PROGRAMME DE LA JDEC'24

8h30-9h00	Inscription
9h00-9h30	**1- Allocution d'Ouverture et de Bienvenue :** **Mr. Abdelmajid BADRI :** Directeur de l'ENSAM-Casablanca. **2- Présentation Pédagogique et Scientifique du Cycle Doctoral de l'ENSAM Casablanca :** **Mme. Nabila RABBAH :** Directrice Adjointe Chargée de la Recherche Scientifique et de la Coopération. **3- Présentation des Laboratoires de Recherches de l'ENSAM Casablanca :** **Mr. Mustapha HAIN :** Directeur du Laboratoire Artificial Intelligence & Complex Systems Engineering (AICSE). **Mr. Mohammed HAMLICH :** Directeur du Laboratoire Complex Cyber Physical Systems (CCPS). **Mr. Benaissa KISSI :** Directeur Adjoint du Laboratoire Ingénierie des Structures, Procédés, Systèmes Intelligents et Informatique (ISPS2I).
9h30-10h30	**Conférence Plénière 1 :** « Generative Artificial Intelligence and Artificial Intelligence Agents ». **Animée par :** *Pr. Mohamed YOUSSFI*, ENSET de Mohammedia, UH2C **Modératrice :** *Pr. Nabila RABBAH*
10h30-11h30	**Conférence Plénière 2 :** « Quel apport pour l'intelligence artificielle sur la performance industrielle : le cas du passage d'une maintenance classique à une maintenance prédictive intelligente ». **Animée par :** *Pr. Anwar MEDDAOUI*, ENSAM de Casablanca, UH2C **Modérateur :** *Pr. Ossama MERROUN*

Session du Matin

SESSION THEMATIQUE 1 : Énergie & Mobilité	
Chairs : Pr. K. Mhada, Pr. H. El Ghazi, Pr. S. Aqil, Pr. S. Sobhi	
11h30-11h50	**OUSSAMA IDBOUHOUCH** **Investigating the Degradation of Photovoltaic Inverter Efficiency in Semi-Arid conditions: A Case Study in Morocco**
11h50-12h10	**AMEZZOUG SALAHEDDINE** **Modeling the photovoltaic solar cells based on quantum dots**
12h10-12h30	**MANAL KOUIHI** **The Optimal Design of a Hybrid Solar PV/Wind/Battery System Using Genetic Algorithm Approach**

12h30-12h50	**RAFA AZIZ**
	Integration of High-Power Wind Turbines into the Electrical Grid using Multiphase PMSGs and Multilevel Converters: A Bibliographic Review

SESSION THEMATIQUE 2 : Mécanique, Matériaux & Procédés Innovants

Chairs : Pr. B. Kissi, Pr. CH. Guemimi, Pr. A. El Kebch, Pr. H. Khatib

11h30-11h50	**BIBRIDNE YOUSSEF**
	Metaheurstic optmization of eco-composite using a gentic algorithm and a hybrid gentic algorithm
11h50-12h10	**ISMAIL LAKHAL**
	Assessing Different Damage Criteria in Finite Element Method Simulation of Orthogonal Cutting Process for Ti-6A-4V
12h10-12h30	**EL GHMARI MAJDA**
	SIMULATION AND MODELISATION OF OPTICAL, ELECTRONIC, MECHANICAL AND STRUCTURAL PROPERTIES OF BULK MATERIALS BASED ON III-NITRIDES ELEMENTS: InN, GaN, AlN, ..
12h30-12h50	**ALHIMA MERYEM**
	Quantum cascade LASER systems based on Nanomaterials for biological applications: Simulation and Modeling

SESSION THEMATIQUE 3 : Systèmes & Intelligence Artificielle

Chairs : Pr. M. Hain, Pr. H. Moutachaouik, Pr. H. Zaki

11h30-11h50	**SARA BAALI**
	A Review of Feature Selection Techniques for High-Dimensional Gene Expression Data
11h50-12h10	**BENOMAR KAWTAR**
	Human Action Recognition using Deep Neural Networks
12h10-12h30	**LEFRAYAH ABDELMOUNIM**
	A Comprehensive Survey of Reinforcement Learning techniques in Finance
12h30-12h50	**HADDANE IBTISSAM**
	Leveraging Artificial Intelligence in Cybersecurity: Enhancing Risk Analysis and Mitigation

SESSION THEMATIQUE 4 : Ingénieries des Systèmes & Contrôle Intelligent

Chairs : Pr. M. Hamlich, Pr. R. Majdoul, Pr. E. Alami, Pr. S. Bounouar

11h30-11h50	**ADNANE BOUCHRA**
	Industrial Modbus-LoRa data logger for digital twin's applications
11h50-12h10	**HALA MELLOULI**
	A decision support system driven by artificial intelligence for industrial applications
12h10-12h30	**HAFID ANASS**
	A systematic literature review on the advantages of industry 4.0 technologies on company quality management systems

12h30-12h50	**BAYOUDE KAMAL** **Robust PQ-Controlled Three-Phase SAPF-based BPMVF and PI Antiwindup**
12h50-14h00	Pause déjeuner

Session de l'Après Midi

14h00-15h20	**Session de Posters**
	Chairs : Pr. A. Touati, Pr. R. Benmessaoud, Pr. A. Kamal, Pr. A. Sakim

MERIEM BENHAFID
Contribution à la modélisation de la Supply Chain et l'intégration des technologies de l'industrie 4.0 : application au cas automobile

BOUNJOUM YOUSSEF
Contribution to the study of the rehabilitation of concrete posts reinforced with natural composites.

