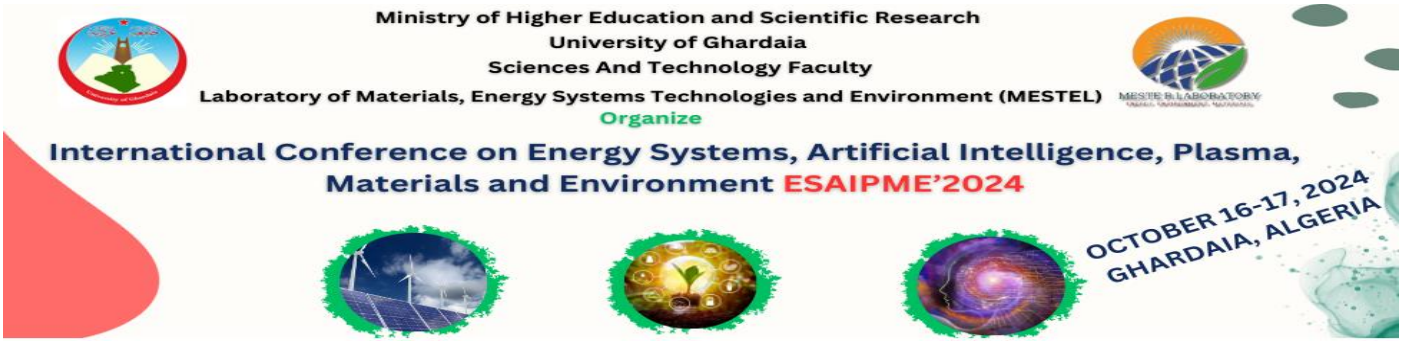


Hybrid International Scientific Conference On

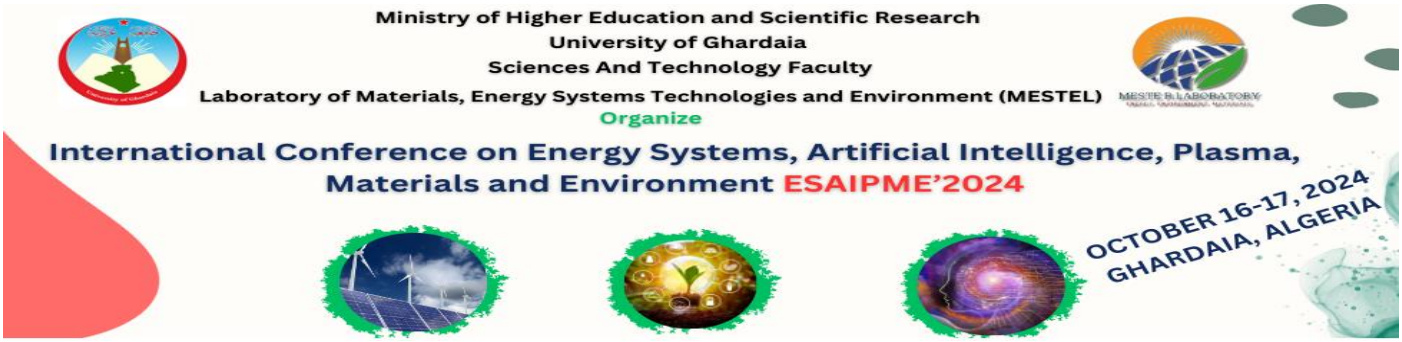
"Energy Systems, Artificial Intelligence, Plasma, Materials and Environment"
"ESAIPME'2024"

October 16 and 17, 2024, Ghardaia, Algeria

(Hybrid meeting, remote or presence)

https://esaipme2024.sciencesconf.org/

Chairman of conference: Pr. Abderrahmane Bellaouar, Ghardaia University, Algeria
Honorary Chairman: Pr. Bensaci Ilyes, Rector of Ghardaia University, Algeria
Honorary vice Chairman: Dr. Sadouni Radhwane, Dean of sciences and technology Faculty,Ghardaia University, Algeria



ORGANIZING COMMITTEE CHAIRMAN

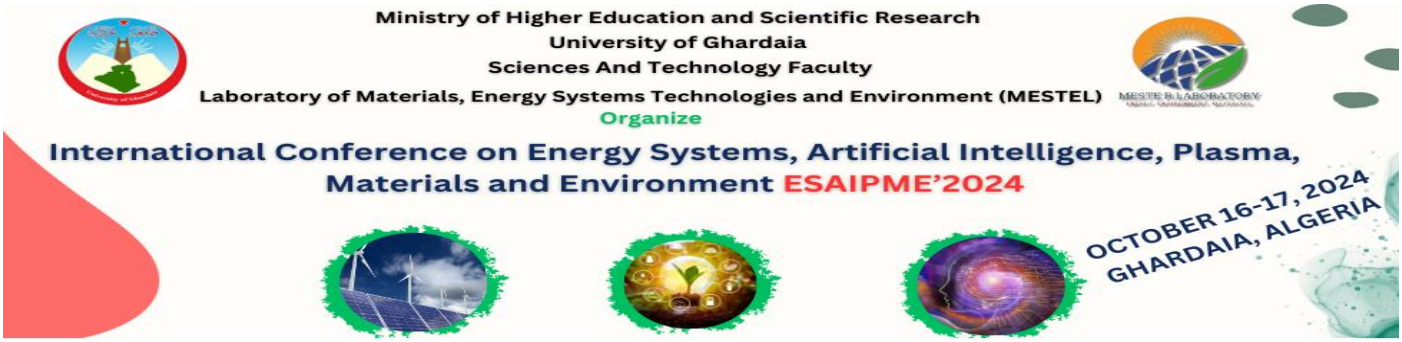
Mr. MOHAMMED ARIF, University of Ghardaia (Algeria)

ORGANIZING COMMITTEE CO-CHAIR

Dr. FARES FENNICHE, University of Ghardaia (Algeria)

ORGANIZING COMMITTEE MEMBERS

Dr. Mosbah Charaf Abdelkarim, University of Ghardaia, Algeria
Dr. Abdellatif Lalmi, University of Ghardaia, Algeria
Dr. Zoulikha Hafsi, University of Ghardaia, Algeria
Dr. Chikh Ouled Belkhir, University of Ghardaia, Algeria
Dr. Khaira Bouamer, University of Ghardaia, Algeria
Dr. Mohammed Aouf, University of Ghardaia, Algeria
Dr. Fatima Zohra Nouasria, University of Ouargla, Algeria
Dr. Djehad Bentarfa, University of Ghardaia, Algeria
Dr. Salah Cherif, University of Ghardaia, Algeria
Dr. Zineb Hadj Amar, University of Ghardaia, Algeria
Dr. Djaber Aouf, University of Ghardaia, Algeria
Dr. Hamed Boukhari, University of Ghardaia, Algeria
Dr. Oum Kelthoum Laghouiter, Algeria
Dr. Bahmed Fekhar, University of Ghardaia, Algeria
Dr. Bachir Bensalah, University of Ghardaia, Algeria
Dr. Guerbouz Affaf, University of Ghardaia, Algeria
Dr. Zababe ilyes, University of Ghardaia, Algeria
Dr. Kesbi Brahim, University of Ghardaia, Algeria
Dr. Messaouda Matallah, University of Ghardaia, Algeria
Dr. Said Mosbah, University of Ghardaia, Algeria
Dr. Yacine Benatallah, University of Ghardaia, Algeria
Dr. Abdelhakem Belaghit, University of Ghardaia, Algeria
Dr. Reda Tahtah, University of Ghardaia, Algeria
Mr. Ilyes Baba Arbi, University of Ghardaia, Algeria
Mr. Youcef Adamou, University of Ghardaia, Algeria
Dr. Ouassila Benchadi, University of Ghardaia, Algeria
Dr. Imane Raache, University of Ghardaia, Algeria
Dr. Achour Benchabane, University of Ghardaia, Algeria
Dr. Selma Benbitoure, University of Ghardaia, Algeria
Dr. Fouzi Akermi, University of Ghardaia, Algeria
Dr. Noura Addoune, University of Ghardaia, Algeria
Dr. Kada Biteur, University of Ghardaia, Algeria
Dr. Toufik Bousnane, University of Ghardaia, Algeria
Dr. Saad boudabia, University of Ghardaia, Algeria
Dr. Sara Zatir, University of Mascara, Algeria



SCIENTIFIC COMMITTEE PRESIDENT

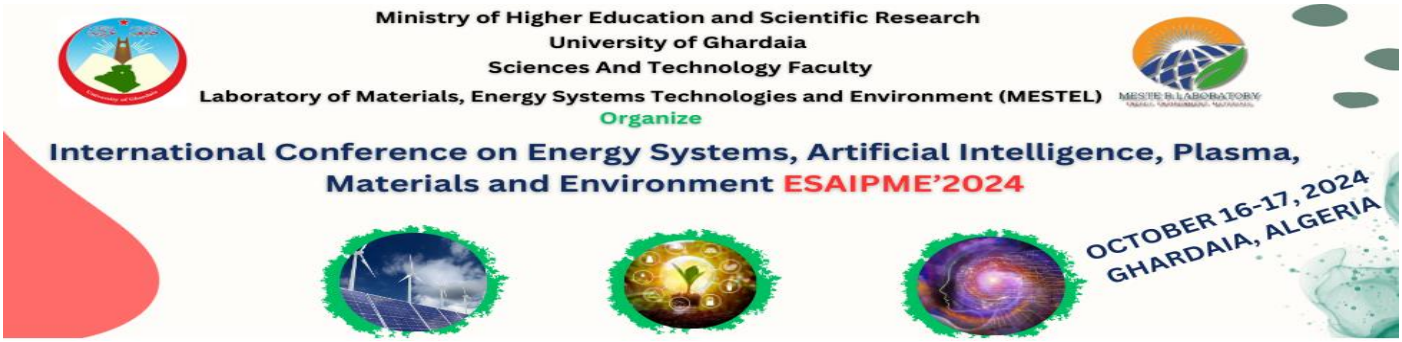
Pr. CHENINI KELTHOUM, University of Ghardaia (Algeria)

