



National Conference on Electrical Engineering (NCEE' 2025)

Djillali Liabès University of Sidi Bel-Abbes

Electrical Engineering Faculty

December 7-8, 2025



<https://www.univ-sba.dz/ge/confncee2025/>

Honorary Chair:

Pr. BOUZIANI Merahi

Rector of Djillali Liabès University of Sidi Bel-Abbes, Algeria

Co-Honorary Chair:

Pr. KHADRAOUI Mohamed

Dean of Electrical Engineering Faculty, Djillali Liabès University of Sidi Bel-Abbes, Algeria

General Chair:

Pr. FELLAH Mohammed-Karim

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Dr. TEHAMI Mohamed Amine

Dr. BEDDAD Boucif

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(to be completed...)

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Pr. BOUREZIG Yamina

(to be completed...)

Second Call For Papers

Electrical Engineering Faculty (Djillali Liabès University of Sidi Bel-Abbes) is pleased to announce the National Conference on Electrical Engineering (NCEE'2025) to be held on December 7-8, 2025, at Sidi Bel-Abbes, Algeria.

NCEE'2025 aims to create a forum for students, researchers, scientists and industrials to debate their latest research results and experience in different areas of electrical energy and present their contributions and research findings.

NCEE'2025 objectives are to provide high quality research papers and contributions.

Topics:

- AC Drives
- Advanced and Intelligent Control of Renewable Energy Production Systems
- Antennas and Radio Frequency Devices
- Artificial Intelligence Applications in Electrical Engineering
- Communication Systems
- Cryptography and Cyber Security
- Diagnosis and Non-Destructive Testing
- Distributed and Parallel Processing
- Electric Vehicles and Transport Electrification
- Electrical Power Systems
- Electromagnetic Compatibility
- Embedded Systems, IoT and Sensor Networks
- Energy Storage and Management
- High Voltage Engineering
- Integration of Renewable Energies into Smart Grids Using Artificial Intelligence
- Intelligent Control and Machine Learning
- IoT and Edge Intelligence for Smart and Sustainable Networks
- Materials and Devices
- Materials for Photovoltaic Applications
- Metaheuristic Methods in Power Systems
- Micro and Nanoelectronics (Characterization, numerical modeling and simulation, surface analysis, etc...)
- Optical and Photonic Communication Systems
- Ozone Generation and Environmental Applications
- Plasma and Electrostatics
- Power Components and Power electronics
- Reflectometry and Sensing
- Satellite and Medical Image Processing
- Signal, Image and Video Processing
- Smart Lighting Systems
- Wireless Communications and Networks

Paper submission:

Papers must be submitted online, exclusively via CMT platform (see conference website for more details).



CMT platform: <https://cmt3.research.microsoft.com/NCEE2025>

Conference website: <https://www.univ-sba.dz/ge/confncee2025/>



Participation fees:

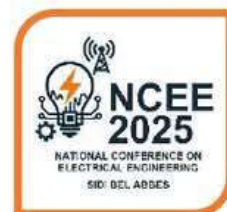
Student: 5.000 DZD

Academic: 10.000 DZD

Important dates:

- Paper submission opens on CMT platform: **July 30, 2025**
- Deadline for full-text paper submission: **October 20, 2025** **November 02, 2025**
- Notification of acceptance/rejection: **November 09, 2025** **November 16, 2025**
- Deadline for camera ready submission: **November 20, 2025** **November 23, 2025**
- Conference dates: **December 7-8, 2025**

Contact: nceeusba2025@gmail.com



Programme NCEE'2025

(Version 1)

Dimanche 07 Décembre 2025

Matin

- 8h00 – 9h00 : Réception et inscription
- 9h00 – 9h30 : Cérémonie d'ouverture
- 9h30 – 10h30 : **Plénière 1**
Présidents de Session :

Conférencier : **Prof. Hafid AOURAG** (UST Oran)

Intitulé : « **Les métamatériaux en électronique : Révolutionner les dispositifs de nouvelles générations** ».

