



University of Science and Technology HOUARI BOUMEDIENE
Faculty of Mechanical Engineering and Process Engineering
Laboratory of Valorization and Recycling of Materials
for Sustainable Development (VRMDD)



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INTERNATIONAL CONGRESS
ON ENERGY AND INDUSTRIAL
PROCESSES ENGINEERING:
VOLUME 1**

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Edited by:

Dr. Nadia Chekir
Dr. Souhila Kadem
Dr. Imene Bouchelkia
Dr. Nassila Sabba

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Nadia Chekir
Souhila Kadem
Imene Bouchelkia
Nassila Sabba
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ICEIPE'24 (14-16 May 2024)*

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ICEIPE'24 (14-16 May 2024)

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Research Laboratory of Matter's Valorization and Recycling for Sustainable Development (VRMDD), University of Sciences and Technology Houari Boumediene (USTHB), Algiers

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ICEIPE'24

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ICEIPE'24

About the Congress

We are proud to present the proceedings of the 2nd International Congress on Energy and Industrial Process Engineering (ICEIPE'24), held in Algiers, Algeria, from May 14 to 16, 2024. This biennial event, organized by the Laboratory of Valorization and Recycling of Materials for Sustainable Development (VRMDD), brings together leading researchers and industry professionals to address critical challenges in energy, environment, and industrial processes. The six key themes of ICEIPE'24 – Energy Conversion and New Energies, Food Safety and Health, Extraction and Formulation Processes, Water Treatment Technologies, Treatment Processes and the Environment, and Materials Recovery and Recycling – directly align with Algeria's national strategic goals. The first of these areas lined with the national "Energy Security" research program, it focuses on developing renewable energy sources, which contributes to the country's energy security strategy by aiming for a 27% share of renewable energy in national electricity production by 2030. Similarly, the themes of food and water security address crucial issues impacting Algeria's socioeconomic development. In this regard, research and innovation activities are today the determining factor for the competitiveness of companies and industries. Research will have to take charge, on the one hand, upstream of the imperatives of development and diversification of wealth production, strengthen the effective integration of the latter into industry and, on the other hand, valorize local knowledge and skills, establish integrated water resource management plans and develop treatment techniques for their reuse.

ICEIPE'24 provides a platform for researchers to present their cutting-edge work through three plenary conferences, nine thematic conferences, and 285 presentations (including oral presentations, posters, and i-posters). The rigorous selection process, with 285 works chosen from 400 submissions, ensures a high-quality program. This edition also offers the unique opportunity for free publication in a special issue of the prestigious DESWATER journal, recently integrated with Elsevier.

We believe that ICEIPE'24 serves as a catalyst for innovation and collaboration, accelerating advancements in sustainable energy, industrial processes, and resource management. We invite you to explore the proceedings and discover the latest research shaping a more sustainable future.

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