of photovoltaic systems
- Intelligent energy management
- Hybrid energy systems

TOPIC #4: Modeling, simulation and optimization of energy systems

- Multiphysics modeling of energy systems
- Digital simulation of energy conversion phenomena
- Artificial intelligence and energy optimization
- Digital approaches for advanced energy technologies

IMPORTANT DATES

- **First call for papers issued: June 30, 2026**
- **Abstract submission deadline: September 15, 2026**
- **Notification of acceptance: October 15, 2026**
- **Full paper submission deadline: November 10, 2026**
- **Final program published: November 15, 2026**
- **Seminar dates: November 24-25, 2026**

INSTRUCTIONS FOR AUTHORS

- **Submitted articles must be original and not have been presented or submitted elsewhere previously.**
- **Accepted work may be published in the Renewable Energies journal, CDER and in the proceedings of the CHEMSS2026 conference.**

SUBMISSION

Authors are invited to submit their contributions through the official seminar website, or by email.
Chemss2026@univ-blida.dz

PARTICIPATION FEES

Ph. D Student	**6000 DA**
Professors / Academics	**12000 DA**
Industriel	**15000 DA**

The registration fees cover access to all seminar sessions, a participant folder, as well as lunch and coffee breaks. (Accommodation not included)

CONTACT

For any questions or additional information, please feel free to contact us at the e-mail: semmar_djaffar@univ_blida.dz

SEMINAR LANGUAGE: ARABIC, ENGLISH, FRENCH.