

الجمهورية الجزائرية الديمقراطية الشعبية  
**République Algérienne Démocratique Et Populaire**

Ministère de l'Enseignement Supérieur  
et de la Recherche Scientifique

وزارة التعليم العالي والبحث العلمي

Direction de la Coopération et des  
Échanges Universitaires

مديرية التعاون والتبادل الجامعي

بالجزائر، في: 14 ماي 2024.

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إلى السادة رؤساء الندوات الجهوية  
شرق - غرب - وسط  
بالاتصال بمديري مؤسسات التعليم العالي والبحث العلمي

**الموضوع:** ف/ي المؤتمر الدولي الثاني والعشرين للبحث والتعليم في الميكاترونكس.  
**المرفقات:** المعلقة الدعائية الخاصة بالمؤتمر.

يشرفني إعلامكم أن المملكة الأردنية الهاشمية تعلن عن استضافتها للمؤتمر الدولي الثاني والعشرين (22) للبحث والتعليم في الميكاترونكس خلال الفترة من 24 إلى 26 سبتمبر 2024، والذي سوف يتم تنظيمه من طرف الجامعة الألمانية الأردنية بالتعاون مع الجمعية الألمانية لهندسة الميكاترونكس (DGMEV)، حيث يعتبر هذا المؤتمر منصة عالمية معتبرة لجمع الباحثين والمهندسين ونشر أحدث التقنيات والدراسات العلمية في مختلف مجالات هندسة الميكاترونكس. كما يستعرض مجموعة من الحلول المقترحة لبعض التحديات العالمية من خلال التصنيفات المختلفة لتكنولوجيا هندسة الميكاترونكس وخصوصا في أنظمة الروبوتات والذكاء الاصطناعي والثورة الصناعية الرابعة. في هذا الصدد، تدعو الهيئة المنظمة أعضاء الهيئات التدريسية وطلبة الدراسات العليا من مختلف الجامعات العربية للمشاركة في هذا الحدث من خلال تقديم الأوراق البحثية في مختلف محاور المؤتمر المذكورة أعلاه، والاطلاع على الموقع الإلكتروني: (<http://rem2024.gju.edu.jo>) علما أن الأبحاث المقبولة ستُنشر في قاعدة بيانات (IEEE Xplore). و عليه، نرجو منكم اتخاذ ما ترونه مناسباً من إجراءات بخصوص هذا الموضوع من أجل ضمان النشر الواسع لهذا الإعلان.

تفضلوا، بقبول أسمى عبارات التحية والاحترام.

# REM

## 22nd International Conference on Research and Education in Mechatronics

### REM 2024

Dead Sea, Jordan

24th-26th September



### CALL FOR PAPERS

The International Conference on Research and Education in Mechatronics (REM) is the official conference of the Jordanian Mechatronics Association (JMA) since 1979. REM is organized by the first and largest Jordanian scientific organization, the Jordanian Mechatronics Association (JMA), with the goal to promote the exchange of information in mechatronics research and education.

The 22nd REM is hosted by the Jordanian Mechatronics Association (JMA) and will be held in Jordan, from Friday, September 24th to Sunday, September 26th, 2024. The conference will be held at the Dead Sea, Jordan. All papers will be peer-reviewed and the published proceedings will be published in the conference proceedings. The conference will be held in Jordan, from Friday, September 24th to Sunday, September 26th, 2024. The conference will be held in Jordan, from Friday, September 24th to Sunday, September 26th, 2024.