SCIENTIFIC COMMITTEE CO-PRESIDENT

Dr. YASMINA KHANE, University of Ghardaia (Algeria)

SCIENTIFIC COMMITTEE MEMBERS

Pr. Abderahmane Bellaouar, Algeria
Pr. Brahim Safi, Algeria
Pr. Redjem Hadef, Algeria
Pr. Bogdan Kopey, Ukraine
Pr. Youcef Soufi, Algeria
Pr. Jasem Mohammed Al-awadhi, Kuwait
Pr. Keltoum Chenini, Algeria
Pr.Salim Albukhaty, Iraq
Pr. Khan Mohammed Mansoob, Brunei Darussalam
Pr. hassan aliwee, Iraq
Pr. Zohra Babaamer, Algeria
Pr. Korhan Kayisli, Turkey
Pr. ilhami Colak, Turkey
Pr. Kamal Mohamedi, Algeria
Pr. Volodymyr Kopei, Ukraine
Pr. Ali Cheknane, Algeria
Pr. Said Douis , Algeria
Pr. Farouk Chellali, Algeria
Pr. Foad Buazar, Iran
Pr. Mohammed Bekkouch, Algeria
Pr. Ana luisa Fernando, Portugal
Pr. Nebati Abdelkader, Algeria
Pr. Abdelkader Harrouz, Algeria
Pr. Mawloud Guermoui , Algeria
Pr. Kamel Benyelloul, Algeria
Pr. Abdelmadjid Kaddour, Algeria
Pr. Achi Fethi, Algeria
Dr. Oussama Bacha, Algeria
Pr. Said Bouabdellah, Algeria
Dr. Mohamed Anouar Ben Messaoud, Tunis
Dr. Mostefa Kermadi , United Kingdom
Dr. Adel Kareem JASIM, Iraq
Dr. Mohamed Saber, Japan
Dr. Farouk Nouizi, USA
Dr. Yasmina khane, Algeria
Dr. Yacine Cherif, France
Dr. Ihor Kopey , Ukraine
Dr. Kamel Bouaraour, Algeria
Dr. Mshal Walid Ibrahim, Iraq
Dr. Khadidja Khoudja, Algeria
Dr. Farid Touaiti, Algeria
Dr.Djilali Larbi, Algeria
Dr. Djemoui Lalmi, Algeria
Dr.Akram A. Al-asadi, Iraq
Dr. Abdelouahab Benseddik, Algeria
Dr. Radhwane Sadouni, Algeria
Dr. Khaled Ferkous, Algeria
Dr. Tayeb Boulmaiz, Algeria
Dr. Slimane Bellaouar, Algeria
Dr. Khaled Mansouri, Algeria
Dr. Abdelouaheb Khattara, Algeria
Dr. Belgacem Bekkar, Algeria
Dr. Nacer Hacene, Algeria
Dr. Abdelkarim Kina, Algeria
Dr. Hadj Yahia Seba, Algeria
Dr. Sahnoun M'hamed, Algeria
Dr. Salah Bezari, Algeria, Algeria
Dr. Aissaoui faris, Algeria
Dr. Mounir Daoud, Algeria
Dr. Hemza Medoukali, Algeria
Dr. Hadj Daoud Bouras, Algeria
Pr. Michał Bembenek, Poland
Pr. Cristian Barz, Romania
Pr. Liubomyr Ropyak, Ukraine
Pr. Oleh Onysko, Ukraine
Pr. Andriy Bandura, Ukraine
Dr. Farid Bennabi, Algeria
Dr .wahiba Chaibi, Algeria
Dr bennabi lamia, Algeria
Pr. Adel Mokhtar, Algeria
Pr. Bilal goudjil, Algeria



Pr. bouhadjar boukoussa, Algeria
Pr. Abdelhalim Zoukel, Algeria
Dr. zine el abidine benarima, Algeria
Pr. Khelfaoui Fethi, Algeria
Pr. Ahmed Rhif, Tunisie
Pr Youcef Himri, Algeria
Dr. Abdessalam Kifouche, Algeria
Dr. Amine Fihakhir, Algeria

Plenary and Keynote Speakers

Prof. Dr. Ing. Youcef SOUFI

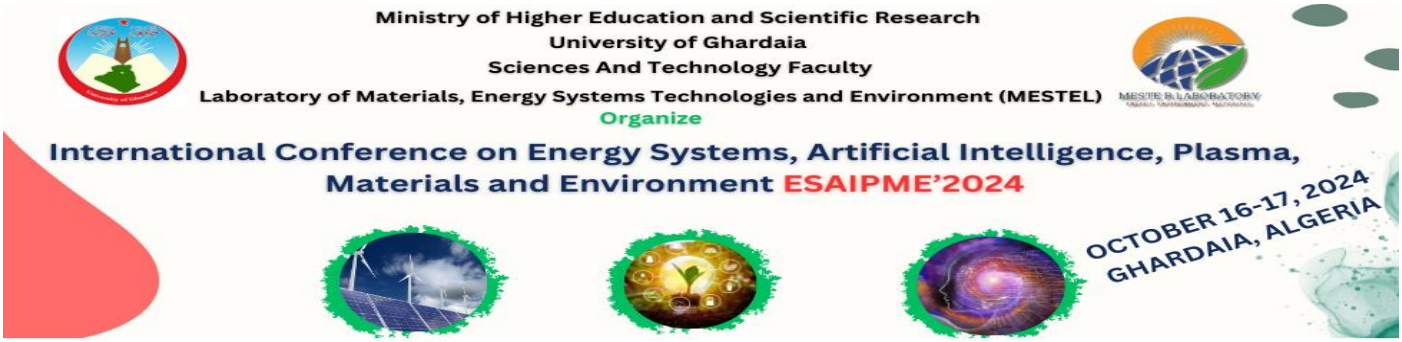
Presentation Title: New Industry 5.0 Revolution and Artificial Intelligence for Green Energy transition and sustainability

Youcef SOUFI received the B.Eng. (1991) and PhD degree (2012) from the University of Annaba, Algeria in Electrical Engineering. Since 2000 he has been with the Department of Electrical Engineering, Laboratory of Electrical Engineering at the University Echahid Larbi Tebessi, Tebessa, Algeria. He is currently a full Professor in electrical engineering. His main and current major research interests include application of Artificial intelligence in electrical engineering, Renewable energy, electrical machines control, power electronics and drives. He has published and co-authored more than 200 technical papers in scientific journals and conference proceedings since 2000. He is the member of editorial board of many journals and the member of technical program committee / international advisory board/ international steering committee of many international conferences.

Prof. Kamal MOHAMMEDI

Presentation Title: Desalination with Renewable Energy

Pr Kamal MOHAMMEDI is a Senior Lecturer of Multiphase Flows, Solar Thermal Energy; Energy Efficiency and Energy Transition, since 1993, at M. Bougara University, Boumerdès/ Algeria, Faculty of Hydrocarbons and Chemistry. He received his M Sc. degree in Mechanical Engineering/Energy Conversion from Boumerdès National Institute of Mechanical Engineering (INGM) Algeria, in 1985 and his Diplôme d'Etudes Approfondies and PhD degrees in Process Engineering from the INSA de Lyon, France, in 1992. Head of the Modelling, Simulation and Optimization of Alternative and Sustainable Systems (MESO Team), he has been involved in 2 FP6 European projects and 10 national projects in the fields of hybrid renewable energy systems, Renewable Energy Desalination, CSP, Sustainable Industrial parks, Carbone Dioxide mitigation in industry, Energy Efficiency, Renewable Energy, Circular Economy, 2050 Long-Term Low Carbon development strategies and 2030 SDGs, etc. . He is the author and co-author of more than 40 published papers; book chapters and 100 conference articles in the fields of Concentrated Solar Power, Hybrid Renewable Energy Systems, and Low Carbon emissions solutions. He is a member of scientific committees and a reviewer of national and International journals. He is a member of advisory boards of national and international conferences where he chaired sessions. He supervised Master/Engineer/Magister and PhD theses and consults for industry.



Prof. Abdelkader AISSAT

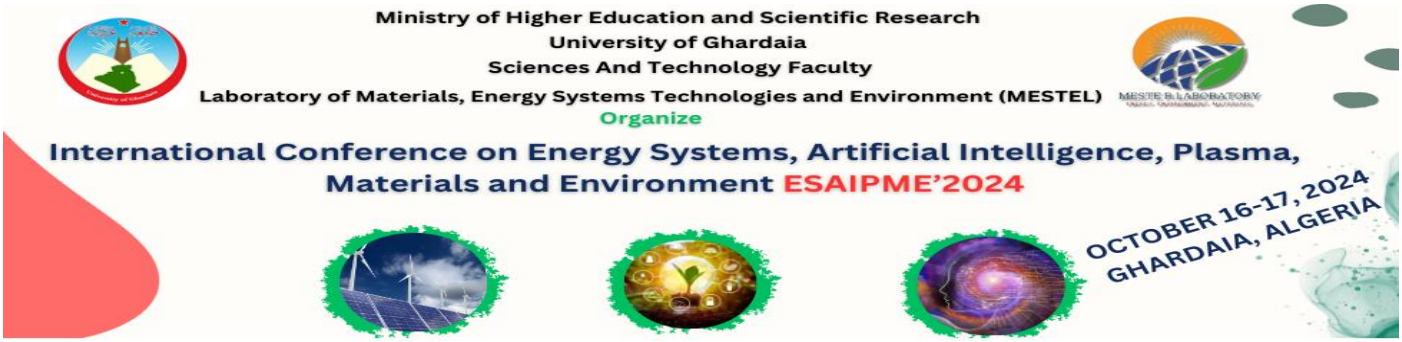
Presentation Title: Impact of nanostructures on solar cell efficiency

Professor Abdelkader Aissat received the magister diploma and doctorate degree in electronics from the University of Blida, ENP Algeria in 1999 and 2007 respectively. He became lecturer in the department of electronics of Blida University. He occupied a post of the head of electronics department. He joined the Engineering Faculty of Blida University in 2000 to 2003 as director of pedagogy and research. His research interests include materials, semiconductors, semiconductors lasers, detection, modeling of the components optoelectronic, microwaves and mixed. His is an active reviewer in Elsevier, IEEE, Springer and Wiley. He has several publications more than 240. He has achieved international projects (CNRS, PHC …) in the field of materials, new materials and nanostructures for optoelectronics and photovoltaic.

