



Faculty of Sciences and Technology



International Conference

Program

October 01 - 03, 2024 – Ghardaia, Algeria



International Conference on Green Hydrogen, Artificial intelligence, Renewable energy and Electrical engineering Systems: First Edition “IC-GARES’24”

Octobre 1, 2024


 1st Day

09h00 – 09h30

Online Opening + General Session

| 09h30 – 12h00 \ on line presentation (Presentation : 10 min ; Debate : 05 min) | | | |
|--|---------------------------|---|---|
| ID | Presenter | co-authors | Title |
| 12 | Samia Medjenah | Samia Medjenah , Farid Benamira | Solving the one-dimensional Schrödinger equation for a positiondependent mass particle, with a Hulthén-type mass distribution and a Morse potential |
| 24 | Abdesselam guerbouz | Imad merzouk , Ahmed hafaifa, fihakhir amine | Photovoltaic MPPT control using CUK converter based on super twisting control |
| 39 | El Mouatez Billah Messini | Yacine Bourek , Charaf Abdelkarim Mosbah | Comparative Study of evolutionary-based Metaheuristic Optimization Algorithms for PV Module Parameter Extraction |
| 18 | Abdelali laid | Bougenah Abdellah,Meksi aissa | Impact of zinc sulfide insulation layer on the Efficiency of CIGS solar cells |
| 32 | Khadidja Dahli | Karim Selam | Innovative Wind-Responsive Control for Preventing Torsional Galloping in Solar Power Installations |
| 30 | Yassine Bouroumeid | Mokhtaria Jbilou , Seyf Eddine Bechekir , Mouffok Arezki , Brahim el Khalil Oulad Naoui and Essama Ahmed. Ghaitaoui | Techno-Economic Analysis of Hybrid Renewable Power Generation Systems Across Various Climatic Zones in Algeria |
| 22 | Messaouda chaib | Ali benatillah, Nadir Hachemi, Abdeldjalil Dahbi | Evaluating Performance Decline and Investigating Root Causes for a Solar Power Plant in Southern Algeria, |
| 31 | MOHAMED TAHAR BOUZAHER | ABDELHAMID BOUZAHER | Photovoltaic Panel Faults Diagnosis: The use of the bishop model for confirmation of the diagnosis method based on the fill factor analysis and use of Artificial Intelligence techniques |
| 27 | Nadir Hachemi | Elfahem Sakher ,Messaouda Chaib, Rachid Tigrine, Faïçal Baira | SEM microstructure comparison between EVA above the cell and EVA below the photovoltaic cell of a degraded solar panel |
| 13 | BEKKAR Belgacem | BEKKAR Belgacem, ZITANI Brahim | Genetic Algorithm Optimization of Advanced Sliding Mode Controllers with Double Integral Terminal for Magnetic Levitation System |

Octobre 2, 2022



| | |
|---------------|---|
| 08h00 – 08h30 | Desk Registration |
| 08h30 – 09h30 | Official opening Speech: University Director\Dean of faculty\Chairman of conference |

Plenary session 09h45 – 10h30

Title: Towards the Realization of the Energy Internet: IoT Technologies for the Massive Integration of Distributed Energy Sources

Speaker: **Pr. Panagiotis G. Papageorgas**

University of West ATTICA Greece



10 :30h - 11h00

Plenary session 11h00 – 11h45

Title: Energy transition governance: Challenges and Strategies

Speaker: **Pr. Ali CHEKNANE**

Amar Telidji University of Laghouat, Algeria

Plenary session 11h45 – 12h30

Title:

- Electric Vehicle
- Impact of Digital Transformation on Alternative and Green Energies