- 10h30 – 11h00 : Pause-Café
- 11h00 – 12h15 : 03 Sessions « Oral » + 01 Session « Poster »

Salle 1 (04 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	53	A Generation Scheduling Solution Utilizing Dynamic Programming Procedure	Rachid Belhachem (Univ. SBA)
2.	13	Effectiveness of Ozonated Water from a Dielectric Barrier Discharge Reactor for Postharvest Disinfection and Shelf-Life Extension of Fresh Produce	Fethi Miloua (Univ. SBA)
3.	58	Evaluation of a Rapid Ozone–Heat Sterilization System Using Dielectric Barrier Discharge Technology	Salim Boublenza (Univ. SBA)
4.	72	Study and Development of a Dielectric Barrier Discharge Ozone Generator and Its Application for Water Disinfection	Zaza Mahkouka (Univ. SBA)

Salle 2 (05 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	25	Modelling and Simulation of Monolithic Two-Terminal CIGS/CIGS Tandem Solar Cell	Ikram Zidani (Univ. SBA)
2.	28	Analysis of I–V characteristics of Au/n-GaAs and Au/GaN/n-GaAs Schottky diodes over a wide temperature range	Hayet Toumi (Univ. SBA)
3.	29	The Effect of Anode Work Function on the Performance of PeLEDs (CH ₃ NH ₃ Pb (Br _{0.5} Cl _{0.5})) ₃	Hadj Barkat Kaarour (Univ. SBA)
4.	68	Temperature-Dependent Electrical Characterization and Thickness Optimization of Ni/In _{0.55} Ga _{0.45} N Schottky Diodes for Photovoltaic Applications	Arbi Kada Benchiha (Univ. SBA)
5.	84	Modeling and Optimization of Electrical properties in Perovskite Multilayer Structure	Amel Lacidi (Univ. SBA)

Salle 3 (05 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	49	Current Sensor Fault Diagnosis in DFIG Wind Turbines Using Kalman Filter Based Simplified Observer Scheme	Mohammed Abbas (Univ. SBA)
2.	22	Experimental Validation of Composite Characterization through Rectangular Waveguide and Coaxial Probe Techniques	Youcef Amine Medjaouri (EMP Alger)
3.	16	Analysis of Fault Currents in Radial Distribution Systems under Renewable DG Integration	Nasreddine Bouchikhi (Univ. Sétif 1)
4.	47	Robust Design of Power System Stabilizer for a Single Generator-Infinite Bus Power System	Imene Dehiba (UST Oran)
5.	80	Equilibrium Optimizer for Solving Directional Overcurrent Relay Optimal Coordination Problem	Bouchra Hamai (ESGEE Oran)

Salle Poster (08 Présentations « Poster ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	45	Detection of COPD Disease using Electronic Nose and machine learning through balanced dataset	Noreddine Kazitani (Univ. SBA)
2.	46	Enhanced Dyna-Q Learning via PSO-GSA for Intelligent Autonomous Mobile Robot Navigation	Amina Nedjoua Benali (Univ. SBA)
3.	73	Enhancing Medical Image Security Using Chaotic Confusion–Diffusion Encryption	Sarra Bencella (Univ. SBA)
4.	90	Blind Recompression of JPEG Crypto-Compressed Images Using Stream Cipher and Requantification	Youcef Ezzine (Univ. SBA)
5.	33	An Investigation of the Structural, Elastic, and Thermoelectric Properties of Ag ₃ SX (X = I, Br, and Cl) Anti-perovskites	Henen Berrouna (Univ. SBA)
6.	34	Design and Energy Performance Evaluation of an Agricultural Farm Integrating a Photovoltaic System Using PVsyst	Halima Boubekeur (Univ. SBA)
7.	76	An Intelligent Vision-Based Approach for Soiling Detection and Power Loss Forecasting in Photovoltaic Systems	Souaad Belhia (Univ. SBA)
8.	41	From Quartz to Current: Process–Device Coupling Across the Silicon PV Value Chain	Sarah Kawther Sedjar (ENP Oran)

- 12h15 – 14h00 : Déjeuner

Après-Midi

- 14h00 – 15h00 : Plénière 2
Présidents de Session :

Conférencier : **Prof. Khaled KHELIL** (Souk-Ahras University)Intitulé : « **AI and Image Processing for Advanced Vibration Analysis and Fault Diagnosis** ».