### GENERAL CHAIR

Prof. Abdulkarim Al-Halabi, JMA President

### HONORARY COMMITTEE

Prof. Dr. Rainer Bachmann, Germany  
Prof. Dr. G.A. Boushneh, Germany

### ORGANIZING COMMITTEE

Dr. Mohamed Alkhatib, JMA, Conference Chair  
Dr. Amr Alkhatib, JMA, Conference Co-Chair  
Prof. Khalid Alkhatib, JMA, Conference Co-Chair  
Prof. Sami Alkhatib, JMA  
Prof. Dr. Amr Alkhatib, JMA  
Prof. Dr. Amr Alkhatib, JMA  
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Prof. Dr. Amr Alkhatib, JMA  
Prof. Dr. Amr Alkhatib, JMA

### TRACKS AND TOPICS

- Mechatronics Systems Design, Modeling, and Control**  
Design, Modeling, Simulation, and Control of Mechatronics Systems, Mechanisms, Control System Modeling and Simulation Techniques and Methodologies, Design and Optimization, Systems Engineering, Interfacing and Communication in Mechatronics Systems, Unconventional Electromechanical Devices and Drives.  
Track Chair: Prof. Mohammad Saleh, JU
- Sensors and Actuators**  
Mechatronics Measurement Systems and Sensors, Actuators, Servo-Systems, Motion Control, Sensor Design, Multi-Sensor Data Fusion Algorithms, Wireless Sensor Networks and Internet of Things (IoT), Applications of Micro and Nano Systems (MEMS/NEMS), Material Engineering and Smart Materials, Energy Conversion.  
Track Chair: Prof. Tarek Younes, BAU
- Robotics and Autonomous Systems**  
Robotics and their Applications, Teleoperation, Tele-Robotics and Teleoperated Semi-Autonomous Systems, Perception, Navigation, Mapping and Localization, Robot Simulation and Visualization, Socially Intelligent Robots, Human-Robot Interaction, Humanoids, Mobile Robots, Unmanned Aerial Robots.  
Track Chair: Dr. Ahmad Alshammari, JUST
- Artificial Intelligence, Machine Learning, and Machine Vision**  
Machine and Deep Learning, Intelligent Control, Neural and Fuzzy Control and their Applications, AI and Reinforcement Learning, System Identification, Computational Intelligence, Smart Devices and Products, Intelligent Systems and Buildings, AI of IoT, Human Activity Recognition, AI in Virtual Reality, Computer Vision Algorithms and Applications.  
Track Chair: Prof. Rami Alatafi, GUJ
- Industry 4.0, Smart Industry, and Smart Manufacturing**  
Digital Twins, Cyber-physical Systems, Industrial Internet of Things (IIoT), Automation and Process Control, Rapid Prototyping and 3D Printing, Digital Manufacturing Systems, Process Automation, Laser Technology and Laser Processing, Technology for the Factory of Future, Cloud Manufacturing, Cybersecurity of Industrial Automation Systems.  
Track Chair: Prof. Mohammad Bassi Younis, PU
- Automotive and Transportation Systems**  
E-Mobility, Electrical Propulsion, Sustainability and Emissions, Advanced Powertrains, Vehicle Performance and Handling, Battery Energy Storage Systems, Vehicle Software and Hardware, Vehicle Infrastructure Integration, Advanced Driver Assistance Systems (ADAS), Vehicle Control, Automated Vehicles, Connected and Cooperative Vehicles.  
Track Chair: Prof. Mohammed Abu Mallouh, JU
- Biomedical and Rehabilitation Systems**  
Bio-Mechatronics, Human Assistive Devices, Biomimetics, Haptics, Artificial Organs and Prostheses, Rehabilitation and Therapeutic Systems, Biomedical Signal and Image Processing, Brain-Machine Interfaces, Medical Imaging, Neuroscience, Biomedical Instrumentation, Biomedical Monitoring, Biomedical and Health Informatics.  
Track Chair: Dr. Samer Alkhabaz, GUJ
- Education and Training in Mechatronics**  
Trends in the Engineering Education of Mechatronics, Engineering Education within the Framework of Concepts, Design, Implement, and Operate (CDO) initiative, Distance Learning and Professional Development in Mechatronics, Training Textbooks for Mechatronics, Curriculum Design and Development in the Education of Engineering, Technology, and Computing.  
Track Chair: Dr. Muneer Al-Yaman, JU

### IMPORTANT DATES

Submission of Abstracts	September 15, 2024
Final Paper Submission	September 20, 2024
Registration	September 24, 2024
Conference Start	September 24, 2024
Conference End	September 26, 2024