



Conference program

1st Day: Monday May 6, 2024

07:30-09:00	Welcome and Registration of participants
	Conference Opening
09:00-09:45	Speech by the Rector of the University and the President of the conference
	1 st Plenary Conference chaired by; Pr M.OUARDANE
09:45-10:30	Pr Noureddine YASSAA : Transition énergétique en Algérie : Quelles Politiques Prioritaires Compatibles avec un Développement Socio-Economique Durable ?
10:30-11:15	Coffee Break + Session (A) Poster
	2 nd Plenary Conference chaired by; Pr R.MAZOUZI
11:15-12:00	Dr Bouziane MAHMAH : De la civilisation du carbone vers celle de l'hydrogène : l'atome et les protons au cœur de cette mutation.
12:00-13:30	Lunch
	Oral Session (1) - 1 st session (Conference room) President: Dr R.TOUAIBI
13:30-15:00	<p>COM1 : Telha Mostapha</p> <ul style="list-style-type: none">- 3D comparative study of three nozzle configurations for enhancing propulsive thrust. <p>COM2 : Kebour Omar</p> <ul style="list-style-type: none">- Comparative performance study of a parabolic trough system for steam production with and without solar tracking (fixed system) <p>COM3 : Dehimi Houda</p> <ul style="list-style-type: none">- Characterization of the Si/Al₂O₃/TiO₂ structure developed by the ultrasonic spray technique for photovoltaic applications. <p>COM4: Merrad Amel</p> <ul style="list-style-type: none">- DFT investigations on the electronic structure, mechanical and optical properties of Rb₂AgBiX₆ (Cl, I) double perovskites alloy for optoelectronics applications <p>COM5 : Hamidi Moussa</p> <ul style="list-style-type: none">- Effet de l'addition de déchets céramique sur les propriétés physico-mécaniques du mortier.



Oral Session (2) - 1st session (Auditorium)

President: Dr. B MEKHANE

13:30-15:00	COM1 : <u>Bezari Salah</u> <ul style="list-style-type: none">- Natural Aeration Influence on the Microclimate in a Solar Greenhous.
	COM2 : <u>Taibaoui Ahmed</u> <ul style="list-style-type: none">- Investigation of Aerodynamic Performances and Airflow Patterns over a rotating Airfoils through a 2D Unsteady Simulations.
	COM3 : <u>Nasri Mohamed Yacine</u> <ul style="list-style-type: none">- Etude Comparative de L'Efficacité Energétique et de l'Effet Environnemental des Systèmes de Climatisation « Type Détente Directe 'VRV' » et Type « Eau Glacée » : Application pour une Clinique Médicale.
	COM4: <u>Trari Benaissa</u> <ul style="list-style-type: none">- Artificial Neural Network Modeling for Optimization of Wastewater Treatment: A Case Study of Ain Bouchekif - Tiaret Wastewater Treatment Plant in Algeria.
	COM5 : <u>Aoudjit Farid</u> <ul style="list-style-type: none">- Enhanced the heterogeneous photocatalytic removal of pharmaceutical pollutant onto Layered double hydroxide materials.

15:00-15:30

Coffee Break + Session (B) Poster

Oral Session (1) - 2nd session (Conference room)

President : Dr Dj. BENZAID

15:30-17:00	COM6 : <u>Ouchefoun Zoulikha</u> <ul style="list-style-type: none">- Analysis of the performance of a multi-source, multi-load system with storage battery.
	COM7 : <u>Bendib Douadi</u> <ul style="list-style-type: none">- PSIM-MATLAB Co-simulation of reduced switches count seven-level inverter and power losses estimation.
	COM8 : <u>Khaldi Chifa</u> <ul style="list-style-type: none">- Energy and Exergy-Based Investigation of Parabolic Trough Collectors in Various Climatic Zones of Algeria.
	COM9: <u>Bakdi Moussa</u> <ul style="list-style-type: none">- Renewable Energy Transmission and Incorporated with AC Power System Using Dynamic Power Electronic Converters link.