Prof. Ahmed HADJADJ

Presentation Title: Adoption of Renewable Energy to Enhance Fossil Energy in the Hydrocarbon Industry

Professor Ahmed HADJADJ holds an engineering degree in Mechanical Engineering (Thermo-Energetics option) from USTHB, a DEA in Energy from UNSA-EMP (France), and a PhD in Engineering Sciences from UFC (France), as well as an equivalency for an Algerian State Doctorate in Mechanics and a certificate in E-Commerce from HEC Montreal (Canada). He has worked as a teacher-researcher in France and Canada, particularly in postdoctoral positions and as a Teaching and Research Associate at UTBM, Belfort-Montbéliard (France), a postdoctoral fellow at ETS Montreal, and a Research Associate at Concordia University (Canada). In Algeria, he has taught at IAP Boumerdes, served as a project manager at Sonatrach, and held positions as a professor, department head, and vice dean at FHC (formerly INH) Boumerdes, as well as professor and dean at the University of Adrar. He is also a member of various international bodies such as SPE (Society of Petroleum Engineers), Who's Who in Thermal-Fluids, and ACS (American Chemical Society) and is listed among the Top 100 Engineers internationally. He has been elected to various committees, including housing and joint commissions, and served on the administrative and scientific councils at the University of Boumerdes. Additionally, he is an accredited auditor with the Ministry of Energy and Environment. Currently, he is a mentor professor for two student scientific clubs: the Petroleum Club at FHC Boumerdes and the Adrar Technical and Scientific Club-IEOMIE at the FST Adrar. Throughout his academic and research career, he has supervised over a dozen PhD candidates, a hundred Master's theses and final year projects, and has to his credit around one hundred international publications and communications, as well as industrial reports. He has been a leader and member of PNR and CNEPRU projects.



Prof. Kamel BENYELLOUL

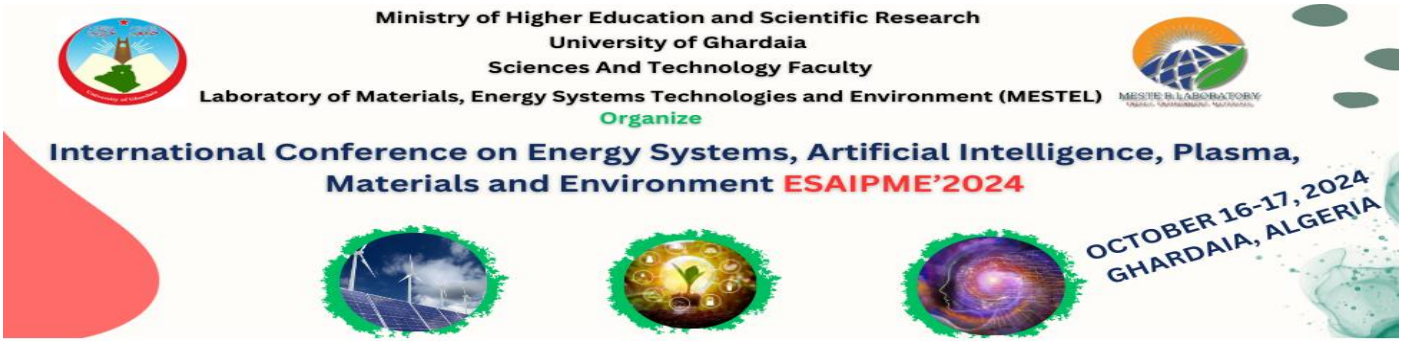
Presentation Title: Application of Artificial Intelligence in Materials: Hydrogen Storage

Dr. Kamel Benyelloul is a Director of Research at the Applied Research Unit in Renewable Energies (URAER), with a specialization in energy conversion, hydrogen storage, and fuel cells. He has led multiple national and international research projects and has an extensive teaching background, particularly at the University of Ghardaïa. His work includes over 100 publications and communications in hydrogen storage, nanomaterials, and renewable energy systems. He is also a member of prominent scientific organizations such as the American Chemical Society (ACS) and has contributed significantly to the field through his academic supervision and industrial collaborations.

Prof. ilhami COLAK

Presentation Title: Impacts of Digital Transformation on Alternative and Green Energies

ilhami Colak was born in 1962 in Turkey. He received his diploma in electrical engineering from Gazi University, Turkey, in 1985. Then, he did his MSc degree in electrical engineering in the field of Speed Control of Wound Rotor Induction Machines Using Semiconductor Devices at Gazi University in 1991. He received his PhD degree from Aston University in England on Mixed Frequency Testing of Induction Machines Using Inverters in 1994. He became an Assistant Professor, an Associate Professor, and a full Professor in 1995, 1999 and 2005, respectively. He has published more than 470 papers on different subjects, including electrical machines, drive systems, machine learning, reactive power compensation, inverters, converters, artificial neural networks, distance learning, automation, renewable energy sources and smart grids in the SCOPUS with 36 h-index. More than 360 of his papers have been cited in the SCI database of Thomson Reuters with 29 h-index and received more than 3650 citations. He has organized more than 100 international conferences and workshops. In the last fifteen years, he has concentrated his studies on renewable energy and smart grids by publishing papers, journals (www.ijrer.org), and (www.ijSmartGrid.org) and organizing international IEEE sponsored conferences (www.icrera.org), and (www.icSmartGrid.org). He is also the editor-in-chief of Electric Power Components and Systems (https://www.tandfonline.com/toc/uemp20/current). He has 1 international and 3 national patents. He also spent around 3 years at the European Commission Research Centre (JRC) as an expert in the field of smart grids in the Netherlands. He used to be a dean of engineering faculty, vice rector and the rector of the Gelisim and Nisantasi universities. He is currently a full professor at Istinye University. Professor COLAK achieved a great success of 10% by being included in the ""World's Most Influential Scientists"" 2% list, which was created USA Stanford University considering the ""Works of the Year 2020-2021-2022-2023"".



Conference Program (Virtual & In-person)

International Conference on Energy Systems, Artificial Intelligence, Plasma, Materials and Environment

ESAIPME'2024

October 15-17, 2024, Ghardaia, ALGERIA

University of Ghardaia (Pole 3, Conference Hall)

WhatsApp Group (for answering participants' questions) | **Facebook page (for streaming live)** | **Conference Hall location**

Conference Day 1 : October 15, 2024		**Start Time**
Virtual Conference		**9:00 12:30**
Conference Day 2 : October 16, 2024		**Start Time**
Desk Registration		**8:00 9:00**
Opening ceremony	**Pr. Abderrahmane Bellaouar** **General Conference Chair** **Univ. Ghardaia (Algeria)**	**8:45 9:15**
	Dr. Dr. Saadouni Radhwane, **Dea Dean of science &technology Faculty (Algeria)**	
	Pr. Bensaci Ilyes, **Ghardaia University Rector(Algeria)**	
Plenary Session		
Session Chairs **Pr. Brahim Safi** **Boumerdes University, Algeria**		**Dr. Tayeb Boulmaiz** **Ghardaia University, Algeria**
Pr. Kamal MOHAMMEDI, Boumerdes University, Algeria	Desalination with Renewable Energy	**09 :30 10 :15**
Pr. Ahmed HADJADJ URAER-MS Adrar, Algeria	Adoption of Renewable Energy to Enhance Fossil Energy in the Hydrocarbon Industry	**10 :15 11 :00**
Coffee Break		**11:15 11:45**
Poster session		

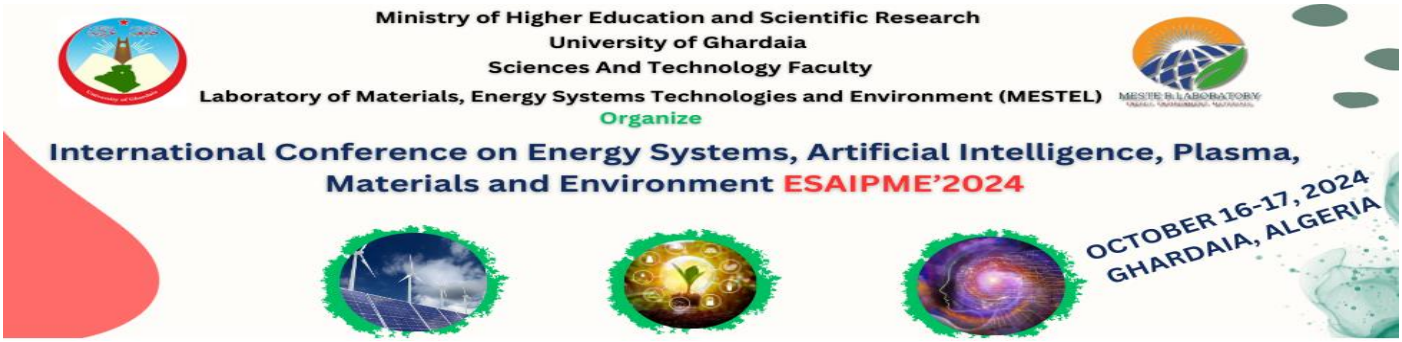
Ministry of Higher Education and Scientific Research
University of Ghardaia
Sciences And Technology Faculty
Laboratory of Materials, Energy Systems Technologies and Environment (MESTEL)
Organize

