The 2nd International Conference On Electrical Engineering and Modern Technologies ICMEET'24

« December 13 - 14 2024 »

Program

Friday December, 13th 2024   09:00 - 11:00

- **Quran**

- **National anthem**

- **Conference Chairman opening Speech : Dr Zouhir Boumous**

- **University MCM Rector 's Welcome Speech: Pr Nora Moussa**

- **Dean of sciences and technology faculty: Dr Farida Khammar**

- **Highlights from the Previous Conference Edition: A Gathering of Experts and Innovators: Dr Moufida Boumous**

Plenary Conferences

Friday : 10 : 00 – 10:45 , Pr Saad Mekhalief, Université De Malaya, Malysia,

Title :   ***Wireless Power Transfer for Electric Vehicle Applications***

Google meet Link meet.google.com/dbc-nihr-qhn

Friday : 14:00 – 14:45: Pr. bdelhamid Mammeri, Team Leader and Researcher at the National Research Council of Canada (NRC) Title: ***Revolutionizing Roads: Computer Vision and AI in Automated and Connected Vehicles***

Google meet Link: meet.google.com/dbc-nihr-qhn

Saturday: 08:30- 09: 15: ,   Pr Toufik Bakir ,   ImVia laboratory, university of Burgundy , Franche-Comte, Dijon, France,

 Title: ***From modeling to control of non-autonomous systems, biomedical application***

Google meet Link: meet.google.com/dbc-nihr-qhn

Friday   13/12/2024   Room 01   Google meet Link: meet.google.com/hqr-odcy-fjv

Session : Artificiel intelligence application   Chairman: Pr. K. Khelil,   Co-Chair: Dr. M.C. Amara Korba

Time	Paper ID	Author	Title	Establishment
14 :00-14 :45		Pr. abdelhamid Mammeri	*Revolutionizing Roads: Computer Vision and AI in Automated and Connected Vehicles*	meet.google.com/dbc-nihr-qhn
14 :45-15 :00	ID 1	Lokmene Melalkia	A deep learning model for wind speed forecasting	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :00-15 :15	ID 2	Bouguenna Ibrahim Farouk	Leveraging Drones and AI for Forest Fire Control	Mustapha Stambouli University - Mascara, Algeria
15 :15-15 :30	ID 3	Lakikza Abdelmalek	Comparative Analysis of Support Vector Machines and Logistic Regression for the Detection and Classification of Gear Failures	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :30-15 :45	ID 4	Lakikza Abderrahmane	Fault Diagnosis in Rotating Machinery and Wind Turbine Systems Using Wavelet Analysis and Artificial Neural Networks	Elechtromechanical systems laboratory- Badji Mokhtar University- Annaba, Algeria
15 :45-16 :00	ID 5	Nabil Hezil	Energy Consumption Prediction: Leveraging Building Attributes and Weather Conditions	Scientific and Technical Research Center for Language Development
16 :00-16 :15	ID 6	Boumediene Ladjal	Cascade and Feed Forward Back propagation for the artificial neural network model of Solar Radiation Prediction: a case study of Scientific Zone, Ghardaia Algeria	University of Ghardaia, Algeria
16 :15-16 :30	ID 8	Ghellouci Mohamed Abderrazak	Optimizing PV Power Generation with Artificial Neural Networks: A Maximum Power Point Tracking Approach	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
16 :30-16 :45	ID 91	Elmoundher Hadjaidji	Automated Classification of Dysphonia Using XGBoost	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
16 :45-17 :00	ID 72	Sakina Aoun	Fuzzy monitoring of stator faults for DFIG used in wind energy conversion system	Department of Electrical Engineering, LABGET laboratory, Tebessa University, Algeria
17 :00-17 :15	ID 7	Tawfik Thelaidjia	Battery remaining useful life prediction based on wavelet multi-resolution analysis and extreme learning.	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
17 :15-17 :30	ID 89	Amara Korba Mohamed Cherif	Voice Disorder Detection Through Vowel Analysis and Machine Learning	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Friday   13/12/2024   Room 02   Google meet Link: meet.google.com/osa-zmqz-eit