Oral Session (2) - 2nd session (Auditorium)

President : Pr B.ZIDANE

15:30-17:00	COM6 : <u>Medjadjji Hamza</u> <ul style="list-style-type: none">- Study of doped Ca_{0.9}Mg_{0.1}Fe₂O₄ Nano-spinel for hydrogen production via photocatalytic water splitting under visible light irradiation.
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15:30-17:00

COM7 : Bouhadji Fatiha

- Power Quality Improvement Based on Direct Current Control of Microgrid-Connected Photovoltaic System and Nonlinear.

COM8 : Ouail Mohamed

- Contribution of electrical distribution network operators to environmental protection.

COM9: Benchamma Sofiane

- Performance investigation of a solar-assisted heat pump for heating, cooling and domestic hot water production for a residential building in Algeria.

2nd Day: Tuesday May 7, 2024

3rd Plenary Conference chaired by; Dr B. KHELIDJ

09:00-10:00

Dr Sadek IGOUD: Renewable Energy for energy security and Environment preservation

10:00-10:30

Coffee Break + Session (C) Poster

Oral Session (1) - 3rd session (Auditorium)

President: Dr S.BENTRIDI

10:00-12:00

COM10 : Reguieg Zakaria

- Optimizing Power Quality: Voltage Compensation Strategies with PO-PV-Series Active Power Filters.

COM11 : Mouissi Ahmed

- Parametric investigations for an ORC cycle works with different fluids fed by the waste heat of SOFC.

COM12 : Bouziane Ibrahim El-Khalil

- Reactant Flow Management and Battery Storage for Enhanced Fuel Cell Vehicles Performance.

COM13 : Boufarh Mohamed

- Thermo-economic Assessment of Combined Organic Rankine and Ejector Refrigeration Cycles.

COM14 : Bouachaoui Okba

- Technical and Economic Assessment of Domestic Refrigerator Consumption Using Solar Energy.

12:00-12:30

Conference Closing

12:30-14:00

Lunch



Session (A) – Poster

Communicant	Titre de la communication	Code d'affichage
Belhadj Mokhtaria	DFT calculation of the structural and electronic properties of KSnI3: Insights into its potential application in photovoltaics. <i>Mokhtaria BELHADJ and Abdelkader BOUKORTT.</i>	POS1
Belhamideche Kheira	Numerical study of the performance of a shallow geothermal system with different types of horizontal ground heat exchangers. Case study of the city of Mostaganem. <i>Belhamideche Kheira , Laredj Nadia , Maliki Mustapha, Missoum Hanifi, Bennaceur Djihad , Brahimi Mahi Eddine.</i>	POS2
Benatallah Yacine	Efficiency and Performance Analysis of a Stand-Alone Photovoltaic System for Residential Use in Laghouat, Algeria <i>Benatallah Yacine, Benali Abdelkrim , Nour Mohamed.</i>	POS3
Chikh Mohammed El-Amine	Analyse des Profils Thermiques de Deux Types du Cuiseurs Solaires <i>Mohammed El-Amine CHIKH , Mohammed BENRAMDANE , Fatiha YETTOU , Amor GAMA, Abdenour ALIANE.</i>	POS4
Dahane Mabrouk	Performances of Sliding Mode Control of Wind System Based DFIG Mabrouk Dahane , Hamza Tedjini ,Abdelkrim Benali.	POS5
Embarek Noureddine	Optimizing Solar Air Collectors: A Comprehensive Study on the Influence of Absorber Design and Spacing for Enhanced Performance <i>Embarek Noureddine, Guellil Hocine,Korti AbdelIllah Nabil,Mahmoudi Djahida</i>	POS6
Fatima Bouzidi	Theoretical Investigation of Water Splitting for H2 Production <i>Bouzidi Fatima , Berbri Abderrezak , Bouhekka Ahmed.</i>	POS7
Hamzaoui Ihssen	Modeling and simulation of a wind system adapted by an MPPT control based on fuzzy logic. <i>Hamzaoui IHSSENI, Baouche FATIMA ZOHRA, Bouchafaa FARID.</i>	POS8
Lyamine Briki	Recovery of chicken egg shell waste as a cementitious material <i>Briki Lyamine, Benzeroual Belkacem, Zidani Kamel.</i>	POS9
Nebbat El Amine	Design of a solar thermoelectric refrigerator for the storage and transportation of medicines <i>El Amine NEBBAT, Nour-Eddine BENAOUEDA.</i>	POS10
Righi Aya	Comprehensive ab-initio calculations of half heusler material for green energy and sustainable environmental applications <i>Righi AYA, Bendahma FATIMA, Labdelli ABESS, Mechehoud KHEDIDJA, Mana MOHAMED</i>	POS11