International Conference on Energy Systems, Artificial Intelligence, Plasma, Materials and Environment ESAIPME'2024



OCTOBER 16-17, 2024
GHARDAIA, ALGERIA

Session Chairs **Pr.Brahim Safi** **Boumerdes University, Algeria**	**Dr. Khaled Ferkous** **Ghardaia University, Algeria**	
Pr. Youcef SOUFI, Tebessa University, Algeria	New Industry 5.0 Revolution and Artificial Intelligence for Green Energy transition and sustainability	**11:45** **12:30**
Lunch		**12:30** **14:00**
Oral Presentation		**14:00** **16:30**
Coffee Break		**16 :30** **17 :00**
Conference Day 3 : October 17, 2024		**Start Time**
Plenary Session		
Session Chairs **Dr. Kamel Bouarour** **Ghardaia University, Algeria**	**Pr. Abderrahmane Bellaouar** **Ghardaia University, Algeria**	
Dr.Kamel BENYELLOUL URAER, CDER Ghardaia, Algeria	Application of Artificial Intelligence in Materials: Hydrogen Storage	**09 :15** **10 :00**
Pr.Abdelkader AISSAT University Ahmed Draia Adrar, Algeria	Impact of nanostructures on solar cell efficiency	**10 :00** **10 :45**
Coffee Break **Poster session**		**10:45** **11:15**
Oral session		**11:00** **13:00**
Session Chairs **Pr. Ahmed Hadjadj** **URAER-MS Adrar, Algeria**	**Pr.Kamel Ben Yelloul** **URAER, CDER Ghardaia, Algeria**	**Pr. Kelthoum Chenini** **Ghardaia University, Algeria**
Pr. Ilhami COLAK, Istinye University İstanbul, Turkey	Impacts of Digital Transformation on Alternative and Green Energies	**11 :15** **12 :00**
Discussion and recommendation		
Closing remarks		**13:00**
Excursion and lunch		



In-person program

Conference Day 2 : October 16, 2024 — 14:00 17:00

Topic 1: Energy systems
Topic 2: Artificial Intelligence in Energy and Renewable Energies Systems and Industry
Topic 3: Materials and plasma
Topic 4: Environment
Topic 5: Natural Sources and Physicochemical Tests
Topic 6: Thermal Transfer

Room 1 (Topic 3)	Room 2 (Topic 1+2+6)	Room 3 (Topic 4+5)	
Session Chairs			
Pr. Kelthoum Chenini **Pr. Achi Fethi** **Dr.Yasmina Khane** **Dr. Oussama Bacha**	**Dr. Slimane Bellaouar** **Dr. Djemoui Lalmi** **Dr. Belgacem Bekkar**	**Pr. Zohra Babaamer** **Dr. Hadj Daoud Bouras** **Dr. Mounir Daoud**	
Oral Presentation			
MOSTEGHANEMI Nour El Houda (PO1) Structural and Thermodynamic Properties of Mg_2FeH_6 : DFT Study	**SAHEL Djamel (PO14)** Three-dimensional simulation of CPU heat sinks performance having perforation space and splitters supplement	**lamia BENNABI (PO21)** Use of nettle extract in a bio plastic and study of its biological and physicohemical activity	**14 :00** **14 :20**
Saadiya AFEISSA (PO2) Mechanical Properties of Peroxide XLPE HV Insulation Under Cyclic Accelerated Weathering Aging	**Boudabia Saad (PO17)** Machine Learning Models for Material Property Prediction	**Hamdache Farida (PO11)** Application of biocomposite material as adsorbent for removal of methylene blue	**14 :20** **14 :40**
Safa Benamor (PO3) Synthesis of Zn-Pb composite coatings for corrosion resistance	**Touati Soundous (PO18)** Accelerating Perovskite Discovery with Machine Learning: XGBoost Application on Open Quantum Materials Database	**Telhas Djihad (PO12)** Depollution of water contaminated by dye through adsorption	**14 :40** **15 :00**

BOUTICHE Salima (PO4) First-Principles Examination of Structural Phases in the Low Spin State of $BiCoO_3$	**Abderrahmane BAY AHMED (PO15)** CO_2 Closed Cycle Combined with Energy Storage System. Energy Storage System & its Destocking Using Cryogenic Technologies Coupled with Gas Turbine	**Hayet Makhdoumi (PO13)** The potential management hierarchy of Djebel-Onk Mine Wastes : A path towards sustainable mining in Algeria	**15 :00** **15 :20**
ROUAIGUIA Leila (PO5) Structural and thermodynamic properties of Mg_2FeH_6 : DFT study	**DJELLOULI Abdelkader (PO19)** Etude des propriétés thermodynamiques des hydrures métalliques par la méthode de l'exploitation des données : Application pour le stockage d'hydrogène	**Laghouiter Oum Kelthoum (PO22)** Evaluation of antioxidant and antimicrobial activities of Moringa leaves extracts from the region of Ghardaia	**15 :20** **15 :40**
BENTARFA Djehad (PO6) Elaboration and characterization of electrochemical sensors activated carbon-based material	**BAHRI Ahmed (PO20)** Hybrid Photovoltaic-Battery energy Systems with Fuzzy Logic Control of Three-Level NPC inverter	**Zohra BABAAMER (PO23)** Cardenolide glycosides from the aerial parts of *Pergularia tomentosa.L*	**15:40** **16:00**
	GUERRIDA Laid (PO16) The Effects of Partial Shading on PV Arrays	**ADDOUN Noura (PO24)** Extraction, characterization and rheological behavior of an arabinoxylan from Plantago ciliata Desf. Seeds	**16:00** **16:20**
		Farida Boulaghmen (PO27) Flood Risk Early Warning System in the Cities of Algeria	**16:20** **16:40**

Topic 3	Topic (1+2+6)	Topic (4+5)
Session Chairs		
Pr. Kelthoum Chenini **Pr. Achi Fethi** **Dr.Yasmina Khane** **Dr. Oussama Bacha**	**Dr. Saad boudabia** **Dr. Hemza Medoukali** **Dr. Hadj Yahia Seba**	**Mr. Ilyes Baba Arbi** **Dr. Khaira Bouamer** **Mr. Youcef Adamou**

Poster session 1

All Topics

N°	Participants	Title	Start discussion
PP1	Idriss Wafid Bouali	Multilayer adsorption study using the DLP theory and Monte Carlo simulation	
PP2	Wahiba Chaibi	Synthesis and Characterization of chemically Crosslinked pH-Sensitive Hydrogel and their application in controlled release of Diclofenac Sodium	**11.15**
PP3	BAHAMIDA Saida	Study the kinetics of the A1 to L10 transformation of polycrystalline Fe56Pd44 by FORC	**11.45**
PP4	Smaida Abdelhay	DSC and TGA ANALYSIS of THERMAL and ELECTRICAL AGING of HV 60 kV XLPE INSULATION	
PP5	Mokadem Safia	Interaction Matrix of Stark and Zeeman Effects in Hot and Dense Plasma	
PP6	Aissa Guesmia	Theoretical Study of Optoelectronic and Thermoelectric properties of double perovskites K2GeSiX6 (X = F, Cl, Br and I) compounds: by DFT approach	
PP7	Mohammed Abdelghani Ben Messaoud	Prediction of Mechanical Properties of Friction Stir Welding of Aluminum Alloy 6082-T6	
PP8	Khalid FAIZA	An Evaluation of the Impact of High Temperatures on Mechanical Behavior of Gas Turbine Blade with Different Materials	
PP12	AYACHI AMOR ASMA	Treatment of Fluoride Contamination from Water Environment Using Eggshells Waste as an Affordable Alternative Adsorbent.	
PP13	LAKHDARI Yasmine	The importance of nocturnal raptors in the protection of biodiversity of Saharan agroecosystems: Case of Touggourt	
PP14	Lakhdari Alia Sara	Investigation of the quality of the	

		groundwater and the nitrate pollution hazards to human health in the de-sert region of Algeria.	
PP15	Lakhdari Alia Sara	Mapping water quality indices (DWQI) to assess the hydrochemical quality of water in the Continental In-tercalary CI aquifer in the Algerian Sahara	
PP16	Bouchra Laouar	Phenotypic diversity of rhizobial isolates associated with peanut (Arachis hypogaea L.), grown in the region of Ghardaia	
PP17	Abdelkader Kessal	Adsorption of copper from aqueous solutions using adsorbents derived from local agricultural waste	
PP18	Bentaiba Fatiha	The influence of doping with metals cations on the photocatalytic degradation of Rhodamine 6G in the montmorillonite presence of TiO_2 nanoparticles/ composites	**11.15 11.45**
PP19	HADJ RAHMOUN Oum El Kheir	Numerical study of melting mode in Selective Laser melting process	
PP21	SAHEL Djamel	Filtration flux improvement in a membrane tube fitted with hemispherical baffles	
PP22	Aissaoui Faris	Experimental Investigation of Riblet Geometry for Drag Reduction on Multiform Bodies in Subsonic Flow	
PP25	Messaoudi Hadjer	Determination of petrophisical property of oil reservoir based on well logging data	
PP26	Aliouat Khadra	Optimizing Energy Efficiency: A Numerical Analysis of Solar-Powered Absorption Cooling with Thermal Energy Storage	
PP27	Sahari Mohamed Abdennour	Magnetic properties of Fe56Pd44−xGdx thin films	
PP30	Zababe ilyes	Detection of Shading Phenomenon in the Photovoltaic Solar Panel Using Artificial Neural Network Algorithm	
PP31	ABDELLATIF TAHTAH	Hybrid Solar Tracking System Using Artificial Neural Network and Fuzzy Logic Control for Optimized Photovoltaic Energy Capture	
PP33	BITEUR Kada	Performance evaluation of a single user receiver in the DS-OCDMA system	
PP34	BOUAMER Kheira	Etude de la qualité de l'eau du lac d'El-Menea	
PP35	Wassila Benchadi	Phytochemical study of various extracts prepared from an Algerian plant	

