



NATIONAL CONFERENCE ON ADVANCED MATERIALS FOR SUSTAINABLE ENERGY TRANSITION

NC – AMSET2025

June 25th,2025

**University of Medea, Ouzera University Campus, Medea,
Algeria**



WELCOME MESSAGE

Dear Esteemed Guests, Participants, and Colleagues,

It is with great pleasure and excitement that I extend a warm welcome to each and every one of you to the National Conference on Advanced Materials for Sustainable Energy Transition (NC-AMSET25), held on June 25th, 2025, at Medea University, Algeria.

During the conference, you'll have an exciting chance to meet fellow researchers, industry experts, and practitioners who are as passionate about sustainable energy as you are. This is a fantastic opportunity to dive into meaningful conversations, share your ideas, and collaborate on projects that can truly shape the future of our field.

We really value your commitment to advancing sustainable energy solutions, and we can't wait to see the insights and innovations that come from our collective efforts.

Make sure to take full advantage of everything the conference has to offer—attend workshops, join discussions, and network during breaks. It's a great time to learn from each other and share your own experiences. Together, let's inspire change and make real progress toward a more sustainable world!



Dr. HADJA Kaouthar

Dr. LABBADLIA Omar



Contact:

Pr. ZIDANI Mosbah

Scientific advisor at the MESRS

E-mail: m.zidani@univ-batna2.dz

Professional web site:

<http://staff.univ-batna2.dz/zidani-mosbah>

Scopus Auto ID: **23136061800**

ORCID: **0000-0002-7229-8841**

ZIDANI Mosbah currently is a Professor in the Faculty of Technology at Batna 2 University. He is the chief of a research team in the LGEM Laboratory at the University of Biskra. He is particularly interested in the development and characterization of innovative metallic materials. He was chairman of the scientific committee of the metallurgy department, member of the Scientific Council of the Faculty of Science and Technology and chairman of several doctoral training at the University from Biskra and currently he is a Scientific advisor at the MESRS and President of the regional commission (HU) at the Cru-Est. The research axes currently developed are mainly focused on the experimental study of the microstructures, deformation and recrystallization texture of metal alloys by SEM, EBSD, RX and neutron diffraction

Pr. Zidani is the author of over fifty (50) international scientific papers (indexed by: Thomson Reuters /Scopus -Elsevier). He has over 170 participations in national and international conferences in the last ten years, which he has presented dozens national and international plenary conferences as an Invited Speaker. Pr. Zidani has chaired and organized several national and international scientific events and also member of the scientific committee in more than seventy (70) national and international scientific events. He is the main Editor of the special issue of journals (DF, DDF and SSP indexed by: Scopus -Elsevier) of the scientific.net house in Switzerland and also Editorial Board member and Evaluation expert (Reviewer) in several high-level journals (Steel research international, JERA, JNanoR, Journal of Molecular Liquids, JMES.... indexed by: Web of Science and Scopus-Elsevier).

Prof. ZIDANI has directed and discussed fourteen (14) doctoral theses and more than thirty-five (35) master's degree and final projects for engineering students. **Supervision of Master START-UP projects (according to decree 1275)** supported in July and September 2023, in collaboration with an industrial partner from a vital national socio-economic sector and in cooperation with research teams from laboratories of Algerian universities

Prof. ZIDANI has directed several national research projects (CNEPRU, PNR, PRFU, etc.) with industrial partners, particularly public, in this case: ENICAB-Biskra and TREFISOUD-El Eulma (Sétif), with several national research centers and laboratories: Advanced Technology Development Center (CDTA), Baba Hassan-Algiers (Algeria), Materials Science and Engineering Laboratory (LSGM), USTHB-Algiers (Algeria), Center for Scientific and Technical Research in Physico-chemical Analysis (CRAPC), Tipaza (Algeria) and with the following international laboratories and institutions: Laboratory Synthesis, Properties and Modeling of Materials (SP2M), Léon Brillouin Laboratory (LLB)/CEA in France, Bioceramics and Theoretical Atomic laboratory, Department of Physics, Faculty of Science, Firat University-Elazig, Turkey and Functional Nanocomposite/Hybrid, Low Dimensional Functional Material Group, Research Center for Advanced Material, National Research and Innovation Agency (BRIN) Indonesia and Ecole Nationale d'Ingénieurs de Sfax, Tunisia.