REDOUANE SERSAR
Modélisation des systèmes LASER à cascade à base des multi-puits quantiques : Etude comparative

ASMAE EL KARMA
Sensitivity of retaining solutions in urban excavations to cohesion

EL KABBAB MOURAD
State of the art on the effects of temperature on the performance of lithium-ion batteries

BENOMAR KAWTAR
Human Action Recognition using Deep Neural Networks

KHOUCHA KAOUTHAR
Industrie 4.0: Concepts et caractéristiques

AALA EDDINE BOUSSKOUL
A Comparative Analysis of Vehicle Lateral Control Algorithms: PID, Pure-Pursuit, Stanley, and MPC

FOUZI REDOUANE
The buckling and post-buckling of functionally graded material beams

BORO OUSSENI
Conception of an RF Energy Receiver for Portable Biomedical Devices

ADIL ZIRAOUI
Seismic Behavior Study of Steel Structure Retrofitted with Linear and Nonlinear Dampers

LISSANDIN FATIMA ZAHRA
Electrical and Mechanical Behavior study of a Dual stator induction machine

BAHRI KHALID
Theoretical study of the photovoltaic performances of solar cells based on multi-quantum wells: Nitrides

ABDERRAHMANE CADI
Review of Recent Advances in SDN Security A Critical Analysis of Selected Papers

AHMED-AMINE BETTACHE
L'application de l'intelligence artificielle pour prédire le comportement des matériaux composites

ZOUHIR DAHI   **An Overview of AI-Enhanced Prognostics and Health Management in Industrial Rotating Machinery**
MAHBOUB SALMA   **POWER QUALITY IMPROVEMENT USING A HYBRID POWER FILTER**
AYACHI ABDELHAK   **Theoretical simulation of the photovoltaic performances of solar cells based perovskites**
TABSISSI KAOUTHAR   **Energy consumption of a desalination plant**
AMEZIANE HAMZA   **Development of a smart platform for detecting cardiovascular diseases**

SESSION THEMATIQUE 1 : Énergie & Mobilité

Chairs : Pr. G. Zaz, Pr. M. Ait El Fqih, Pr. L. Bentarla

14h00-14h20	**ARKAM YOUSSEF** **Optimisation CFD des performances thermohydrauliques d'un capteur solaire à air équipé avec des turbulateurs.**
14h20-14h40	**OUACHAKRADI ZAKARIAE** **Strategies for Successful Multiscale EMS Deployment in Industrial Sectors during the AI Revolution**
14h40-15h00	**LATIFI MOHAMMED** **Adrc performance in power control of PMSG used in wind turbine during grid undervoltage**
15h00-15h20	**RHIB YASSINE** **Experimental Validation of Field-Oriented Control (FOC) for BLDC Motors using a Hoverboard Motherboard in Mobile Robot Applications**

SESSION THEMATIQUE 2 : Mécanique, Matériaux & Procédés Innovants

Chairs : Pr. A. El Haouzi, Pr. A. Akhiate, Pr. A. Jrifi, Pr. A. Timesli

14h00-14h20	**KARIM GEHAD SAADELDIN** **Digital Twin: A Practical Approach**
14h20-14h40	**AAYA HASSAN** **Seismic vulenrability of existing buildings in Casablanca metropolis**
14h40-15h00	**ILHAME AZDINE** **Experimental study on the behavior of cement grout-steel sheet interface under shear forces**
15h00-15h20	**DOUBIZ MOHAMED** **IoT connectivity for enhancing hydroponic farming**

SESSION THEMATIQUE 3 : Systèmes & Intelligence Artificielle	
Chairs : Pr. A. En-Nhaili, Pr. S. Bahassine, Pr. I. Guelzim	
14h00-14h20	**ABARAGH SAMIA** **Machine Learning for Outlier Detection, Methods and Classification**
14h20-14h40	**MOUATAZ IDRISSI KHALDI** **Standardiser l'IA : Ingénierie des Modèles en Action**
14h40-15h00	**BICHRI HOUDA** **Detecting Available Parking Space with YOLOv5**
15h00-15h20	**IMAN MAKROUF** **Bearing Fault Diagnosis Based on Multi-Sensor Data Fusion with Continuous Wavelet Transform and Deep Learning**

SESSION THEMATIQUE 4 : Ingénieries des Systèmes & Contrôle Intelligent	
Chairs : Pr. M. Moutchou, Pr. M. Baghouri, Pr. A. El Afia	
14h00-14h20	**EL AMRI KAWTAR** **A comparative analysis on the use of smart bracelets for enhanced healthcare and telemedicine**
14h20-14h40	**HAMDI ALAOUI ABDELHAFID** **Challenges of implementing Predictive Maintenance in industry 4.0**
14h40-15h00	**HILLALI YOUNESS** **Multi-criteria evaluation of statistical approaches for detecting variability in assembly line balancing**
15h00-15h20	**LEMSSADDAK SOFIA** **A novel asymmetrical multilevel inverter with reduced number of switches Regulated by PD-PWM Method**

15h20-15h45	Pause-café
15h45-17h00	Table ronde et remise des attestations de participation