In-person program

Conference Day 3 : October 17, 2024	**11:00** **12:20**

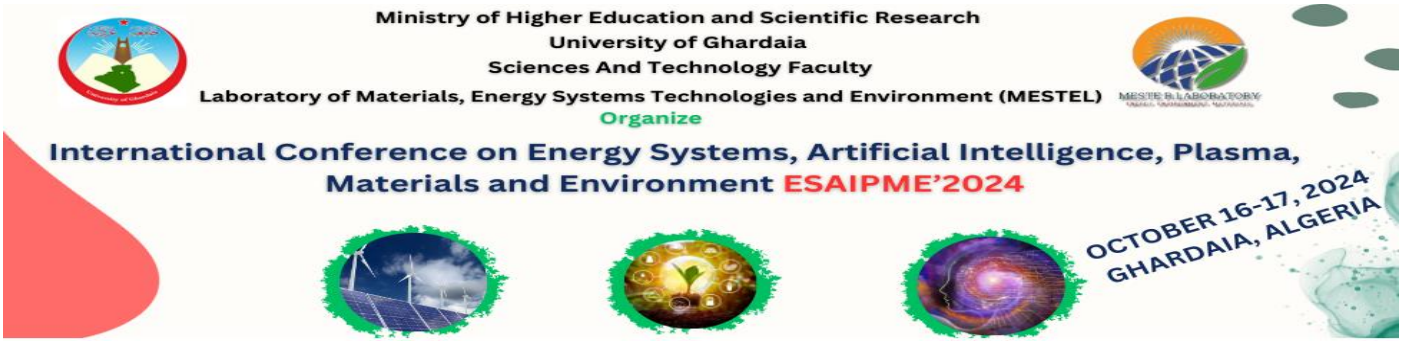
Topic 1: Energy systems
Topic 2: Artificial Intelligence in Energy and Renewable Energies Systems and Industry
Topic 3: Materials and plasma
Topic 4: Environment
Topic 5: Natural Sources and Physicochemical Tests
Topic 6: Thermal Transfer

Room 2 (Topic 1+2+3)

Dr. Aissaoui faris
Dr. Amine Fihakhir
Dr. Oussama Bacha

Oral Presentation

Walid Rezig (PO7) Preparation of diatomite supported iron ternary magnetic material and enhanced UV-responsive photoactivity and reusability	**11 :00** **11 :20**
Zineb HADJ AMAR (PO8) Study of polyene sequences evolution in thermally aged rigid Poly (Vinyl Chloride)	**11 :20** **11 :40**
Djemai Bara (PO9) The Impact of Relativistic and Suprathermal Phenomena on the Quality of Laser-Accelerated Beams	**11 :40** **12 :00**
Lafane Slimane (PO10) Thickness effect on the Thermoresistive Properties of Vanadium Oxide Thin Films for Microbolometers	**12 :00** **12 :20**
Said MOSBAH (PO26) High sensitivity microwave sensor based on meta-materials for the characterization of liquid media	**12 :20** **12 :40**
Rouibah Abdelkader (PO25) Precise Calculation of Effective Direct Normal Irradiance (DNI) and Optimization of Concentrated Solar Power Performance in Algeria (Ouargla and El oued regions)	**12 :40** **13 :00**



Topic 3	Topic (1+2+6)	Topic (4+5)
Session Chairs		
Pr. Achi Fethi	**Dr. Kada Biteur**	**Dr. Bahmed Fekhar**

Poster session 2

All Topics

N°	Participants	Title	Start discussion
PP9	Derbali Imane	The SYNTHESE of (METHOXYCARBONYMETHYL) TRIPHENYLPHOSPHONIUM BROMIDE AND HIS OXYDES	
PP10	Yasmina Khane	Investigation of mechanical properties of synthesis ali-phatic polyester/ layered silicateon of mechanical properties of synthesis ali-phatic polyester/ layered silicate	**10.45** **11.15**
PP11	KESBI BRAHIM	Use Agricultural application software and environment safe	
PP20	AKROUR Dalila	Heat transfer enhancement by electroconvection in a square Enclosure utilizing nanofluids	
PP23	Mohammed Azzaoui	An experimental study, energy and exergy analysis of solar stills	
PP24	TAHTAH Reda	An experimental investigation aimed at utilizing ambient air convection within a channel to cool a horizontal aluminum cylinder	
PP28	Sifia BELGHERRAS	Energy efficiency integration of off-grid photovoltaic systems	
PP29	Amine Mehdi FIHAKHIR	Third-Order Sliding Mode Applied to Dc-Bus voltage regulator for PV application	
PP32	HAFSI ZOULIKHA	Deep Neural Network-Based Prediction of Mechanical Properties in Poly(ethylene adipate) Thin Films with Zinc Oxide Nanoparticle Reinforcement	
PP36	RAACHE IMANE	Encapsulation of Laurus Nobilis.L essential oil for biotechnological applications	

PP37	Benatallah Yacine	Optimized MPPT Control Using Genetic Algorithms for Boosted Photovoltaic Systems in Changing Environmental Conditions
PP38	Daoud Mounir	Sustainable Dye Removal Using Jujube Stone-Based Activated Carbon
PP39	Djaouida Hadj Bachir	Synthesis and carachterization of TiO_2 pillared clay. Effect of the photocatalyst loading on the photocatalytic degradation of linuron in Aqueous Suspension
PP40	Mosbah Charaf Abdelkarim	Bifacial PV Modules: Current Challenges and Opportunities
PP41	Mosbah Charaf Abdelkarim	Impact of Albedo Factor on the Performance of Bifacial PV Modules
PP42	BOUKHARI Hamed	Synthesis and Characterization of LDPE/MgO Nanocomposite Films for Enhanced Electrical Insulation Performance
PP43	Bachir Amieur	Effects of angular momentum and spin on electron scattering by a hydrogen like atom
PP44	Amel Trabelsi	Analyzing Thermal Heat Exchanges in a Concentric Tube Heat Exchanger through Simulation
PP45	Brahim Zitani	Environmentally Friendly Treatment of Oil-Based Drilling Waste Using Thermal Desorption Method focus on Energy Balance
PP46	Brahim Zitani	Modeling the Annual Solar Energy Availabile on Inclined Flate Plate Collector in Ghardaia and Optimizing the Slope Angle
PP47	Lakhdar Bouragbi	Reducing Irreversibilities in Mini-Channel Solar Collectors: A Computational Investigation into Optimal Working Fluid Choices
PP48	Bennabi Farid	Comparative Study of the Biological Activities of Nanoparticles and Aqueous Extracts of the Medicinal Plant Ricinus communis in the Ain Temouchent Region
PP49	Bouras Hadj Daoud	Experimental Study of Clofibric Acid Removal by Adsorption onto Tamarix articulata stems in Aqueous Solution

Virtual program

Conference Day 1 : October 15, 2024	9:00 12:30

Room 1	Topic : Energy Systems	Session Chairs: ➢ Dr. Bahmed Fekhar ➢ Dr. Imane Raache ➢ Dr. Yacine Benatallah	Link1
09:00 – 10:30 15/10/2024	ES-O-1 | ES-O-2 | ES-O-3 | ES-O-4 | ES-O-5 | ES-O-6 | ES-O-7 | ES-O-15		
11:00 – 12:30 15/10/2024	ES-O-8 | ES-O-9 | ES-O-10 | ES-O-11 | ES-O-12 | ES-O-13 | ES-O-14		

Room 2	Topic : Energy Systems && Artificial Intelligence in Energy and Renewable Energies Systems and industry	Session Chairs: ➢ Pr. Abdelmadjid Kaddour ➢ Dr. Reda Tahtah ➢ Dr. Salah Bouhoun ➢ Dr. Abdessalam Kifouche	Link2
09:00 – 10:30 15/10/2024	ES-P-1 | ES-P-2 | ES-P-3 | ES-P-4 | ES-P-5 | ES-P-6 | ES-P-7 | ES-P-8 | ES-P-9 | ES-P-10 | ES-P-11 | ES-P-12 | ES-P-13 | ES-P-14 | ES-P-15		
11:00 – 12:30 15/10/2024	AI-O-1 | AI-O-2 | AI-O-3 | AI-O-4 | AI-O-5 | AI-O-6 | AI-P-1 | AI-P-2		

Room 3	Topic : Natural Sources and Physicochemical Test && Thermal Transfer	Session Chairs: ➢ Dr. Noura Addoun ➢ Dr. Matallah Messaouda ➢ Dr. Abdelhakem Belaghit ➢ Mr. Akermi Faouzi	Link3
09:00 – 10:30 15/10/2024	NS-O-1 | NS-O-2 | NS-P-1 | NS-P-2 | NS-P-3 | NS-P-4 | NS-P-5		
11:00 – 12:30 15/10/2024	TH-O-1 | TH-O-2 | TH-P-1 | TH-P-2 | TH-P-3		

N.B.: If you have any problems, please contact the organisation committee in Room 0.

