PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC
RESEARCH

UNIVERSITY OF SAAD DAHLAB- BLIDA 1 FACULTY OF SCIENCES

LABORATORY OF ENERGY PROCESSES AND

NANOTECHNOLOGY (LPEN)





CONTRIBUTION OF ARTIFICICAL INTELLIGENCE TO ECO-DESIGN AND ENERGY TRANSITION IN ALGERIA

BLIDA, DECEMBER 1 & 2, 2025









Honorary Presidents

Pr. M. Bezzina Rector, University of Blida 1

Dr. A. LouazaniDean of the Faculty of Sciences

Pr. M. Roudane
Vice-Rector in Charge of PGRS

Seminar Chair

Dr. Halima Mazouz
Director of LPEN (University of Blida 1)

Dr. Malha Oudir Member of LPEN (ESSAIA, Algiers)



CONTEXT AND OBJECTIVES

In response to the growing challenges of climate change. eneray transition. decarbonization, and industrial sustainability. the integration of Artificial Intelligence (AI) in eco-design processes represents a strategic * lever for the circular economy. Algeria. committed to transitioning toward sustainable and innovative models, benefits from promoting • between advanced synergies digital technologies and key industries such as energy, agri-food, chemistry, materials, and environment.

The seminar "Contribution of Artificial Intelligence to Eco-Design and Energy Transition in Algeria" aims to be a space for dialogue and scientific outreach, bringing together researchers, industrialists, startups, and institutional stakeholders. It seeks, through a multidisciplinary approach, to explore how Al can support a greener, more resilient, and more competitive Algerian economy.





SEMINAR THEMES



1. Carbon Footprint, Energy Security and Green Hydrogen



- Carbon footprint of energy processes in Algerian industry;
- Eco-design of energy systems;
- Energy transition, security and efficiency, sustainability and profitability;
- Artificial intelligence applied to sustainability and energy transition.



2. Eco-design in the Agri-food Industry and Food Security



- Eco-design of agro-industrial processes and eco-innovation in food production:
- Artificial

 Life cycle analysis (LCA) in the agri-food sector;
 - Eco-design of food packaging supported by artificial intelligence;
 - Al in the management of sustainable agri-food chains: agriculture, processing, packaging, logistics, and consumption



3. Water Footprint and Sustainable Water



- Resources Management
 Impact of climate change on water resources in Algeria
- Eco-design and AI to reduce the water footprint
- Innovative and intelligent processes for water management and the valorization of non-conventional resources.
- Eco-friendly processes for water treatment, recycling, and reuse in industry.



4. Artificial Intelligence, Environment and Public Health

- Al applied to risk management and monitoring of air, soil and food safety:
- Biocompatible materials and green disinfectants
- Healthcare waste management....



5. Green Startups in Algeria





Scientific Committee Chair Dr. OUDIR Malha

Scientific committee members

- Pr. ROUDANE Mohamed, University of Blida 1.
- Pr. BENMAAMAR Zoubir, University of Blida 1.
- Pr. KIRAD Abdelkader, University of Blida 1.
- Pr. BENAROUS Abdellah, University of Blida 1.
- Pr. BOUTOUMI Hocine, University of Blida 1.
- Pr. BELGHACHI Abderrahmane, University of Bechar.
- Pr. HELMAOUI Abderrachid, University of Bechar.
- Pr. BENABDALLAH Tawfik, Polytechnic School, Maurice Audin, Oran.
- Pr. DJAZOULI Zahr-Eddine, University of Blida 1.
- Pr. BOUKRAA Fatima Zohra, USTHB.
- Pr. ALIOUANE Leila. University of Boumerdes.
- Pr. DJENANE Djamel, University of Mouloud Mammeri, Tizi Ouzou.
- Pr. BOUDALIA Sofiane, University of 8 May 1945 Guelma.
- Pr. CHOUDER Aissa, University of Msila.
- Pr. HADJ AEAB Amar, Renewable Energy Development Centre, Alger.
- Pr. AMROUCHE Badia, University of Blida 1.
- Pr. LARIBI Hassiba, University of Blida 1.
- Pr. HADJ SADOUK Abdelkader, University of Blida 1.
- Pr. BOURAS Omar, University of Blida 1.
- Pr. BADIS Abdelmalek, University of Blida 1.
- Pr. AOUABED Ali, University of Blida 1.
- Pr. ISSADI Rachid, University of Blida 1.
- Pr. MERZOUK Mustapha, University of Blida 1.
- Pr. ABED Hafida, University of Blida 1.
- Pr. BENBELIDIA Nadjia, University of Blida 1.
- Pr. SALHI Merouane, University of Blida 1.
- Dr. OUIR Souad, University of Blida 1.
- Dr. CHEKIRED Fethia, UDES, Alger.
- Dr. BEN AZIZ Ouarda, University of Blida 1.
- Dr. TIGRINE Zahia, UDES, Alger.
- Dr. BELHAOUAS Nasreddine, Renewable Energy
- Development Centre, Alger.
- Dr. KHARCHI Razika, Renewable Energy Development Centre, Alger.
- Dr. CHIKH Madjid, Renewable Energy and Energy efficiency Commission (CEREFE), Alger.