Contact :

Pr Hemis Mohamed
Full Professor of Mechanical
Engineering at Khemis
Miliana University

Email: m.hemis@univ-dbkm.dz

Scopus ID: 35388367000

Orcid : [0000-0001-7387-7709](https://orcid.org/0000-0001-7387-7709)

Areas of research:

- Drying and storage of cereals and oilseed.
- Modeling heat and mass transfer in porous medium using new and old methods.
- Researches concerning the favorable conditions for grains storage.
- Development of Research methods in agriculture (cereals) in the fight against various diseases. The research of varieties that adapt to the climate and soil.
- Two of my last research on the drying of seeds by microwave and convective hot-air were selected among the best 10 papers in 2012-2013 in Biosystems Engineering Journal.

Project research

- Project research PRFU on "Experimental research and modeling of grain drying (Algerian cereals and oilseed products) by hot air dryer assisted by microwave" 2018- 2022
- Project research CNEPRU on "Effects of soy products on human and animal health in Algeria." 2015- 2018
- Project research CNEPRU on "Microwave drying effects on soybean" 2013-2014

research internships

- Lethbridge polytechnic 2023/2024
- Department of Bioresource Engineering, Macdonald Campus, McGill University, Montreal, Canada 2013, 2014, 2016, 2017, 2018 and 2019
- Southern University of Illinois at Carbondale, USA in 2011
- University of Manitoba, Winnipeg, Canada in 2008 and 2009 and 2010, and 2012
- University of Bordeaux, laboratory of TREFLE, France in 2007

NC – AMSET2025 :06/25/2025			
8h00	RECEPTION		
8h30-9h15	OPENING CEREMONY		
	Quranic Verse + Algerian National Anthem		
	Prof. Djaafar BOUAROURI, Rector of Medea University Prof. Mourad BACHENE, Dean of Faculty of Technology Dr. Kawthar HADJA, Chair of NC-AMSET25 Dr. Omar LABBADLIA, Chair of NC-AMSET25 Prof. Younes CHIBA, Co- Chair of NC-AMSET25 Dr. ZakaryaMADAOU, Co-Chair of NC-AMSET25		
9h15-10h00	Plenary session1		
	Métaux industriels et économiques : Caractérisation et développement avancés Prof. Mosbah ZIDANI		
10h00-10h45	Plenary session 2 Drying medicinal plants using an indirect hybrid solar dryer Prof. Mohamed Hemis		
10h45-11h15	COFFEE- BREAK		
POSTER SESSIONS			
11h15-14h00	Session1	Session2	Session3
ORAL SESSIONS			
11h15-14h00	Session1	Session2	Session3
Online ORAL SESSIONS (VIRTUAL)			
11h15-14h30	Session2	Session2	Session3

ORAL SESSIONS (1) 06/25/2025 (11H15-14H00)

Advanced Materials and Functional Composites

Chairs: Dr. GUENDOZ Mohamed - Dr. BOUKHELKHEL Djamilia- Dr. Messad Ali

ID	Authors	Title
109	Houcine SEGHIR ABDALLAH , Fadila BELKHARROUBI, Wided BEKHTI and Adel ABDELLAH EL HADJ.	Enhancing renewable energy efficiency with Licap half-heusler semiconductor: a pressure-based approach.
81	A. OuladBrahim , N. FAHEM, A. ZARA, A. Khatir, A. SOUCI, S. KHATIR	Optimized patch design for cfrp-repaired cracked pipelines using machine learning
17	Karima SEFFAH , LouizaSADOUN , Imane LAKEHAL , Hadjer OURIACHE , Taous HAMAD	Design of β -feooH/dwcnt composites for enhanced adsorption of methylene blue in water treatment
38	Djamel ABDELKEBIR ,AzzeddineAbderrahmane RAHO	Microstructure and Thermal Conductivity of Al-Si/ZrO ₂ Composite for Energy-Efficient Thermal Management Applications
115	Merouane GUETTIOUI , Norelhouda GHANEMI, Yasmina KELLOUCHE, Abdelkader BOUGARA	Prediction of Cement Activation Energy Using Artificial Neural Networks for Sustainable Construction Materials
118	Mohammed BENKHEDDA	Numerical analysis of thermo-hydrodynamic behavior of hybrid nanofluids in uniformly heated horizontal tube

ORAL SESSIONS (2) 06/25/2025 (11H15-14H00)

Renewable Energy, Smart Systems, and Hydrogen Technologies

Chairs : Pr. ALLICHE Mounir - Pr. KEZRANE Mohamed

ID	Authors	Title
54	Nour elHoudaBOUGHEDAUI ,Omar LABBADLIA, Zakaria MADAUI	Smart climate optimization for photovoltaic agricultural greenhouses
96	AmiraLAGHOUATI ,Abdelhafidh MOUALDIA, Salah BOULKHRACHEF.	Design and optimization of a pem fuel cell and battery-based hybrid propulsion system for regional energy conditions
63	YehyaANIBA , Hamza BENYEZZA , Mounir BOUHEDDA, Mahdi SEDDIKI , Abdelhafid TOBBAL and AbdallahAZZOUZ	Real-Time IoT Dashboard for Monitoring Lightweight Materials in Electric Vehicles (EVs)
120	TorkiaAZZAZ ,BrahimElkhalil HACHI	A comparative study of thermal insulation materials for energy efficiency in buildings
19	Korichi HAMICHE , Yamina SEFIR, Ali ZITOUNI and Sabria TERKHI	Investigation Of Structural, Electronic And Thermoelectric Properties Of Chalcogenide Perovskite: A Dft Study Using Gga-Pbe And Tb-Mbj