Session: Image and signal processing   Chairman: Pr. H. Bourouba, Co-Chairs: Dr. H. Doghmane

Time	Paper ID	Author	Title	Establishment
14 :00-14 :45		Pr. abdelhamid Mammeri	*Revolutionizing Roads: Computer Vision and AI in Automated and Connected Vehicles*	meet.google.com/dbc-nihr-qhn
14 :45-15 :00	ID 9	Chami Ahmed Chaouki	Application Of vision Transformers In Face Age Classification	Shahid Hama Lakhdar University - El Oued, Algeria
15 :00-15 :15	ID 10	Mehdi Baali	Implementation of CNN Accelerator based on ARM Processor especially for Medical Imaging Applications using Zynq-7000 Platform	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :15-15 :30	ID 75	Rania Boukhenoun	Implementation of SSD-Mobile Net for Real Time Object Detection Using Opencv And Cell Phone Camera	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :30-15 :45	ID 77	Chouchene Karima	Preprocessing of Medical Images Using FCM Algorithm for Better Detection of Regions of Interest Especially for Artificial Intelligence Techniques	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :45-16 :00	ID 79	Amani Nasri	Advanced Modeling and Integration of Intelligent Image Sensors for High-Speed Optical Fiber Transmission	Badji Mokhtar University - Annaba, Algeria
16 :00-16 :15	ID 84	Nadira Boukhatem	Error propagation analysis for the HEVC video codec in an optical fiber video transmission	Badji Mokhtar University - Annaba, Algeria
16 :15-16 :30	ID 86	Baya Ayeb	Biometric system based on features extraction by CNN pretrained models of two hand datasets	Badji Mokhtar University - Annaba, Algeria

Friday   13/12/2024   Room 03   Google meet Link: meet.google.com/qve-djag-wuo

Session: Optimization and reliability of electrical systems   Chairman: Pr. M. Sedraoui, Co-Chair: Pr Nouri

Time	Paper ID	Author	Title	Establishment
14 :00-14 :45	Pr. abdelhamid Mammeri		*Revolutionizing Roads: Computer Vision and AI in Automated and Connected Vehicles*	meet.google.com/dbc-nihr-qhn
14 :45-15 :00	ID 12	Yamina Belhadef	Design of a miniature patch antenna based on metamateriels for 4G	Abou Bekr Belkaid University - Tlemcen, Algeria
15 :00-15 :15	ID 13	Slimane Ouanes	A digital protection approach in power transformers	Ferhat Abbas University - Setif, Algeria
15 :15-15 :30	ID 14	Boumediri Khaled	Comprehensive Reliability and Maintainability Analysis of Solar-Powered Street Lighting Systems in Algeria	Mohamed Cherif Messaadia University -Souk Ahras, Algeria
15 :30-15 :45	ID 15	Mahdi Benaouadj	Robustification of the Fractional PID Controller for a Heating Ventilation Air Conditioning (HVAC)	Kasdi Merbah University – Ouargla , Algeria
15 :45-16 :00	ID 16	Samir Bedoui	Ferro-Resonance Occurrence In A Potential Transformer	Larbi Ben M'hidi University - Oum el Bouaghi, Algeria
16 :00-16 :15	ID 37	Chaima Gherari	Model-based current sensor fault detection in DFIG wind turbine systems .	Electrical engineering department Laboratory of Electrical Engineering and Renewable Energy
16 :15-16 :30	ID 38	Hassen Kaddour	A Comparative Study Between Optimization Algorithms of MPPT Algorithms (P&O and Incremental Conductance Method)	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
16 :30-16 :45	ID 90	Ali Srihen billel	Approach for Prototype Environmental Monitoring and Forest Fire Management	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
16 :45-17 :00	ID 18	Hicham Zaimen	A Novel Open-circuit Failure Diagnosis Approach of Inverters in PMSM Drives	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
17 :00-17 :15	ID 17	Zouhir Boumous	Decentralized Optimization for Distributed Energy Resources in Power Grids	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Friday   13/12/2024   Room 04   Google meet Link: meet.google.com/buw-renc-bbe