Sali Yehya	Production of biofuels (bioethanol) through the valorization of food processing by-products in the Adrar region <i>Sali YEHYA, Boulal AHMED.</i>	POS12
Laissaoui Mohammed	Industrial process heat using parabolic trough solar collector. <i>Mohammed Laissaoui, Housseyn Karoua, Sabrina Lecheheb ,Amar Bouhallassa ,Abdelatif Takilalte, Messaoud Hazmoune.</i>	POS13
Benchebiba Ismail	Effect of mesh grades on GDL current density optimization in a fuel cell by COMSOL . <i>Ismail BENCHEBIBA, Mohamed MOSTEFAOUI, Ahmed Nour El Islam AYAD</i>	POS14
Benettayeb Youcef	Analyzing the Performance of Solar Chimney Power Plants: Investigating the Effects of Ground Slope and Collector Divergence <i>Y.BENETTAYUEB, A.BENBOUALI, T. Tahri</i>	POS15
Bennaceur Djihad	Geothermal perspective: Analysis of unsaturated soil properties in the context of climate change for the design of sustainable energy systems <i>Bennaceur DJIHADI, Laredj NADIA1, Maliki MUSTAPHA, Brahimi MAHI-EDDINE, Belhamideche KHEIRA, Missoum HANIFI</i>	POS16

Session (B) – Poster

Communicant	Titre de la communication	Code d'affichage
Aissani Ali	Analyzing the optical properties of perovskite oxides CeXO ₃ (X=Be, Mg) for optoelectronic applications <i>Aissani Ali, Besbes Anissa, Djelti Radouane , Benahmedi Lakhdar, Bendehiba Sidahmed</i>	POS1
Alouache Benali	Frequency control of an isolated Microgrid based on PID controller tuned by pole placement and Genetic Algorithm <i>ALOUACHE Benali , HELAIMI M'hamed, BELHADJ DJILALI Abdelkadir, YAHDOUN Adil.</i>	POS2
Benahmedi Lakhdar	Cs ₂ GaAgCl ₆ : A Lead-Free Perovskite Poised for Eco-Friendly Thermoelectric Applications <i>Benahmedi Lakhdar, Djelti Radouane, Besbes Anissa, Aissani Ali, Bendehiba Sidahmed.</i>	POS3
Khelladi Mohammed	Effect of Black Stones in Phase Change Materials on the Efficiency of Solar Thermal Energy Storage System <i>KHELLADI Mohamed, BEN RABAH Athmane, HEMIS Mohamed</i>	POS4
Mohammed Nadir Meghachou	A study of the impact of a thermal management system and various configurations of lithium-ion cylindrical batteries on cooling performance <i>Mohammed nadir MEGHACHOU1, Ahmed Wahid BELARBI2, Aïssa BOUTTE.</i>	POS5
Alliche Ridha	Study of the Stirling LTD Engine Cycle to Improve Its Performance. <i>Alliche RIDHA, Azzizou MOHAMED, Announ MOHAMED</i>	POS6