ORAL SESSIONS (3) 06/25/2025 (11H15-14H00)

Power Systems and Electrical Network Optimization

Chairs: Dr. MORSLI Abdelkader- Dr. MENASRI Rabeh

ID	Authors	Title
62	Amina MAHAMMEDI , Abedalkader MORSLI, Abdelkarim KHERKHARE, Dounia SAHRAOUI , Zouhir AMOKRANE	Optimization of a photovoltaic system using type-2 fuzzy mppt controller
114	Mohamed DINE ,Abdelkrim KHERKHAR, Youcef TAMI and Noureddine OULD CHERCHALI	Fault location method for transmission line connected to wind farms
24	Hamid ABDI , Omar KETFI, Abdelhak ACHOURI , Abder Raouf MELEK , Mohamed Elarbi DAID	Modeling and performance analysis of a pemfc-orc power generation system under different climates conditions in Algeria
116	Elhachemi Mammeri , Bilal Merabtane , Mohammed Saoudi, Islam Hassani, Elhachemi Koudad	Comprehensive equivalent circuit model parameterization of a lithium-ion battery

POSTER SESSIONS (1) 06/25/2025 (11H15-14H00)

advanced materials and functional composites

Chairs: Pr. ANNOUN Mohamed – Dr. DERAdJI Nadia – Dr. KRIBY Saliha – Dr. BOUAZIZ AminaManel – Dr. BRAHIMBELHAOUARI Ratiba, - Dr. YKRELEF Hichem- Dr. DJEGHDOUGH Mohamed

ID	Authors	Title
1	Younes CHIBA	Rares earth materials: Algerian perspectives
104	Mohamed amine OUARED Youcef TOUMI, MerouaneGuettoui, Abdelkader BOUGARA, Nadjia KHERRAZ	Enhancing gypsum mortar properties: the combined impact of recycled gypsum and white cement.
103	TaousHAMAD , Dalila BADIS , Mohamed NEDJIHOUI, Karima SEFFAH	Valorization of white mulberry as a bio-adsorbent for the removal of methylene blue from contaminated water
98	Meriem BOUDOUKHANI , Younes CHIBA and Malika AMARI	Tin-doped zno semiconductors: a promising path toward efficient solar energy conversion
99	Abdelhamid CHELLALI , Malika AMRI	Enhancing photovoltaic efficiency: first principles study of the structural, electronic and elastic properties of a cubic perovskite type SrTiO_3
3	Mohamed Khodjet KESBA , BillelBOUKERT , A. BENKHEDDA , E. A. ADDA	Modeling stress distribution in $\text{Al}/\text{Al}_2\text{O}_3$ composites: impact of porosity and microcracks
12	Billel BOUKERT , Mohamed KhodjetKESBA , Amina BENKHEDDA , El-Abbes Adda Bedia	Hygrothermal aging analysis of polymer matrix composite laminates under asymmetrical environmental conditions
14	Zineb MEGUELLATI , Naima GHEMMIT	Study of coal-lamellar double hydroxide electrodeposition on nickel-based electrode
20	Bouchra Sarah BOUKHATEM , Abd- Elmoneim BELHADJ	Microwave-assisted extractions: eco-friendly and innovative techniques for phytochemicals and natural-derived products poster
28	NourEddine BENHARKAT , Fatima KEFIF, Yassine MOUSSAOUI	Layered double hydroxides as efficient materials for industrial wastewater treatment poster
33	Djamel ABDELKEBIR , Azzeddine Abderrahmane RAHO	Effect of 3 wt. % Al_2O_3 addition on x-ray peak shifts in $\text{Al}-7$ wt. % Mg and $\text{Al}-15$ wt. % Zn alloys
88	Abdelkader LOUZA , Abdelkader HOCINE, Abdelhakim MAIZIA , Levent AYDIN and Ghania HABBAR	Analysis of burst pressure in composite hydrogen storage vessels
92	Omar BOUKSANI , Kawthar HADJA, Ilyas KHELIFA KERFAH, fatiha ABBA, fattoum KHARCHI, yacine HADIBI	Thermal and mechanical properties of mortar containing expanded perlite
79	N. FAHEM , A. OULADBRAHIM, A. ZARA, S. MAAFA, T.K. HIJAZ, C. ARIBI.	Inverse identification of hashin damage parameters in CFRP composite materials