Session: Renewable Energy Sources and Technology   Chairman: Pr. Y. Kourd   Co-Chair: Dr .M.Benaouadj

Time	Paper ID	Author	Title	Establishment
14 :00-14 :45		Pr. abdelhamid Mammeri	*Revolutionizing Roads: Computer Vision and AI in Automated and Connected Vehicles*	meet.google.com/dbc-nihr-qhn
14 :45-15 :00	ID 57	Brahim Ayeb	Improved Maximum Power Point Tracking for Grid-Connected Photovoltaic Systems with the Use of Grey Wolf Optimization	Echahid Cheikh Larbi Tebessi University - Tebessa, Algeria
15 :00-15 :15	ID 58	Soulef Mahiddine	Energy management system for a micro grid containing photovoltaic power sources and hybrid energy storage systems	Echahid Cheikh Larbi Tebessi University - Tebessa, Algeria
15 :15-15 :30	ID 66	Meryem Lagoune	Control of BLDC Motor Speed for Pumping system Using Fuzzy Logic and Proportional Integral Control	Electrical Engineering Departement, Automatic Laboratory of Setif-LAS
15 :30-15 :45	ID 61	Kaddour Hassen	A Comparative Study Between Optimization Algorithms of MPPT Algorithms (Fuzzy Logic and Incremental Conductance Method)	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :45-16 :00	ID 62	Khalissa Behih	Nonlinear Adaptive Controller for Optimal Photovoltaic Systems Performance	Ferhat Abbas University - Setif, Algeria
16 :00-16 :15	ID 63	Bouabida Seddik	Synthesis of Fe Doped SnO_2 Thin Films and Their Effect of Dipping Cycles on Structural, Morphological, and Optical Properties.	Echahid Cheikh Larbi Tebessi University - Tebessa, Algeria
16 :15-16 :30	ID 74	Khallouf Khaoula Nermine	Fractional Order Proportional Integral Control For Power Quality improvement of Microgrid Connected System	Frères Mentouri University - constantine, Algeria
16 :30-16 :45	ID 39	Belhouchet Hadia	Crowbar Protection For Hybrid Microgrids AC-DC During Faults	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
16 :45-17 :00	ID 83	Amira Aggoune	Fuzzy optimal control of doubly-fed induction generator (DFIG) based wind turbine system using PSO	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
17 :00-17 :15	ID 82	Berrezzek Farid	Technical and economic analysis of wind energy in the Adrar region - Algeria	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
17 :15-17 :30	ID 60	Samira Boumous	Investigation into the optimization of the photovoltaic station of Oued Kebrit- Comparative study-	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Saturday morning   14/12/2024   Room 01   Google meet Link: meet.google.com/ymw-kygr-qer

Session : Optimization and reliability of electrical systems   Chairman: Dr. L.Moussaoui , Co-Chair: Dr. H. Mellah, Dr S.Farhi