Room 4	Topic : Environment	Session Chairs: ➢ Dr. Mohammed Aouf ➢ Dr. Fares Fenniche	Link4
09:00 – 10:30 15/10/2024	ENV-O-1 | ENV-O-2 | ENV-O-3 | ENV-O-4 | ENV-O-5 | ENV-O-6 | ENV-O-7 | ENV-O-8 | ENV-O-9		
11:00 – 12:30	ENV-O-10 | ENV-O-11 | ENV-O-12 | ENV-O-13 | ENV-O-14 | ENV-P-1 | ENV-P-2 | ENV-P-3		

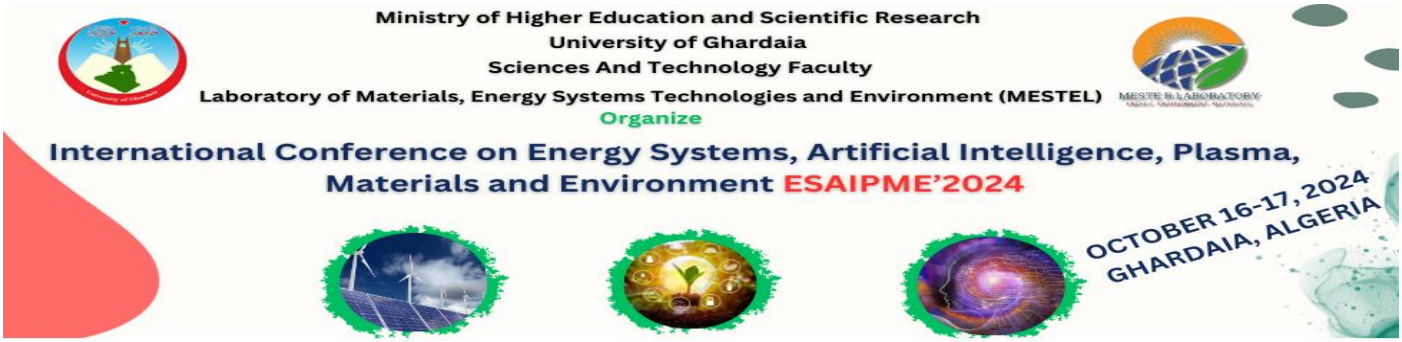
Room 5	Topic : Environment	Session Chairs: ➢ Dr. Djehad Bentarfa ➢ Dr. Mounir Daoud	Link5
09:00 – 10:30 15/10/2024	ENV-P-4 | ENV-P-5 | ENV-P-6 | ENV-P-7 | ENV-P-8 | ENV-P-9 ENV-P-10 | ENV-P-11 | ENV-P-12 | ENV-P-13 | ENV-P-14 | ENV-P-15		
11:00 – 12:30 15/10/2024	ENV-P-16 | ENV-P-17 | ENV-P-18 | ENV-P-19 | ENV-P-20 | ENV-P-21 ENV-P-22 | ENV-P-23 | ENV-P-24 | ENV-P-25 | ENV-P-26		

Room 6	Topic : Materials and Plasma	Session Chairs: ➢ Dr. Kesbi Brahim ➢ Dr. Djaber Aouf ➢ Dr. Toufik Bousnane	Link6
09:00 – 10:30 15/10/2024	M&P-O-1 | M&P-O-2 | M&P-O-3 | M&P-O-4 | M&P-O-5 | M&P-P-21 | M&P-P-22 | M&P-P-23 | M&P-O-26		
11:00 – 12:30 15/10/2024	M&P-O-6 | M&P-O-7 | M&P-O-8 | M&P-O-9 | M&P-O-10 | M&P-P-24 | M&P-P-25		

Room 7	Topic : Materials and Plasma	Session Chairs: ➢ Dr. Yasmina khane ➢ Dr. Zoulikha Hafsi	Link7
09:00 – 10:30 15/10/2024	M&P-O-11 | M&P-O-12 | M&P-O-13 | M&P-O-14 | M&P-O-15 | M&P-P-26 | M&P-P-27 | M&P-P-28		
11:00 – 12:30 15/10/2024	M&P-O-16 | M&P-O-17 | M&P-O-18 | M&P-O-19 | M&P-O-20 | M&P-O-27		

Room 8	Topic : Materials and Plasma	Session Chairs: ➢ Dr. Hadj Daoud Bouras ➢ Dr. Said Mosbah ➢ Dr. Zineb Hadj Amar	Link8
09:00 – 10:30 15/10/2024	M&P-O-21 | M&P-O-22 | M&P-O-23 | M&P-P-6 | M&P-P-7 | M&P-P-8 | M&P-P-9 | M&P-P-10 M&P-P-1 | M&P-P-2 | M&P-P-3 | M&P-P-4 | M&P-P-5		
11:00 – 12:30 15/10/2024	M&P-O-24 | M&P-O-25 | M&P-P-11 | M&P-P-12 | M&P-P-13 | M&P-P-14 | M&P-P-15 | M&P-P-16 M&P-P-17 | M&P-P-18 | M&P-P-19 | M&P-P-20		

N.B.: If you have any problems, please contact the organisation committee in Room 0.



Link 1	https://meet.google.com/zrk-btdj-ukm
Link 2	https://meet.google.com/nju-ddte-mxw
Link 3	https://meet.google.com/vrj-gnpj-jzu
Link 4	https://meet.google.com/fqc-xkes-jjo
Link 5	https://meet.google.com/fba-hbkv-pgi
Link 6	https://meet.google.com/gzf-crxg-uci
Link 7	https://meet.google.com/phr-pzfu-omm
Link 8	https://meet.google.com/wyy-pybe-ryi
Room 0	https://meet.google.com/tnr-rhvs-tda

Topic	Energy Systems		
ID	**Author**	**Title**	**Type**
ES-O-1	Andrii Velychkovych	Tandem Use of the Improved Downhole Motor Support and Plate Shock Absorber for Drilling Geothermal Wells	**Full In- Virtual (Oral)**
ES-O-2	Bazzine zineb	Developing an optimal matrix treatment strategy for Haoud Berkaoui oil fields	
ES-O-3	Bechlaghem sara	Performance of CIGS solar cell with non-toxic buffer layer	
ES-O-4	Belhait Abdekaziz	Implementation a High Order Sliding Mode Control for Maximum Power Point Tracking (MPPT) in Wind Energy Conversion Systems	
ES-O-5	Belhamideche Kheira	A numerical investigation on the cooling applications of horizontal air-to-ground heat exchangers	
ES-O-6	Bitour Yousra	The Flare gas recovery systems	
ES-O-7	Cristian Barz	Data Management Interface for Temperature Control with SMART-MAIC D105-12	
ES-O-8	Draoui Ahmed	Comparative Analysis of Photovoltaic Performance: Laboratory-Synthesized versus Commercial oxide in Dye-Sensitized Solar Cells	
ES-O-9	Ghania DEKKICHE	Synthesis and characterization of ZnO nanoparticles in 1-methyl-3-propylimidazolium iodide ionic liquid	
ES-O-10	Righi Aya	Insight into structural, electronic and thermoelectric properties of half-Heusler compound: Competitive candidate for energy and environmental sustainability	
ES-O-11	Sek Lakhdar	Investigation of an InGaN/Si-Based Heterojunction Tandem Solar Cell	
ES-O-12	Sonia Chebouki	A DFT study of perovskite type halides $KXCl_3$ (X = Be and Ca): structural, electronic and mechanical properties.	
ES-O-13	Volodymyr Kopei	Improving the Leak-Tightness of Casing Joints by Increasing the Accuracy of Thread Machining	
ES-O-14	BAHMED FEKHAR	Aspen Plus Software Application for the Numerical Simulation of Biomass Waste Gasification	
ES-O-15	hamzaoui assia	High-Sensitivity Surface Plasmon Resonance Sensor Using Photonic Crystal Fibers with Horizontal Elliptical Air Holes	
ES-P-1	Abdelbasset Rahmoune	Numerical analysis of MoS_2 based solar cell using non-toxic In_2S_3/SnS_2/ZnSe Electron transport layer	**Full In- Virtual (Poster)**
ES-P-2	AYACHI AMAR Abdelouhed	Modelling of dynamic stall in a rotor of a wind turbine with vertical axis darrieus type h using comsol multiphysics	
ES-P-3	Bouabdallah Mounira	TOMORROW'S ENERGY IN THE HANDS OF STORAGE	
ES-P-4	Chelgham Fatiha	Electrochemical Corrosion Behavior by ZnO and TiO_2 thin films deposited on Carbon Steel	
ES-P-5	El Mouatez Billah MESSINI	Techno-Economic Evaluation of Green Hydrogen Production from Solar Energy in Southern Algeria	
ES-P-6	HAMLA Meriem	Synthesis of the semiconductor material from a binary zinc sulfide alloy as a precursor for solar cells	
ES-P-7	Khenfer Hana	Structural and electronic properties of hydrogen Storage in NaH and Na_7CH_8 hydrides	
ES-P-8	Korichi Zineb	The effect of solar tracking devices on the performance of the photovoltaic unit in the Sidi Khouiled Ouargla region	
ES-P-9	MOHAMED SEGHIR Zahira	Recovery of zeolite 4a for Depollution of discharge water from Industrial units	
ES-P-10	Medjenah Samia	Exact solution of time-independent one-dimensional Klein-Gordon	

		equation by SUSY QM approach in the presence of scalar potentials and vector potentials	
ES-P-11	Messaoudi Abdelkarim	Heusler Alloys: The Next Generation of Thermoelectric Materials for Efficient Energy Conversion	
ES-P-12	MOHAMED SEGHIR Zahira	study of Morphology and thermal properties of poly(butylene terephtalate) nanocomposites	
ES-P-13	LAKHDARI Amani Sabrine	A numerical simulation and analysis of perovskite solar cells utilizing different electron transport materials	
ES-P-14	Djamila Rekioua	Development of a Power Management Control of Photovoltaic System with Batteries storage	
ES-P-15	Mokrani Zahia	Energy Management Strategy for a Hybrid PV/Fuel Cell/Battery Energy Conversion System	