80	Leila DJAHNIT, Saida SOUALMI, Rachid DELLALI, Samira MAOU, Fatima Zohra KERMAZLI, Chafia METAOU, Fouzia OUADAH BENSALAH	Environmentally friendly approach for zno nanoparticle synthesis, stabilization and application
82	Khalida ZITOUNI	Characterization of clay material using advanced spectroscopic and microscopic techniques for industrial applications
93	Imane Hamied, Abdelhaliml KAHOU, Salim Daoudi	Semi-empirical calculation of jump factor λ for element-selective
83	Loubna Benatallah , Mohamed Guendouz, Djamila Boukheikh	From waste to resource: sustainable concrete through advanced material integration
84	Loubna Benatallah , Mohamed Guendouz, Djamila Boukheikh	Transforming industrial waste into high-performance concrete: a materials science approach
6	Sidi Mohammed MERGHACHE , Abdelhak HAROUN, Amine HAMD, Mihoub MEDKOUR	A comparative analysis of three-dimensional flatness measurement by cmm "faro" and numerically controlled machine tools "emco pc mill 155"
29	Hadjer AMMI , Zoulikha CHARIFI, Hakim BAAZIZ and Torkia GHELLAB	Study of electronic properties of ionic semiconductor Bi_2Te_3 photovoltaic application
35	Sabrina BENABBAS , Wafa HAML	Investigation of structural and electronic properties of cds and cdte semiconductors
40	Zahra BELADZAR , Djamila BOUKHEIKHAL, Mohamed GUENDOZ	Performance evaluation of automotive glass waste-modified flowable sand concrete: a durability-focused investigation
46	Safoua NECIB , Saleh KHIR, Redha REBHI, Faouzi DIDI, Malika AMARI	Analytical study of thermosolutal convection within a porous medium saturated by non-newtonian swcnt-water nano-fluid
48	Riad HERR , Redha REBHI, Mohamed KEZRANE, Sabrina HERR	Effect of substrate presence on plasma jet flow and heat distribution
52	Omar BOUKSANI , Kawthar HADJA, Ilyas, KHELIFA KERFAH, Maissen BENHADJI, Fattoum KHARCHI and Fatiha ABBA	How sand particle size affects the characteristics of epoxy mortar
58	Ayoub BENNIA , Sidahmed ALLICHE and Mohamed Nadjib BOUAZIZ	An investigation into the effects of inclination angle on thermal performance parameters for magnetohydrodynamic mixed convection in nanofluids.
64	Mohamed AZIZOU , Saleh KHIR, Mounir ZIRARI, Mohamed Nadjib BOUAZIZ, and Redha REBHI	Heat transfer by non-newtonian-based swcnt-nanofluids in the presence of mhd in a horizontal porous cavity
86	Fatiha ABBA , karim EZZIANE, mhamed ADJOUDJ	Environmental impact of recycled concrete aggregate with additions minerals
89	Nadia DARADJI	Comparison study between spiral porous fin and circular porous fin in radiative convective medium.

106	Abdelatif MEBARKI , Salim SAFIDDINE, Hamza SOUALHI, Yousra BENMOUSSA, Abdelkader Oussama AZROU ISGUI	Sustainable Mortar Design: Influence Of Brick Powder And Slag On Cement-Based Mixes
100	Amina OULD LARBI , RedhaREBHI ,Maamar LAIDI , Selma LOUNIS, Sarah BENSILAKHAL	Numerical investigation of double-diffusive convection with Lewis number effects in non-newtonian fluids within an inclined porous layer
119	Nabila Ahlam Boukhalkhal , Yasser Chiker, Mourad Bachene, Mouloud Guemana	Free vibration behavior of graphene-reinforced composite plates under different boundary condition
121	Boudjema BOUAOUINA , Amira KECHAIRI, Ayoub-LAZHARI NAAS, Kamel MOKEDDEM , Bachir MESSAID , Seddik ABADIA	Photocatalytic activity for natural graphite with nickel oxide prepared by sol-gel technique
11	ABDELHAK Haroune	Experimental Evaluation Of The Performance Of A Binder Magnetic Type Synchronous Belt Transmission

POSTER SESSIONS (2) 06/25/2025 (11H15-14H00)

Synergies between renewable energy, smart systems, and hydrogen technologies for a clean energy transition