Time	Paper ID	Author	Title	Establishment
08:30-09:15		Pr Toufik Bakir	*From modeling to control of non-autonomous systems, biomedical application*	meet.google.com/dbc-nihr-qhn
09 :15-09 :30	ID 67	Samir Bedoui	Ferro-Resonance Occurrence In A Potential Transformer	Larbi Ben M'hidi University - Oum el Bouaghi, Algeria
09 :30-09 :45	ID 71	Med Mounir Abbes	battery state of charge estimation using AI	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
09 :45-10 :00	ID 76	Chafa Mohamed	Hardware implementation and optimization of PWM control for a three-phase voltage inverter	Frères Mentouri University - constantine1, Algeria
10 :00-10 :15	ID 85	Boumediri Khaled	Comprehensive Reliability and Maintainability Analysis of Solar-Powered Street Lighting Systems in Algeria	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
10 :15-10 :30	ID 88	Saida Hassainia	Improving the Performance of an Induction Machine Variable-Speed Drive Using Parallel Fractional Controllers	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
10 :30-10 :45	ID 69	Hesna Aberkane	Improved Predictive Torque Control Method for Induction Motor Using Indirect Matrix Converter	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
10 :45-11 :00	ID 93	Faiçal Kharchouche	Elaboration of varistors used for electrical protection against overvoltages by microwave sintering and conventional sintering	Ferhat Abbas University - Setif, Algeria

Saturday morning   **14/12/2024**   **Room 02**   **Google meet Link:** meet.google.com/rzf-cqhd-nty

Session : Smart grid Technologies & Applications/Others   **Chairman: Dr. S.Mouassa, Co-Chair: Dr. F. Kharchouche , Dr. Alisrihen**

Time	Paper ID	Author	Title	Establishment
08:30-09:15		Pr Toufik Bakir	*From modeling to control of non-autonomous systems, biomedical application*	meet.google.com/dbc-nihr-qhn
09 :15-09 :30	ID 20	Abdesselam Babouri	Infrastructure-to-Vehicle Communication in the Realm of Autonomous Vehicles Utilizing Visible Light Communication for Enhancing Road User Safety	8 Mai 1945 University - Guelma, Algeria
09 :30-09 :45	ID 21	Ameur Chaabna	Integration of VLC/Li-Fi Communication in Industry 4.0: Industrial Scenario for Wireless Communication	Science and Technology Houari Boumediene USTHB University, Algeria
09 :45-10 :00	ID 80	Nadjet Bououden	Robust Estimation of Actuator Fault for Uncertainties Descriptor T-S Systems	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
10 :00-10 :15	ID 65	Badis Bacha	A Hybrid Stand-Alone Renewable Microgrid Technology : Techno-Economic Analysis	Mohamed Khider University - Biskra, Algeria
10 :15-10 :30	ID 64	Zeyneb Berkat	Compact Antenna Design for 5G Applications	Saad Dahlab University - Blida1, Algeria
10 :30-10 :45	ID 96	Khalissa Behih	Enhanced Robust Sliding Mode Control for MPPT Tracking	Ferhat Abbas University - Setif, Algeria
10 :45-11 :00	ID 73	Derradji Ilheim	Fractional-order regulator applied with direct torque control for controlling a type 6/4 switched reluctance motor	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Saturday morning   **14/12/2024**   **Room 03**   **Google meet Link:** <mark>meet.google.com/eof-buia-ypr</mark>

Session: Power quality in modern power   **Chairman: Pr. Y. Sahraoui,   Co-Chair: Dr Rouaibia**