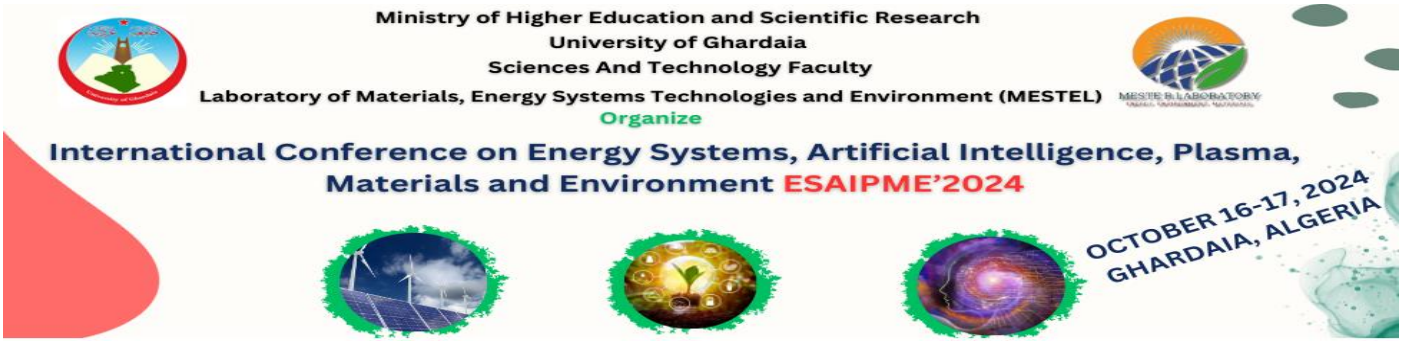
Topic	**Artificial Intelligence in Energy and Renewable Energies Systems and industry**		
ID	**Author**	**Title**	**Type**
AI-O-1	Assia MEZIANI	EVALUATION OF TAKAGI-SUGENO FUZZY INFERENCE FOR ESTIMATING EVAPOTRANSPIRATION IN MILA-ALGERIA'S SUB-HUMID CLIMATE	**Full In- Virtual (Oral)**
AI-O-2	Benyoucef Rania	Enhancing fault tolerance performance of PV system under partially shaded conditions using an Inc-IT-2FLC hybrid controller	
AI-O-3	Cherifa KARA MOSTEFA KHELIL	Intelligent fault diagnosis of PV systems based on Random Forest classifier	
AI-O-4	Volodymyr Kopei	Python-framework for Mobile Robot Competition. Classification of information resources of PLM systems based on the principles of systems theory and machine learning methods	
AI-O-5	Yasmine Senouci	Particle swarm optimization to extract the temperature-dependent capacitance-voltage characteristics of NiO/Ga_2O_3 heterojunction diode	
AI-O-6	Farouk NOUIZI	Innovative Hybrid MRI/NIR Laser System for Non-Invasive Tissue Oxygenation Monitoring	
AI-P-1	ASMA Kadri	Advances in Artificial Intelligence for Reservoir Characterization in Petroleum Engineering	**Full In- Virtual (Poster)**
AI-P-2	Nabil MEZHOUD	Energetic efficiency enhanced and environment indicator optimization of hybrid microgrids enriched by renewables energies sources using swarms intelligence algorithm and nature-inspired methods	

Topic	Natural Sources and Physicochemical Test		
ID	**Author**	**Title**	**Type**
NS-O-1	OUAISSA Meriem	Predicting the blood-brain barrier permeability values (logBB) of CNS drugs using a QSPR modeling: a hybrid Dragonfly-Support Vector Regression Algorithm (DA-SVR)	**Full In- Virtual (Oral)**
NS-O-2	Zineb Laali	The Soxhlet Method: Unlocking the Potential of Extractives for Pharmaceutical Applications	
NS-P-1	AMMAR Lalia	Valorisation de l'huile essentielle du Faux Poivrier dans la région de Mascara	**Full In- Virtual (Poster)**
NS-P-2	Boudjellal Djamel	Bioactivity of Biopolymers Extracted From Plant Biomass	
NS-P-3	BOUZIANE AMEL	Phytochemical Analysis and Antioxidant activity of different extracts of Cytisus villosus.	
NS-P-4	Djalila AOUFI	Physicochemical characterization of biocomposite based films plasticized with glycerol/DL-lactic acid mixture	
NS-P-5	YOUNES Ikhlas	Phytochemical screening and yield of two differential extracts obtained by soxhlet from a species of the Asteraceae family from the Ain Temouchent region	

Topic	Thermal Transfer		
ID	**Author**	**Title**	**Type**
TH-O-1	BENDEHIBA SID AHED	DFT STUDIES ON ELECTRONIC, OPTICAL PROPERTIES OF NEW HALF-HEUSLER XRhZ	**Full In- Virtual (Oral)**
TH-O-2	AKERMI FAOUZI	Dimensioning of an Air Solar Collector to Power a Heat Pump	**Full In- Virtual (Poster)**
TH-P-1	GHOZLANE Ismail	Simulation Study of Steady-State Temperature Distri-bution in an Oil-Cooled Annular Transformer	
TH-P-2	Rania Boudebane	Study of heat transfers in a silico-clay sand mold in the presence of copper plates	
TH-P-3	BELAGHIT Abdelhakem	Analysis of the influence of geometric and thermal parameters on the performance of a heating installation	

Topic	Environment		
ID	**Author**	**Title**	**Type**
ENV-O-1	Abdelkader Guemgam	Treatment of Water Polluted by Adsorption Activated Carbon Prepared from Local Date Pits	**Full In- Virtual (Oral)**
ENV-O-2	Asma Bellaouar	Heterogeneous Fenton process for the degradation of an azo dye: Methyl orange using iron modified dolomite as a catalyst.	
ENV-O-3	Bendellaa ramila chahinez	Innovations in Water Treatment : The Integration of Adsorption Techniques	
ENV-O-4	BOUCHAALA Laid	Evaluation of the Environmental Impact of Wastewater Treatment in Algeria: A Case Study of WWTPs and LTPs	
ENV-O-5	BOUCIF Fatima	Application of ZnFe-LDH layred double hydroxide and calcination product for adsorptive removal of anionique Dye from aqueous solution: Thermodynamic and modélisation study	
ENV-O-6	Driouch Aouatef	Removal of Pollutant (dye) from Wastewater using Low-cost Adsorbent	
ENV-O-7	Hamadi Zineb	Application of Heusler Materials in Reduction of Greenhouse Gaz emissions	
ENV-O-8	Kattia YALAOUI	Effets des Fibres Végétales (Malva) sur les Propriétés Physico-Mécaniques de la Matrice Cimentaire	
ENV-O-9	khenfer siham	Synthèse écologique de nanoparticules : aperçu sur des méthodes de biosynthèse et de caractérisation	
ENV-O-10	Laila NAIB	Study of the phytoremediation potential of Atriplex halimus L. and Atriplex canescens (Pursh) Nutt. For lead-contaminated soil cleanup (biochemical parameters)	
ENV-O-11	Masuoda Farhat	Corrosion Inhibition of Medium Carbon Steel in the hydrochloric acid Using Aqueous Extract of Saussurea costus	
ENV-O-12	Mohammed AOUF	Washing of TPH contaminated soil using SLES solution on a fluidization column	
ENV-O-13	RABIE Renad	Effect of microwave irradiation time on the preparation of a porous material from vegetable waste	
ENV-O-14	Souheyla BOUDJEMA	Synthesis of Keggin-type 11-vanado tungstophosphates encapsulated into mesoporous silica pillared clay and their catalytic performance in cyclohexene oxidation	
ENV-P-1	BAIDAR Lokmane Abdelkaddous	A polymer/activated carbon composite for the elimination of oil spills in the oceans.	**Full In- Virtual (Poster)**
ENV-P-2	BENHOURIA Assia	Highly efficient removal of acid blue 29 by adsorption onto chitosan beads	
ENV-P-3	Bouabdallah mounira	RENEWABLE ENERGY IS GATE FOR MODERN DESALINATION	
ENV-P-4	Bouldiab Yasmine	Computational analysis of new half-Heusler material for heat recycling process: an environmentally friendly energy resource	
ENV-P-5	Chala mouna	Optimization of a pharmaceutical pollutant degradation by homogeneous fenton oxidation using a box-behnken design	
ENV-P-6	DALI Awatef	Decolorization of the azo dye Orange G by the Fe (III)-EDDS/persulfate/UVA process in aqueous medium: reaction kinetics and mechanism	

ENV-P-7	DELALI Halima	Kinetics of Removal of a Cationic Dye by Activated Carbon Based on Nut Shells
ENV-P-8	GOUSMI Nawel	Effect of bentonite addition on electrocoagulation process to remove the organic matter in cutting oil emulsion
ENV-P-9	Guerdouh Amal	Etude Expérimentale du Pouvoir Extractif d'une Base de Schiff Polydentate Devant Les Ions du Cuivre (Cu^{+2}).
ENV-P-10	Guerdouh Amal	Évaluation de l'activité antibactérienne d'un ligand base de Schiff bidentate.
ENV-P-11	Guermoud Nor Eddine	ESSAIS DE TRAITEMENT DES LIXIVIATS DES DECHETS MENAGERS DE LA VILLE DE MOSTAGANEM (OUEST ALGERIE) PAR EVAPORATION FORCEE
ENV-P-12	Hafsa MOKRI	Comprehensive Evaluation of MIP-202 Metal-Organic Framework for Enhanced Adsorption in Environmental Applications.
ENV-P-13	Hafsa MOKRI	Adsorption Characteristics of UIO-66-NH_2 Metal-Organic Framework: Kinetic and Thermodynamic Analysis.
ENV-P-14	Imane Akacha	Optimizing process parameters for adsorption of pharmaceutical contaminant
ENV-P-15	Kahina Bedda	Catalytic Converters for Automotive Exhaust Gas Treatment: Construction, Operation and Types of Catalysts
ENV-P-16	Kedjar Nedjla	Optimizing Coffee Grounds Recycling and Their Applications in Hexavalent Chromium Removal
ENV-P-17	Kouroulou Zoubida	Valorization of lignocellulose as the biosorbent of heavy metal ions from the contaminated water
ENV-P-18	LOUAHEM M'SABAH Ahmed Nabil	Effect of gamma irradiation on the performance of composites of HDPE and spent coffee grounds
ENV-P-19	LOUAHEM M'SABAH Ahmed Nabil	Development of high-density polyethylene and polypropylene composites through the reuse of coffee waste
ENV-P-20	Omar BERKANE	Synthesis of a New Generation of Green Solvents (deep eutectic solvents) and Their Applications in Liquid-Liquid Equilibria for Pollutant Extraction
ENV-P-21	Oufella sarah	A Decision Making Model Based On TOPSIS Method For Evaluating Water Resource Management Strategies
ENV-P-22	Rezala Houria	Adsorption of anionic dye by intercalated montmorollonite
ENV-P-23	Sellam Badreddine	Enhanced activation of Calcium peroxide by the Fe(III)-picolinic acid complex under UVA irradiation for metobromuron degradation
ENV-P-24	Timedjeghdine Mebarka	The influence of the temperature on the liquid–liquid equilibrium of the ternary system (water, 1-pentanol, isobutyl alcohol)
ENV-P-25	Timedjeghdine Mebarka	Experimental study and thermodynamic modeling of phase equilibria of systems containing water, lactic acid and alcohols (C4 and C5)
ENV-P-26	Souheyla BOUDJEMA	Synthesis and characterization of novel Keggin-type polyoxometalate nanocatalysts for Congo red degradation