**Chairs: Dr. Lachenani Amina – Dr. Ghalem Naima – Dr. Hamza Imane - Dr BOUKORT Houcine
Dr ALIAGHA Hamza**

ID	Authors	Title
23	Fazia AICHE , Souad HAMOUDI, Adel LALAOUA	Evolution of the simulated volume fraction to provide a more detailed insight into the bed hydrodynamics.
24	Hamid ABDI , Omar KETFI, AbdelhakACHOURI ,Abder Raouf MELEK , Mohamed Elarbi DAID	Modeling and performance analysis of a pemfc-orc power generation system under different climates conditions in Algeria
128	Fatma Zohra SAIDOUN , Souad TAHAR, Ratiba BRAHIM BELHOUARI, Mounir ZIRARI	Numerical Exploration of Eyring-Powell Nanofluid Magnetohydrodynamic Flow over a Vertical Plate with Convective Heat Transfer
41	Islam ZID , Redha REBHI, Mounir ALLICHE, Saleh KHIR	Thermal and Flow Behavior of Al ₂ O ₃ -Cu/Water Hybrid Nanofluid in a Magnetized Square Porous Medium
60	Khaled YAHIA MAHAMMED , Rabah KERFAH, Mustapha ZOUANTI	Combined experimental and theoretical assessment of a single slope solar still equipped with a condensation chamber poster
62	Amina MAHAMMEDI , Dounia SAHRAOUI, Zouhir AMOKRANE, Abedalkader MORSLI, Abdelkarim KHERKHARE	Optimization of a photovoltaic system using type-2 fuzzy mppt controller
26	Dalila MEZIANE , Nacera MEZIANE , Lilia MAZARI	New alternative to design solar panel with recycled materials
113	Ilyas KHELIFA KERFAH , Kawthar HADJA, Abdelkader LARABI, Abdelhakim BERDI, Omar BOUKSANI, Sadia LAIDI	Development of a gas stove heating model for the trnsys thermal simulation environment
30	Mohamed Rachid CHERITI	Les matériaux critiques associés aux énergies renouvelables : entre enjeux économiques, géostratégiques et environnementaux, et risques de pénurie et nécessite d'une économie circulaire
78	Samir KHELEDJ , Hamida BENCHEIKH	Bioclimatic heritage: thermal comfort and passive design in colonial schools of Algeria
96	Amira LAGHOUATI , Abdelhamid MOUALDIA, Salah BOULKHRACHEF	Design and optimization of a pem fuel cell and battery-based hybrid propulsion system for regional energy conditions
122	Soumia RAGAI , Younes CHIBA, Mounir ZIRARI	Multi-Parametric Optimization of a PHETES System through Integration of Hybrid Nanofluids and Advanced Geometric Design: Coupled Thermo-Fluidic Modeling.
123	Abdelli MESKERROUH , Mounir ZIRARI, Younes CHIBA	Comparative study of pcm melting behavior using water and nanofluid heat transfer fluids

127	Abdelkrim TERFAI, Younes CHIBA, Mounir ZIRARI, Mohamed Najib BOUAZIZ	Thermal Performance Prediction of a Shallow Solar Pond Coupled with a Storage Tank Using the ANN Fitting Tool
39	Messaoud ZELACI , Abdelouahab. BENSEDDIK, Lakhdar AIDAOUI , Ali ZINE	Analyzing the drying process and kinetics of tomato slices in a greenhouse solar dryer

POSTER SESSIONS (3) 06/25/2025 (11H15-14H00)
Power systems and electrical network optimization

Chairs: Pr. MOUALDIA Abdelhafidh – Dr. Hasnaoui Hanaa

ID	Authors	Title
59	Fayçal Hadj Mihoub SIDI MOUSSA, Abdelkader MORSLI , Abdelhalim TLEMÇANI	PSO-Optimized MPPT for Grid-Connected PV System Using a Two-stage Three-Level Inverter under Variable Irradiance
111	Sarah BENSILAKHAL , Redha REBHI, Nouredine HADIDI , Amina OULD LARBI, Selma LOUNIS	The impact of the fluid rheological behavior and the buoyancy forces on the thresholds of bifurcations
51	Adel YAHIAOUI , Abdelhalim TLEMÇANI	Technical and economic optimization of pv/diesel system integrating battery energy storage
37	Wahiba MENASRI , Sofiane TOULAIT, Abderrezak GACEMI	Fractional transfer functions for modelling dielectric losses in ferroelectric materials (using artificial neural network

Online ORAL SESSIONS (VIRTUAL 1/part 1) 06/25/2025 (11H15-13H00)