- 15h00 – 15h30 : Pause-Café
- 15h30 – 17h00 : 04 Sessions « Oral » + 01 Session « Poster »

Salle 1 (05 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	24	Characterization of the current–voltage law in dual-electrode DC corona discharge systems	Ahmed Kasdi (Univ. Béjaia)
2.	39	Experimental analysis of the current ratio factor in a dual–grid–plane corona configuration	Sabrina Chouali (Univ. Béjaia)
3.	59	Analysis of the effect of high-voltage amplitude and frequency on the behavior of conductive granules in double-sided curtain electrodes	Azzedine Lahcen (Univ. SBA)
4.	60	Analysis of The Behavior of a Non-Ferrous Conductive Particle Subjected to an Alternating Magnetic Field in a Liquid Separation Medium	Mustafa Louahedj (Univ. SBA)
5.	66	Experimental Investigation of Droplet Deposition Patterns from an Electrostatic Air-Assisted Spraying System	Ikram Kada Zair (Univ. SBA)

Salle 2 (05 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	12	Robust Passive Fault Tolerant Control of PMSG-Based Wind Turbine Using a Hybrid Fuzzy Sliding Mode Control	Rania Kadri (Univ. SBA)
2.	32	Intelligent MPPT Control for Photovoltaic Systems Using Type 2 Fuzzy Logic	Yasser Nadhir Azzeddine (Univ. SBA)
3.	48	Hardware-in-the-Loop Evaluation of Extended Kalman Filter Based Sensorless Control for Open-End Winding Induction Motor	Younes Djellouli (Univ. SBA)
4.	63	Energy Optimization of Fuel Cell–Ultracapacitor Hybrid Electric Vehicles via Maximum Efficiency Point Tracking	Sid Mohamed Nacereddine (Univ. Biskra)
5.	69	Energy Management Strategies in Hybrid Fuel Cell and Battery Vehicles: A Comparative Study	Sid Mohamed Nacereddine (Univ. Biskra)

Salle 3 (05 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	17	Optimal sizing and experimental study of a dielectric barrier discharge ozone generator	Fethi Miloua (Univ. SBA)
2.	38	Experimental Investigation of Polarity and Geometry Effects on Corona Discharge in a Blade-Plane Configuration	Ikram Brakna (Univ. Aïn Témouchent)
3.	83	Influence of Relative Humidity and Residence Time on the Triboelectrostatic Separation of Granular Polymers Using a Vibrating Table Separator	Thiziri Celia Aggoun (Univ. Béjaia)
4.	87	AC Voltage Breakdown Characteristics of Air, Synthetic Oil, and Air with Solid Barrier Insulations	El Hanafi Ouatah (Univ. Béjaia)
5.	95	Grid resistance effect on the charging level of polypropylene films in a triode system	Ouarda Chibane (Univ. Béjaia)

Salle 4 (03 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	18	Adaptive PID Control with Reinforcement Learning and Kalman Filtering for Mobile Robot Navigation: A Performance Comparison with Traditional Methods	Ahmed Bennaoui (Univ. Laghouat)
2.	52	Neural Network-Based Air Quality Monitoring and Control Using Multi-Sensor Systems	Badia Errouane (Univ. SBA)
3.	74	Comparative Study of MLP and RBF Neural Networks for Predicting Electrical Breakdown in Dielectric Materials	Abderrezak Mansouri (ESGEE Oran)