Alliche Sid Ahmed	MHD micropolar fluid flow with thermal radiation along a vertical cylinder. <i>Sid Ahmed Alliche , Mohamed Najib Bouaziz, Ayoub Bennia</i>	POS7
Belmiloud Mohamed Amine	Effect of number of coil paths on heat transfer enhancement for a natural gas heater. <i>Mohamed Amine BELMLOUD, Mohamed Boutkhil GUEMMOURI and Nord-eddine SAD CHEMLOUL</i>	POS8
Bennia Ayoub	Effect of inclination angles on thermal performance factor parameters in nanofluid mixed convection under magnetic field effect <i>Ayoub BENNIA, Sidahmed ALLICHE</i>	POS9
Ben Rabah Athmane	Drying Pepper Using an Indirect Hybrid Solar Dryer <i>Athmane BEN RABAH, Mohamed HEMIS, Khelladi Mohammed</i>	POS10
Bensider Nora	Dynamics and Thermal Analysis of Turbulent Flow Around a Square Obstacle <i>Bensider NORA, Louaifi SAMIRA , Benabdallah MENAOUER</i>	POS11
Boukrida Aboubakr	Modeling by artificial neural networks of the mass diffusion coefficient of cork treated by ecological processes. <i>Aboubakr Boukrida, Tayeb Kermezli , Mohamed Announ, Sofiane Ladeg</i>	POS12
Chadouli Rachid	Numerical Study of the Surface Roughness, Thermal Conductivity of the Contact Materials on the Thermal Contact Conductance <i>Rachid CHADOULI, Mourad MODERRES.</i>	POS13
Foual Mohammed	Investigating the Impact of Surface Roughness on Staggered Tube Bundle Heat Exchangers <i>Mohammed Foual, Youcef Becheffar, Houssem Eddine Abdellatif</i>	POS14
Hennane Yamina	Numerical prediction of turbulent impinging multijets heat transfer <i>Yamina HENNANE, Amina MATAOUI</i>	POS15
Horr Riad	Numerical Simulation of the Plasma-Substrate Interaction and Prediction of Substrate Temperature During the Plasma Heating <i>Riad Horr, Redha Rebhi, Mohamed Kezrane.</i>	POS16
Khir Saleh	Double-Diffusive Convection in an Inclined Porous Layer Filled with non-Newtonian Power-Law . <i>Saleh KHIR, Redha REBHI, Selma LOUNIS, Mohamed KEZRANE.</i>	POS17
Maiga Assiéto Moussa	Numerical study of the influence of the change in shape of a supply grid <i>MAIGA Assiéto Moussa, FELLAGUE CHEBRA Abdelhak, KHELIL Ali and BRAIKIA Mohamed</i>	POS18
Wissem Eddine Abbaci	Investigation on the Performance of the ejector refrigeration system <i>Presenting Author, Abbaci Wissem Eddine, Boumaraf Latra.</i>	POS19