Advanced materials and functional composites

Chairs: Dr. AMARI Malika – Dr. BOUDOUKHANI Meriem – Dr. LAROUSSE Berkahoum

Link : meet.google.com/xxo-xjtd-xjt

ID	Authors	Title
70	Elaid OUADAH , Nasr-Eddine HAMDADOU	Study The Structural Properties Of $W_{0.3}Sb_{0.1}$ Thin Films Deposited By Spray-Pyrolysis Technique For Photovoltaic Applications
66	ImaneFatnaDjireb , Farid Debieb, Hamza Soualhi, Loubna Benatallah	Evaluation Of The Hydraulic And Physico-Mechanical Performance Of Porous Concrete
57	AtaallahELDJEMAI , Mohamed HALIT	Structural, Electronic, Elastic And Optical Properties Of $Rb_{0.5}Te_{0.5}$ Compound
50	Hamza HASNAOUI , Basma SAMET, Ali SDIRI	Enhancing Self Compacting Concrete with Renewable Alfa Fibers and Slag: Rheological And Mechanical Insights
25	BAHOUS Raounak , IDRES Abdelaziz	Characterization And Processing Of Low-Grade Phosphate Ore From The Djebel Onk (Kef Es-Sennoun) –Tebessa, Algeria
22	Sonia BAAZIZ , Bouzid HANNACHI, Nourredine BENALI-CHERIF	Design And Characterization Of A New Cytosine-Based Proton-Transfer Hybrid Material
9	Saadiya BENATMANE	Theoretical Investigations Of Structural, Mechanical And Elastic Properties Of Novel Quaternary Heusler Alloys For Spin Polarized And Waste Heat Recycling Systems.
4	Houssam BOUGHEDDA, HemzaGHEDDAR , Sid-Ahmed TOUIL	Non-Destructive Characterization Of Ferromagnetic Materials Using Hybrid Sensor And Time-Of-Flight Analysis
110	BALI Khadidja , Azzeddine BEGGAS, Asma Labbi ,Mounira Mammi, Abdelouahab GAHTAR	The Effect Of Substrate Temperature On The Structural Properties Of CO_3O_4 Thin Films
125	Youcef MOUFFOK , Abdelkader TABETI, Hamza ABBASSA, Abbas CHAREF, Abdelkader BOUKORT	Theoretical study on quaternary Heusler compounds for spintronics
126	Abdelkader TABETI , Youcef MOUFFOK, Hamza ABBASSA, Abbas CHAREF, Abdelkader BOUKORT	New half Heusler alloys for renewable energy
108	Omar KHELIFI , Mohammed Amine MERABTI, Nassima Djihane ZEMANI , Hamza LAKSACI , Aicha Imane MAIZA, Abbas BENABDELKABIR , Dounya KHALLA , Mouna NACEF , Mohamed Lyamine CHELAGHMIA , Abed Mohamed AFFOUNE	Biofuel Production From Fruit Waste By Anaerobic Digestion

Online ORAL SESSIONS (VIRTUAL 1/part 2) 06/25/2025 (13H00-14H45)

Advanced materials and functional composites

Chairs: Dr. BENTOUATI Ismain – Dr. ZEMIRLINE Adel – Dr. BOUGHEDAUI Rachid

105	Walid REZIG	Fabrication And Evaluation Of Diatomite Modified With Titanium Dioxide And Ferrihydrite For Photocatalytic Removal Of Industrial Dyes
90	Imen Yamina OMRI, Seif Eddine KHADRAOUI, Aymen Elouanas ASSELI, Zine EL Abidine RAHMOUNI, Nadia TEBBAL	Valorisation Plus De 50% Des Résidus Industriels Par La Méthode D'activation Chimique Pour Améliorer Le Comportement Mécanique Des Mortiers Alternatifs Comme Matériaux Cimentaires
73	Fadila Belkharroubi, Malika Amari, Fatima Sidjilani, Saliha Azzi	Structural, Electronic, And Optical Properties Of The Half-Heusler Compound Nayge Using The Fp-Lapw Method: A Potential Material For Renewable Energy Applications
72	Mohd Oulmessaoud BOUGHANEM, Nassim TOUKA, Salim MOKHTARI	Preparation, Structural, And Topographical Of ZnO/CuO Nanocomposites Using Sol-Gel Method.
75	Abdellahel hadj Adel, Belkharroubi Fadila, Azzi Saliha, Seghir Abdallah Houcine, Amari Malika	The Impact Of Hot-Dip Galvanizing On A Structural Steel's Mechanical Properties.
68	Tarek HOUARI, Mourad ABED	Fracture Analysis Of Polymers Using Experimental Energy For Sustainable Energy Uses
43	Boutheina BELDI, Hayette SAIFI	From Crystalline To Amorphous: Magnetic Tailoring Of TiFe Alloys For Advanced Applications
36	Meriem Touil, Nassima Meftah, Abderrahim Achouri, Rachid Gheriani and Rabiaa Benessedik	Investigating The Mineral, Chemical, And Thermal Properties Of Desert Sand From The Eastern Algerian Sahara
34	Wafa HAMLA, Sabrina BENABBAS	Advancing Sustainable Road Infrastructure Through Innovative Concrete Using Local
85	Khadidja KEHLI, Belkacem BELHADJ	L'intégration Des Matériaux Bio Sourced Dans L'enveloppe Bâtie: Aperçu Des Fibres Végétales Comme Exemple
124	Rabiaa BENESSEDDIK, Abderrahim ACHOURI, Aziez ZEDDOURI, Meriem TOUIL	A comparative study of two samples of Khanguet Sidi Nadji Biskra rocks
93	Imane Hamied, Abdelhalim KAHOU, Salim Daoudi	Semi-empirical calculation of jump factor j_k for element-selective
18	A. CHAREF D. BRADAI	Analysis of Microstructural Changes and Mechanical Properties of Cu-1%Si Alloy Before and After Annealing