Speaker: **Pr. ILHAMI Colak**

Istinye University

Turkey



12h30 - 14h00

Octobre 2, 2022



| 14h00 – 15h30 \ Room 1 (Presentation : 10 min ; Debate : 05 min) | | | |
|---|---|--|--|
| <i>ID</i> | <i>Presenter</i> | <i>co-authors</i> | <i>Title</i> |
| 46 | Birane Mouhoub | Seba Samah, Birane Mouhoub, Benmouiza Khalil | Analysis and Modeling of P&O and Beta MPPT Algorithms under Partial Shading Photovoltaic Systems |
| 45 | KOUADRIA Mohamed | KOUADRIA Mohamed, ARAB Mustapha, ZEGAOUI Abdellah | Diagnosis of Stator Faults in an Induction Motor Using the Matrix Pencil Method |
| 33 | Slimane Sayah | Mouhoub Birane, Khalil Benmouiza, Abdelkader Firah, Aicha Degla. | Long Short-Term Memory Network-Based Control for Single-Phase Grid-Connected Inverter |
| 68 | Babaousmail Moussa | hattara Abdelouahab | PV and Wind sources integration, power flow analysis and data visualization |
| 69 | Guerbouz Abdesselam | Amine Mehdi FIAKHIR | Nonlinear Control with Genetic Algorithm of UAV Type HELIPLANE |
| 94 | Abdelkader ELMEDDAH | Djalloul ACHOUR | "Optimal design parameters of cylindrical pumps for water pumping system" |
| 20 | Bouguenna Abdellah | Bouguenna Ibrahim Farouk, and Ouslim Mohamed | Study and simulation of intelligent sensor using the microchip dspic30F |
| 62 | Ouarniki Hadj Abdelkader , Gama Amor , Mosbah Charaf Abdelkarim , Yattou Fatiha | Gama Amor , Mosbah Charaf Abdelkarim , Yattou Fatiha | Empirical investigation and prediction of Linke turbidity factor through Artificial intelligence methods: an experimental approach |
| 19 | CHACHI Mohamed | KAMLA Youcef, BENHARKAT wiam, LARCH nadia, | "Etude expérimentale et réalisation d'une éolienne à axe Vertical de type SAVONIUS |

(17h00 – 20h00)

Evening

Gala dinner

Octobre 3, 2022



3rd Day

Plenary session 9h00 – 9h45

Title: Application of Artificial Intelligence Technique in Photovoltaic systems

Speacker: **Pr. Adel MELLIT**

University of Jijel, Algeria

Plenary session 09h45 – 10h30

Title: Innovative Exploration of Green Hydrogen

Speacker by: **Dr Mohamed KHERAT**

Centre de Développement des Energies Renouvelables (CDER), Algeria



10h30 - 11h00

09h00 – 11h00 \ Room 2 (Presentation : 10 min ; Debate : 05 min)

| ID | Presenter | co-authors | Title |
|----|-----------------------------|--|--|
| 16 | Saggai Abdelmoula | Saggai Abdelmoula ,mehdadi Khaled , Benras Mohamed Taher ,Hadjaidji elmoundher | Fault Tolerant Control of an UAV type Octorotor Against Wind Gusts |
| 67 | Mohamed Kellal | Abdellah Zegouai, Mustapha,Ilhami COLAK Tayeb ALLAOUI, ARAB, | Modeling of the Characteristics I-V and P-V of an HVDC PV array under partial shading using Proteus ECAD |
| 44 | SAHNOUN M'hamed | SAHNOUN M'hamed, SADOUNI Radhwane , DJERIOU Salim | Indirect Rotor Field-Oriented Control for Dual Stator Induction Motor Used in Solar Water Pumping System |
| 38 | Benali AIOUACHE | Benali AIOUACHE, M'hamed HELAIMI, Abdelkadir BELHADJ DJILALI Hadj ALLOUACHE and Adil YAHDOU | Frequency oscillation control of an islanded microgrid system based on PSO-PID controller |
| 65 | Belhadj benziane Izzessalam | Izzessalam, ZEGAOUI Abdallah,Bouchelga Fatma,Kellal Mohamed,ARAB Mustapha,ALLAOUI Tayeb,ilhami COLAK | Influence of Irradiation on Distributed PV Architecture Dedicated to DC Power Transmission |
| 60 | Rabah Benabid | Rabah Benabid | NPP flexibility modeling in interconnected grid considering power ramp ratio limit |
| 47 | Zababe ilyes | sadouni radhwane ,moussa oussama | "Detection Inter-Turn Short Circuit Fault in induction motor using Artificial neural network |

11h00-12h00

Closing ceremony and certificate of participation



(12h00 – 13h30)