Salle Poster (08 Présentations « Poster ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	78	Techno-Economic Study of Replacing Gas-Generator-Fed LED Lamps with "All-in-Two" Solar Street Lights: Case Study of the Arzew Refinery Perimeter	Yassine Bouroumeid (Univ. SBA)
2.	20	A Comparative Study of Advanced MPPT Strategies for PV System in Standalone Microgrid	Nourel Houda Cheggoufi (C. U. El Bayadh)
3.	64	Design of an Integral PI Controller for DFIG-Based WECS	Hamza Gasmi (Univ. Québec)
4.	40	Signal Synchronization and Transmission Using SDR	Yasmina Tabouri (Univ. SBA)
5.	15	Identification of fault signatures using the Hanning window in Squirrel-Cage Induction Motors	Faiza Kouidri (C. U. Naâma)
6.	98	Circular Patch Microstrip Antenna based on Bambusa Vulgaris (BV) Substrate for Metal Cracks Detection	Mohamed Souilah (CRTI Alger)
7.	30	Control of a 2-DOF Arm Robot Manipulator-Based FOPID Controller Tuned Using Ant Colony Optimization	Mohammed Yousri Silaa (Univ. Laghouat)
8.	77	A Meta-Analysis of Contemporary Research in Internet of Things (IoT)	Mohammed Taher Amine Sahraoui (Univ. SBA)
9.	89	Towards Privacy-Aware Anomaly Detection in Fog Computing: A Comparison Between Centralized and Federated MLP Models	Sihem Souiki (Univ. Aïn Témouchent)
10.	85	Face Detection and Recognition Based on Viola Jones and SURF Algorithms	Amina Hachemi (Univ. SBA)
11.	93	Multi-Modal ECG Biometric Identification Using Cepstral, Statistical, and Deep Image Features Fusion with Random Forest	Islameddine Arioua (Univ. Guelma)
12.	9	Robust Moment-Based Estimators and Optimization Algorithms for Parameter Extraction in Compound Gaussian Radar Clutter with Log-Normal Texture under Thermal Noise	Zoulikha Douiou (Univ. M'Sila)

Lundi 08 Décembre 2025**Matin**

- 8h30 – 09h30 : Plénière 3
Présidents de Session :

Conférencier : **M. Bachir BELKADI** (Sonelgaz Sidi Bel-Abbès)Intitulé : « **Modernisation et évolution des réseaux électriques Via les technologies Smart Grids** ».

- 09h30 – 10h00 : Pause-Café
- 10h00 – 11h30 : 02 Sessions « Oral » + 01 Session « Poster »

Salle 1 (03 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	44	Estimating Wavelength Division Multiplexing Free-Space Optical Link Distance through Long Short-Term Memory Neural Networks.	Rima Kebaili (Univ. SBA)
2.	21	An Enhanced Blind Watermarking Algorithm in the Hybrid Frequency Domain for Medical Imaging	Ali Kouadri (Univ. Djelfa)
3.	54	Ensemble Learning based Blind Digital Modulation Classification for Cooperative STBC-OFDM Systems	Hakima Moulay (C. U. Naâma)

Salle 2 (03 Présentations « Oral ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	70	Enhancing VANET Reliability: Performance and Security Analysis of ACO-AODV in Urban Environments	Neila Berrekchi Berrahma (Univ. SBA)
2.	81	Latency and Round-Trip Time Analysis of TCP vs QUIC under 5G Network Conditions.	Hana Elhachi (Univ. Guelma)
3.	82	Visual Quality and Packet Loss Analysis of UDP and uQUIC Protocols for Real-Time Video Streaming.	Hana Elhachi (Univ. Guelma)
4.	92	Dynamically Optimized Chaotic SLM (DOC-SLM) technique for high peak power mitigation	Somia Taba (Univ. Guelma)

Salle Poster (07 Présentations « Poster ») :

Présidents de Session :

N°	ID	Intitulé de l'article	Auteur
1.	67	Robust Sliding Mode Speed Control for BLDC-Driven Electric Scooters	Hicham CHERGUI (Univ. Béchar)
2.	14	Implementation of Two Alternative Control Strategies in Voltage-Oriented Control	Abdelhamid Zabouri (ENP Oran)
3.	31	IoT-Based Power Grid Monitoring Board for Remote Energy Infrastructure	Zakaria Taleb Bendiab (Univ. Boumerdes)
4.	26	Experimental study of electrostatic separation for sorting micronized plastic/plastic mixtures using rotating cylindres	Fethi Miloua (Univ. SBA)
5.	97	An Improved Bio-inspired Algorithm for Optimal Power Flow Problem	Noureddine Boukhari (Univ. SBA)
6.	86	Comparison Between Two Venturini Algorithm Of Matrix Converters Applied to Dynamic Voltage Restorer	Fatiha Ghezal (Univ. SBA)
7.	43	A Novel Space Vector PWM for Three Phase H-Bridge Inverter	Attia Rabiai (Univ. Djelfa)

- 11h30 – 12h00 : Clôture
- 12h00 – 14h00 : Déjeuner