Online ORAL SESSIONS (VIRTUAL 2/part 1) 06/25/2025 (11H15-13H00)		
Synergies Between Renewable Energy, Smart Systems, and Hydrogen Technologies for a Clean Energy Transition		
Chairs: Pr. ABADI Amel -Pr. HAMIDIA Fethia		
Link: meet.google.com/qmb-qors-gtd		
ID	Authors	Title
61	Sakina AOUN , Laatra YOUSFI , Aziz BOUKADOUM	Evaluation Of Open-Circuit Fault Diagnosis In A Three-Phase Inverter Using A Fuzzy Logic Methodology
21	Samira BOUMOUS , Zouhir BOUMOUS , Samia LATRECHE , Mabrouk KHEMLICHE	Load Flow Analysis Of A 30-Bus Power Network With Renewable Energy Integration
10	Razika ADJOUZ , Zehor ALLAM , Abdelkader HALMOUS	Optimizing The Performance of CsSnI3 Solar Cells: A Numerical Study
19	Korichi HAMICHE , Yamina SEFIR, Ali ZITOUNI and Sabria TERKHI	Investigation Of Structural, Electronic And Thermoelectric Properties Of Chalcogenide Perovskite: A Dft Study Using Gga-Pbe And Tb-Mbj
8	Abdelkader HALMOUS , RazikaAdjouz, Hossam E.A. ABBOU	Newton-Raphson-Based Optimizer Algorithm For Load Frequency Control In The Presence Of Renewable Energy Source
2	Sanket SHINDE , Shivam YADAV, Siddhant ZOLAGE, Simran KHIANI	Iot-Enabled Smart Campus Sustainability: A Kpi-Based Approach To Monitoring Water, Electricity, And Mobility
107	Chaima GOUBAR , Mama BOUCHAOUR and Laarej MERAD	Maximizing (Pv/T) Efficiency Through Dual Heat Transfer Fluids: A Python-Based Simulation Study
95	Benameur BOUAMOUD , Samir HOUAT	Numerical Assessment Of Nanofluid Effect On Cooling Performance In A Square Cavity
91	Choayb BOUSNOUBRA , Hassen BELILA , Yacine DJEGHADER	Adaptive Sliding Mode Control For Maximum Power Point Tracking In Solar Systems
87	Khadidja RAHMOUNE , M BOUTOUBAT , B.K OUBBATI , A HALMOS , W BAKHAT	Integrated Mppt And Battery Management For Standalone Photovoltaic Systems
30	Mohamed Rachid CHERITI	Les matériaux critiques associés aux énergies renouvelables : entre enjeux économiques, géostratégiques et environnementaux, et risques de pénurie et nécessite d'une économie circulaire
Online ORAL SESSIONS (VIRTUAL 2/part 2) 06/25/2025 (13H00-14H45)		
Synergies Between Renewable Energy, Smart Systems, and Hydrogen Technologies for a Clean Energy Transition		
Chairs : Pr. TRIKI Zakaria - Dr. REBHI Redha		
47	Meryem LAGOUNE , Samia LATRECHE, Mabrouk KHEMLICHE, Badreddine BABES, and Hamza KHEMLICHE	Dc-Dc Converter Comparison For Solar Power Conversion Systems