Time	Paper ID	Author	Title	Establishment
08:30-09:15		<mark>Pr Toufik Bakir</mark>	<mark>*From modeling to control of non-autonomous systems, biomedical application*</mark>	<mark>meet.google.com/dbc-nihr-qhn</mark>
09 :15-09 :30	ID 22	Mezghich Lyes	Enhanced Direct Power Control Using Sliding Mode Control for Grid-Connected Photovoltaic Systems with Shunt Active Power Filter	Larbi Ben M'hidi University - Oum El Bouaghi, Algeria
09 :30-09 :45	ID 87	Rebiha Marki	Modeling of Nanowire Field-Effect Transistor NWFET	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
09 :45-10 :00	ID 24	Nadhir Mesbahi	Model Predictive Control of a Shunt Active Power Filter with Fixed Switching Frequency under Distorted and Unbalanced Grid Conditions	Echahid Hamma Lakhdar University - El Oued, Algeria
10 :00-10 :15	ID 25	Messaouda Bedoui	Improving Power Quality in Three-Phase Distribution Systems through a Digital Control Algorithm for Power Factor Correction using MATLAB.	Ibn Khaldoun University - Tiaret, Algeria
10 :15-10 :30	ID 26	Mounira Mekki	Effect of Hybridization (PV-Wind turbine) on the Power Quality.	Larbi Ben M'hidi University-Oum El Bouaghi, Algeria
10 :30-10 :45	ID 27	Abdellah Kadri	Fuzzy-Logic Controller Based UPFC Transmission System	Ahmed Draya University - Adrar, Algeria
10 :45-11 :00	ID 70	Ali Boucetta	Comparative study between the methods of Identification Algorithms for STATCOM device	Electrical engineering department Laboratory of Electrical Engineering and Renewable Energy
11 :00-11:15	ID 95	Nadjat Zerroug	Nonlinear Synergetic Control Based MPPT	Ferhat Abbas University - Setif, Algeria
11 :15-11 :30	ID 23	Salah Eddine Farhi	High-Order Sliding Mode Control of Three-Phase PWM Rectifiers for Achieving Unity Power Factor	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Saturday morning   **14/12/2024**   **Room 04**   **Google meet Link:** meet.google.com/wni-nzte-cic

Session: Renewable Energy Sources and Technology   **Chairman: Dr. F. Berrezzek,   Co-Chair: Dr. S.Latréche**

Time	Paper ID	Author	Title	Establishment
08:30-09:15	Pr Toufik Bakir		*From modeling to control of non-autonomous systems, biomedical application*	meet.google.com/dbc-nihr-qhn
09 :15-09 :30	ID 47	Sait Oussama	Design, Simulation and Real-Time Application of Solar System in View of a Fault Detection	Ferhat Abbas University - Setif, Algeria
09 :30-09 :45	ID 48	Meryem Lagoune	BLDC-Driven Solar PV Water Pumping System with Speed Sensor Using Super Twisting Sliding Mode Control (SMC)	Ferhat Abbas University - Setif, Algeria
09 :45-10 :00	ID 49	Salhi Fatima	Grid-Connected PV System Using Particle Swarm Optimization Algori	YAHIA Fares University - Médéa, Algeria
10 :00-10 :15	ID 50	Khaled Imane Meriem	Wastewater treatment using solar light by the synthesized of copper oxide nanoparticles	Mohamed Boudiaf University - M'sila, Algeria
10 :15-10 :30	ID 51	Brahim Ayeb	Enhancing PV System Fault Detection with the Application of ANNs and Statistical Parameters	Echahid Cheikh Larbi Tebessi University - Tebessa, Algeria
10 :30-10 :45	ID 52	Mahfoudi Rayane Yasmine	A method of controlling smart meters that preserves privacy while accounting for energy storage losses	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
10 :45-11 :00	ID 53	Mahdi Benaouadj	Enhancing Grid-Connected Photovoltaic System Performance under Partial Shading Using Predictive Control	Department of Electrical Engineering, Kasdi Merbah University - Ouargla, Algeria
11 :00-11 :15	ID 54	Allele Selma	Fuzzy logic for Wind Generation systems with Improved Efficiency and Stability under Varying Load Conditions	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
11 :15-11 :30	ID 55	Brahim Bacha	Design and Simulation of Solar Heating System in Cold Mountainous Area : Case Study of a School in Ouled Dris, Souk Ahras, Algeria	Mohamed Khider University - Biskra, Algeria
11 :30-11 :45	ID 56	Khammar Farida	Performance Study Of Electric And Thermal Parameters For Photovoltaic Solar Module	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Saturday afternoon   14/12/2024   Room 01   Google meet Link: meet.google.com/aef-pdec-yft

Session : Power quality in modern power   Chairman: Pr. K. Hemsas, Co-Chair: Dr. T.Thelaidjia