- Dr. MAZOUZ Halima, University of Blida 1.
- Dr. AGGOUN Amele. University of Blida 1.
- Dr. IBRIR Abdellah . University of Blida 1.
- Dr. BOUCHAMA Lamia. University of Blida 1. Dr. CHABANE Leila. University of Blida 1.
- Dr. ASSAM Amar . University of Blida 1.
- Dr. AIT MESBAH Zohra. University of Blida 1.
- Dr. CHIKH Hayat, University of Blida 1
- Dr. KASBADJI Nachida, University of Blida 1.
- Dr. LOUAZANI Ahmed, University of Blida 1 Dr. BENKHEDA Amina, University of Blida 1
- Dr. HAMITOUCHE Houria, University of Blida 1
- Dr. BABA AHMED Ilves, University of Blida 1 Dr. HAMAD Taous, University of Blida
- Dr. KACI Karim, University of Blida 1.
- Dr. BADIS Dalila, University of Blida 1
- Dr. ZAZOUA Hanene, (CRAPC, Tipaza
- Dr. ABOUMOUSTAPHA Mohamed. (CRAPC. Tipaza).

- Dr. RAHMANI Khadidja, University of Blida 1.

- Transmissions, Koléa, Tipaza.
- Dr MEFLAH Aissa, UDES, Alger.
- Dr. EL HADI Djamel, University of Blida 1 Dr. LAZALI Wassila, University of Blida 1
- Dr. ZAITER Sabrina, University of Blida 1
- Dr. GUERFI Bahdja, University of Blida 1



Organizing Committee Chair Dr. MAZOUZ Halima

Pr. BENMAAMER Zoubir

- Dr. OUDIR Malha
- Dr. AGGOUN Amele
- Dr. AIT YAHIA Ahmed.
- Dr. BENYACOUB Assia. Dr. BACHA Siham
- Dr. HAMZA Kahina
- Dr. BENSAHLA Naziha Dr. GHERIBI Fathi

- Dr. KACI Karim
- Dr. HAMITOUCHE Houriya
- Dr. RADI Nora
- Dr. BOURICHE Sabrina
- Dr. ASNAM Amira
- Dr. SAKRI Asma
- Dr. HACHANA Romaissa Dr. BABA AHMED Ilyes

- **IMPORTANT DATES**
- Call for papers launch: October 25, 2025
- Abstract submission deadline: November 16, 2025
- Notification of acceptance: November 23, 2025
- Final program publication: November 27, 2025
- Seminar dates: December 1 & 2, 2025

AUTHOR INSTRUCTIONS

- Abstracts must not exceed 300 words.
- Use Times New Roman font:
- 14 pt bold for the title
- 12 pt for the abstract text.
- Accepted languages: English, French, or Arabic.
- Abstracts must be submitted in **PDF format only.**
- Submission must be done exclusively through the Google Forms link (or scanning the QR code):

https://forms.gle/s7JoGjbHppvg997C8

• Use the official seminar abstract template. downloadable by scanning the QR code.





PARTICIPATION FEES



Students: 3,000 DA

Researchers/Faculty: 5,000 DA

Professional: 8,000 DA

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

CONTACT

- E-mail: lpen.events@univ-blida.dz
- Tel: 0563077180

SEMINAR LANGUAGE: ARABIC, ENGLISH, FRENCH.