45	Zaina AIT-CHEKDHIH , Aghiles ARDJAL, and Maamar BETTAYEB	Scaled Pid-Funnel Control For Wind Turbine Speed Regulation: A Comparative Study With Pi-Funnel Control
42	Slimane MEDJMADJ	Solar Photovoltaic Modeling And Simulation: Performance Evaluation Under Environmental Variations
32	Samah Yahiaoui , Ouarda Assas	Forecast Of Global Solar Radiation On A Horizontal Surface By Fuzzy Logic
67	Si ahmed ZEGNOUN , Khedidja MAKHLOUFI, Naceur TANDJAOUI	Boosting Wind Turbine Performance Via Dvr Implementation
53	Liyes AGUEDAL , Mohamed ZERZAIHI, Mohamed Achraf FATIT	Thermo-Fluid Dynamics Of Composite Tanks For Hydrogen Storage Applications
16	Asma BENHEMINE , Hamza TEDJINI, Imen CHAOUFI, Abdel Djabar BOUCHAALA	Wind Energy Conversion Systems Based on Dual Feed Induction Generator Controlled By Mppt Strategy
15	Asma BENHEMINE , Hamza TEDJINI , Imen CHAOUFI, Abdel Djabar BOUCHAALA	Overview And Classification Of Wind Turbine Technologies For Sustainable Power Generation
7	Hassina Ghodbane , Fouad Khaldi, Derradji Bahloul	Clean Power of Hydrogen Internal Combustion Engines

Online ORAL SESSIONS (VIRTUAL3/part 1) 06/25/2025 (11H15-13H00)

Power systems and electrical network optimization

Chairs : Pr. HENINI Nouredine – Pr. TELMCANI Abdelhalim

Link : meet.google.com/nfc-msiw-pia

ID	Authors	Title
65	Habib Bouighi , Nardjes Bengherbia	Numerical Investigation Of Biodiesel Combustion On Diesel Engine: Egr (Performance And Emissions)
13	Bourhane BOUHABEL , Abdelfatah MARNI SANDID, Zouhair aouissi	Numerical Analysis of Heat Transfer and Mass Flow in a Crossflow Heat Exchanger with Rectangular Finned Tubes
5	Badreddine BENDRISS , Samir SAYAH, Abdellatif Hamouda	Solving The Optimal Capacitor Bank Installation Problem In Radial Distribution Networks
112	Adil BAKRI , Djamal eddine BERRABAH, Boumediene KHAOUANI	A Smart Glasses-Based Driver Drowsiness Detection And Alert System Using Infrared Ensing
102	SOUAD MEFTAH	Evaluation Of Tribological Performance And Mechanical Properties Of As12 Alloy
101	GAID EL HABIB	Biofuel And Essential Oils On Advanced Materials For Sustainable Energy Transition
97	Habib HEBALI	Investigation Of Buckling Behavior In Functionally Graded Plates Using A Novel Four-Variable Refined Plate Theory
77	Zakaria Zabar , Mouna Laïb	Preparation Of A New Photocatalyst Based On A Semi-Conductor Material And Enhancing Its Photoactivity By Noble Metal Modification, Case Of Ag-Cu/Tio2.
69	Elhachemi Mammeri , Ammar NECAIBIA, Ahmed BOURAIYOU, Islam HASSANI, Elhachemi KOUDAD	Efficient power harvesting from pv systems in dynamic psc using grey wolf optimizer

Online ORAL SESSIONS (VIRTUAL 3/part 2) 06/25/2025 (13H00-14H45)

Power systems and electrical network optimization

Chair : Pr. GUECEMI Abderrezak – Dr. MENACERI wahiba

76	Mohamed BABAKHALI , Ali MERDJI, laid AMINALLAH	The Impact Of Hot-Dip Galvanizing On A Structural Steel's Mechanical Properties.
74	Abdelghani BALTACH , A. BOUKHLIF, A. TAGHEZOUT, A. DJEBLI and A. BENHAMENA	Delay In Fatigue Crack Propagation Using The Indentation Technique
71	Mabrouk DAHANE , Hamza TEDJINI, Abdelkrim BENALI	Nonlinear Fractional-Order Pid Controller For Enhancing The Performance Of Dfig-Based Wecs
49	Slimane MEDJMADJ	Comparative Analysis And Control Of Electrical Machines For Electric Vehicle Application
31	Zakarya KOURDI , Mohammed DEBBAL, Bouchra KOUBI and Manel BOURELEM	Transmission Of Big Data Via Leo/Ground Laser Links: A Revolution For Satellite Applications

27	BrahimDAHOU , Seddik BAALA, Korichi HAMICHE	modeling, simulation and control of the doubly fed induction generator (dfig) using matlab/simulink
44	Khoukha BOUGUERRA , Samia LATRECHE, Mabrouk KHEMLICHE, Zahira BOUGUERRA, Hamza KHEMLICHE	Intelligent Control of Grid-Connected Photovoltaic Systems Using Artificial Neural Networks

Virtual room Links

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Session 2:meet.google.com/qmb-qors-gtd

Session 3:meet.google.com/nfc-msiw-pia



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