Topic	Materials and Plasma		
ID	**Author**	**Title**	**Type**
M&P-O-1	Assala HAMIDANI	Semi-empirical and empirical calculation of Kβ/Kα intensity ratios for elements with $31 \leq Z \leq 40$	**Full In- Virtual (Oral)**
M&P-O-2	Ayoub BENGHERBIA	Investigation of Electromagnetic Properties of a Composite Material Based on Epoxy Resin Using X-Band Microwave Test Bench Characterization Technique	
M&P-O-3	BELGUENOUNE Ahmed	Comparative Analysis of Structural and Electrical Properties in Un-doped and Bi-doped Lanthanum Ferrite Nanoparticles	
M&P-O-4	BELHADJI Kenza Amel	The biological, photocatalytic and adsorption properties of biosynthesised MnO nanoparticles used in pollution control.	
M&P-O-5	Boukhamla Yousra	A new additive material is engineered to boost both effi-ciency and performance in cement manufacturing process	
M&P-O-6	Chakour naziha	Synthesis and characterization of the $LaFeO_3$ perovskite by samarium substitution: La (1-x) $SmxFeO_3$."	
M&P-O-7	Djaber Aouf	Photocatalytic Degradation of Methylene Blue Using Zinc Sulfide-Based Thin Films Prepared by Spin Coating	
M&P-O-8	Djamel Eddine Zenkhri	The use of machine learning to predict Gaunt-factor	
M&P-O-9	Fares Fenniche	Electrochemical Nanocomposite Sensor for Sensitive Detection of Lead Concentrations	
M&P-O-10	GHITRI Feriel	Extraction of lanthanum(III) by a magnetic nanocomposite	
M&P-O-11	Karima BAGHDAD	Synthesis of Clay - Microcrystalline Cellulose Films for Medical Bench Cover	
M&P-O-12	KHARROUBI ABDELMALEK	Effect of ZrO_2 doped $CuCo_2O_4$ on the optical and electrical properties	
M&P-O-13	MECHEHOUD Khedidja	Full-Heusler alloys: a future perspective for revolutionizing conventional semiconductor technology	
M&P-O-14	Mohammed Lamine BOUCHAREB	Thermal Buckling Characteristics SWBNNT Embedded in Pasternak Elastic Foundation using NFSDT Theory	
M&P-O-15	Nemiri Ouarda	DFT-Based Calculations of the Structural, electronic properties and phase transition of InxGa1-xSb ternary alloys	
M&P-O-16	Ouldhamadouche Nadir	Physicochemical properties of nickel oxide deposited by magnetron-assisted sputtering for photovoltaic applications	
M&P-O-17	Oumelaz Fayçal	An investigation using DFT methods on the structural, electronic properties and phase transition of InxB1-xSb ternary alloys	
M&P-O-18	RAMDANI Halima	Investigation of the Dielectric and Thermodynamic Properties of Transition-metal Ions Doped in Zinc Sodium Phosphate Glass	
M&P-O-19	Seksak Youssef	DFT study for fundamental physical characteristics of the zinc-blende BexMgyZn1-x-yO alloys	
M&P-O-20	SIOUANI Chaouki	Atomic-scale simulation of the engineering of stable arsenic nanomaterials for nanotechnology applications	
M&P-O-21	SMATI Sabrina	Theoretical Investigation and Pharmacological Potential of (E)-3-(2-chlorophenyl)-1-(2,5-dichlorothiophen-3yl)prop-2-en-1-one: A DFT, Hirshfeld Surface, NCI-RDG, and Molecular Docking Study	
M&P-O-22	Wissem gouasmia	Structural, electronic, thermal and elastic Properties of CsPbCl3 Perovskite: a density functional study	
M&P-O-23	Djamel Eddine Zenkhri	The QGP thermodynamic properties under the general-ized uncertainty principle	
M&P-O-24	Abdelhakim Benkrane	Bright Soliton in a box under the impact of generalized momentum	

		operator	
M&P-O-25	OKBI Farid	First-Principles study of the physical properties of tungsten disulfide by CASTEP	
M&P-O-26	Toufik BOUSNANE	Contact pressure between two surfaces	
M&P-O-27	SADOK HADJADJ	Improved power generation based on deformation of lead zirconate titanate (PZT) piezoelectric ceramics for energy harvesting applications with renewable energy	
M&P-P-1	Amraoui Fatma	Doped Ga_2O_3 thin films by sol-gel method: optical, structural, and morphological properties	**Full In- Virtual (Poster)**
M&P-P-2	Ayachi Omar Ali	Effect of Changing the Deposition Angle on The Growth Behavior and Topography of the Ti Film Deposited Over a Large Area Using DC Magnetron Sputtering with a Rectangular Target	
M&P-P-3	BEHISSA SOUAD	Effect of Stabilizers on the optical band gap and carbon clusters of LDPE films Under Natural Weathering in Ghardaïa, Algeria	
M&P-P-4	Belabed Ahlam	CHARACTERIZATION OF n-MCM-41 MATERIAL MODIFIED BY IMPREGNATION METHOD	
M&P-P-5	Benhouria Basma	Structural and optical properties of Eu^{3+} in a novel un-conventional glass incorporating Sb_2O_3	
M&P-P-6	DAHO Salah Eddine	First-Principles Calculations (FP-LMTO) on Structural and Electronic Properties of compound CaTe	
M&P-P-7	DEMMOUCHE Soumia	Investigated of the Physical Properties of Oxide Perovskite $YFeO_3$: ab-initio Study	
M&P-P-8	FATIMA ZOHRA KARIMA HAMDI	Electrodeposition of Co-Fe alloys coatings: effect of organic additives	
M&P-P-9	NESRINE LOUATI	Analytical study of the structural stabilities, phase transition, electronic and elastic properties of gallium antimony and gallium phosphide	
M&P-P-10	Guerrida Houria	The distribution function of the electric micro field of magnetized plasma	
M&P-P-11	Halima HABIEB	Synthesis and photoluminescence of SnO_2: Sb thin films	
M&P-P-12	Hamdi cherif Mohammed	Theoretical Investigation of Sr2MnWO6 for Nanotechnology and Plasma-Based Renewable Energy Applications	
M&P-P-13	HAMDI Dounia	Structural and optical properties of La^{3+} doped $BaTiO_3$ powders hydrothermally synthesized	
M&P-P-14	Khatar abdelhak	Barium Gold Bismuthide: A Sustainable Material for Next-Generation Thermoelectrics	
M&P-P-15	Kopei Bogdan	Efficiency of Hybrid and Carbonfiber Sucker Rods	
M&P-P-16	Kopei Bogdan	Fatigue Damage Investigation of Hybrid Sucker Rod	
M&P-P-17	Kopei Bogdan	Investigation of Sucker Rod Resistance to Corrosion Fatigue Failure	
M&P-P-18	Kopei Bogdan	Reliability Improvement of Shear Ram Preventer	
M&P-P-19	Leyla YOUNES	Optimization of the ion exchange time of soda-lime silicate glass	
M&P-P-20	Louiza Tahraoui	Zn-Co-Al_2O_3: Electrochemical Deposition, Structure and Corrosion Resistance	
M&P-P-21	Mebarkia Ishak	DFT Investigation of Sodium Gold (III) Fluoride: Unveiling a New Advanced Material for Optoelectronic Applications	
M&P-P-22	MECHEHOUD NOUREDDINE	Environmentally Friendly Energy Potential of Cloro-Elpasolite Cs2NaVCl6 First-principles Investigation of Optical Properties using GGA+U Approach	
M&P-P-23	Mouattah Dalila	Synthesis, characterization, and optical properties of bismuth-based perovskites: monometallic MBiO3 (M: Ba, Ca, Sr, La, and Al), and	

		solid solutions Ba1-xSrxBiO$_3$ (x= 0, 0.2, 0.4, 0.6, 0.8).	
M&P-P-24	Noureddine Saidi	Theoretical Investigation on Ba_2DyTaO_6 oxide double perovskite	
M&P-P-25	Sassoui khadidja	Investigating the structural and electronic properties of quaternary Heusler alloys through density functional theory (DFT)	
M&P-P-26	TEKILI Adel	Impact of Laser Fluence on AlN Plasma Emission	
M&P-P-27	TERKHI MOHAMMED CHERIF	Equilibrium, kinetic and thermodynamic studies of the adsorption of a toxic heavy metal "Hg" by zinc oxide nanoparticles derived from a green synthesis	
M&P-P-28	Abdelhafid Kellou	Electronic and Optical Properties of Graphene, Silicene and Germanene Doped with P, Ti and Fe	