Session (C) – Poster

Communicant	Titre de la communication	Code d'affichage
Affane Montaha	Etudes des propriétés structurales d'un alliage heusler. M. Affane, S. Benatmane.	POS1
Belabed Ahlam	Elaboration and Characterisation of Mesoporous Materials. Study of Catalytic Properties. Sadou Mohammeda, Belabed Ahlam.	POS2
Beyaz Khaled	Preparation and characterization materials from biopolymers. <i>Khaled BEYAZ</i>	POS3
Boukhatem Horiya	Alginate/montmorillonite beads for efficient removal of malachite green dye from aqueous solutions <i>Horiya Boukhatem, Amel Douba, Amira Saidani.</i>	POS4
Cherifi Souad	Removal of Textile Dye from Aqueous Solution Using Immobilized Cells on Column pozzolana Bed Reactor <i>Cherifi Souad, Djafer Abderrahmane, Fizir Meriem.</i>	POS5
Djabbour Samia	Crystal Structure, theoretical investigations of the electrostatic potential and non-linear optical properties of a new organic compound <i>Samia DJABBOUR, Nourdine BOUKABCHA, Abdelkader CHOUAIH</i>	POS6
Fizir Meriem	Sustainable Treatment of Phosphate in Hydroponic Wastewaters with Biopolymer-Based Clay Beads <i>Meriem Fizir, Sami Touil, Amina Richa, Liu Wei, Selma Douadia, Rihab Taibi , Souad Cherifi , Demet Sezgin Mansuroglu, Pierre Dramou.</i>	POS7
Benharkat Noureddine	Structure determination of an organic compound using computational and experimental methodology along with The Molecular Electrostatic Potential (MEP) and Frontier Molecular Orbital (FMOs) analyses <i>Benharkat NOUREDDINE, Chouaih ABDELKADER, Boukabcha NOURDINE</i>	POS8
Karahacane Hana	Inhibitory potency corrosion of natural compound for API 5L X60 steel <i>Karahacane HANA, Khadraoui ABDELKADER, Hachama KAMEL</i>	POS9
Khater Mohammed Amine	Simulation model aimed at examining the thermochemical boriding process of stainless steel 309L <i>Mohammed Amine KHATER, MEBAREK Bendaoud , Benaoumeur AOOUR ,Sabik Abd elhadi BOUAZIZ</i>	POS10
Lamri Younes	Analysis of Glass Foam Composite for Electromagnetic Wave Absorption Application <i>Youne LAMRI, Fayrouz BENHAOUA, Bachir Eddine MESSAID, Nacira STITI, Razik TALA-IGHIL, Faiza MOUHOUCHE</i>	POS11



Messaïd Bachir Eddine	<p>The technical and ecological impact of a PMMA:ZnO nanocomposite as photovoltaic protective cover Bachir Eddine MESSAÏD,, Mahdia TOUBANE, Younes LAMRI, Razika TALAIGHIL, Faycal BENSOUICI, Boujamaa BOUAOUINA, Farouk MEBTOUCHE</p>	POS12
Saidi Noureddine	<p>Structural, Elastic and Electronic Properties of full-Heusler Co₂FePb alloy By first Principles Calculation. Noureddine SAIDI, Wissam BENSTAALI, Kheira BAHNES, Amel ABBAD</p>	POS13
Bekheira Ilyes	<p>Study of engine oil degradation by monitoring physicochemical and rheological parameters <i>Ilyes BEKHEIRA, Laraba SAMIHA, Fatiha BOUDJEMA, Khelidj BENYOUCEF, Ridha MAZOUZI</i></p>	POS14
Belahcene Maamar	<p>Numerical Simulation of Pin on Disc Contact <i>Maamar BELAHCENE, Ridha MAZOUZI, Mourad LOUNIS, Mohamed ABBADENI</i></p>	POS15
Bennaceur Hadjar	<p>The effect of the aspect ratio on the performance of a two-lobe journal bearing lubricated with non-Newtonian fluids <i>Hadjar BENNACEUR, boualem CHETTI</i></p>	POS16
Laraba Samiha	<p>Rheological Property Prediction of Synthetic Automotive Engine Oil Using Machine Learning Algorithms <i>Samiha LARABA, Ilyes BEKHEIRA , Ridha MAZOUZI, Benyoucef KHELIDJ</i></p>	POS17
Meriem-Benziane Madjid	<p>Numerical study of the rheological behavior of grease in the mechanical systems <i>Madjid MERIEM-BENZIANE, Ridha MAZOUZI, Bassam Gamal Nasser MUTHANNA, Abdelaali BENMAHAMMED, Zahi MESSAOUD</i></p>	POS18
Muthanna Bassam	<p>Experimental study of the rheological properties of Grease with additives <i>Ridha Mazouzi, Madjid Meriem-Benziane, Bassam Gamal Nasser Muthanna, and Zahi Messaoud</i></p>	POS19
Hentabli Mohamed	<p>Optimizing Neural Networks and Thixotropic Behavior of Solid Lipid Microstructures: A Dual Approach with the Ant Lion Algorithm. <i>Mohamed Kouider Amar, Mohamed Hentabli, Mahtal Badiet El Djamel Nedjma.</i></p>	POS20