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



**ORGANIZES** 

NATIONAL SEMINAR



# 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. Louazani**Dean 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, transition. energy 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 advanced synergies between 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 Ilyes, University of Blida 1 Dr. HAMAD Taous, University of Blida 1.
- Dr. KACI Karim, University of Blida L.
- Dr. BADIS Dalila, University of Blida 1.
- Dr. ZAZOUA Hanene , (CRAPC, Tipaza).
  Dr. ABOUMOUSTAPHA Mohamed, (CRAPC, Tipaza).
- Or EED A D.H. Estimo Zohro, University of Dide 1
- Dr. FERADJI Fatima Zohra, University of Blida 1.
- Dr. KADRI Farida, University of Blida.
- Dr. RAHMANI Khadidja, University of Blida 1.
- Dr. BRAHIMI Sounila, University of Blida 1
- Dr. BENZETTA Abdelhalim, Ecole Supérieure des
- 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

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.