Time	Paper ID	Author	Title	Establishment
14 :00-14 :15	ID 28	Rouibah Tahar	Transformer Protection for Magnetizing Inrush Current and Different Protection Schemes	Department of Electrical Engineering, Kasdi Merbah University - Ouargla, Algeria
14 :15-14 :30	ID 29	Choayb Bousnoubra	Shunt Active Power Filter Based on PQ and DQ Using PWM and Hysteresis Techniques	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
14 :30-14 :45	ID 30	Sabrine Morakeb	Enhancing Power Quality in Microgrids through Optimization Using GA and PSO Methods	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
14 :45-15 :00	ID 68	Nour El Yakine Kouba	MATLAB Based Symmetrical and Unsymmetrical Short-Circuit Faults Simulation Tool For Power System Transient Stability Analysis	Laboratory of Electrical and Industrial Systems, Sciences and Technology Houari Boumediene University, Algeria
15 :00-15 :15	ID 36	Sait Oussama	Optimizing Fault Detection in Solar Photovoltaic Systems via Thresholding Techniques: A Simulation-Based Study	Ferhat Abbas University - Setif, Algeria
15 :15-15 :30	ID 92	Faiçal Kharchouche	Development and dielectric characterization of varistors used for electrical network protection	Ferhat Abbas University - Setif, Algeria
15 :30-15 :45	ID 93	Malaoui Yousra	The effect of TiO2 on the microstructure and electrical properties of ZnO-based varistor ceramic used in an electrical installation	Ferhat Abbas University - Setif, Algeria
15 :45-16 :00	ID 81	Berrezzek Farid	Combination of a robust H∞ observer and nonlinear control of an induction motor	Mohamed Cherif Messaadia University - Souk Ahras, Algeria

Saturday afternoon   14/12/2024   Room 02   Google meet Link: <mark>meet.google.com/irm-nhre-akw</mark>

Session: Renewable Energy Sources and Technology   Chairman: Pr. R. Toufouti,   Co-Chair: Dr Djeghader

Time	Paper ID	Author	Title	Establishment
14 :00-14 :15	ID 31	Mourad Boufadene	Adaptive Neural Network Nonlinear Observer For Mechanical Speed And Load Torque Estimation With A Nonlinear Controller For Induction Machine	Ammar Telidji University - Laghouat, Algeria
14 :15-14 :30	ID 33	khoukha bouguerra	Comparative study between P&O, IncCond, SMC and FLC algorithms for MPPT control of PV system	Electrical Engineering Departement, Automatic Laboratory of Setif-LAS
14 :30-14 :45	ID 35	Meryem Lagoune	P&O Application for Photovoltaic Brushless DC-Motor Powered Water Pumping System MPP Algorithm	Electrical Engineering Departement, Automatic Laboratory of Setif-LAS
14 :45-15 :00	ID 40	Chebel Ahlem	Controller Design for DFIG Driven by Variable Speed Wind Turbine Using Fuzzy Logic Technique	20 Aout 1955 Univeristy - skikda, Algeria
15 :00-15 :15	ID 42	Mohammed El Amine Beyour	A Simulation Approach to Enhancing the Design and Efficiency of Si/GaAs/Si Single Junction Solar Cell	Department of Electrotechnical, Mustapha STAMBOULI University - Mascara, Algeria
15 :15-15 :30	ID 43	Khoukha Bouguerra	Control of Grid-Connected Solar Energy Systems by Regulating the DC-Link Voltage Levels	Ferhat Abbas University - Setif, Algeria
15 :30-15 :45	ID 45	Djamal Benabied	Tuning PI-Controller for Energy Storage System in in PV-Based DC Microgrids :A Pole Placement Approach	Mohamed Cherif Messaadia University - Souk Ahras, Algeria
15 :45-16 :00	ID 94	Iméne Djelamda	KNN and Naive Bayes Algorithms Diagnosis of PMSM Faults Dedicated to Electric Vehicles.	Mohamed Cherif Messaadia University - Souk Ahras, Algeria