PROGRAMME BOOK

**INTERDISCIPLINARY CONFERENCE
ON
MECHANICS, COMPUTERS AND ELECTRICS**
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ICMECE

27-28 November 2021

ANKARA / TURKEY

27 November 2021 Saturday

Opening Session   Hall A

10:00-10:10	Welcome Talk of Chairman, Prof. Dr. Erol Kurt

KEYNOTE SESSION 1
Chairman: Prof. Dr. Erol KURT - Gazi University, Turkey

10:10-10:40	**Energy Management Strategies for Fuel-Cell Vehicles** Prof. Dr. Nicu Bizon Pitesti University, Romania
10:40-11:10	**3D printed electrostatic generators for vibration energy harvesting** Prof. Dr. Francesco Cottone Perugia University, Italy

Plenary Session 1
Chairman: Prof. Dr. Yasemin Çiftçi, Gazi University, Turkey

11:15-13:15	ID71 Graphical Analysis of PV Panels with Solar Charge Controller System	**Cüneyt Çelik** (Bahçeşehir University); Berna Çelik(Bahçeşehir University); Orhan Can Ezenci(Bahçeşehir University); Sabri Oğuz Güney(Bahçeşehir University); Nezihe Yıldıran (Bahçeşehir University)
	ID72 Electrical behavior of an HV cable in the presence of an insulating or conductive defect	**Amina BOUDIAF** (Houari Boumediène University of Science and Technology), Slimane BOUAZABIA (University of science and technology Houari Boumédiène); Noureddine HARID (Khalifa University of Science Technology, Emirats Unis)
	ID76 The conception of the education in the field of mechanical engineering and physics in the conditions of remote access to the laboratory	Vasilina Baranava(Belarusian State University); Oh Suchan(Belarusian State University); **Siarhei Liashkevich** (Belarusian State University); Vladimir Saetchnikov(Belarusian State University)
	ID68 Estimating the Time-dependent Settlement Concerning the Variation in Compressibility and Permeability during the Process of Consolidation	**Tham Hong Duong** (Ho Chi Minh City Open University)*
	ID89 Effects of Compositions on the Properties of Cu doped ScAu : First-Principles Study	**İlknur Kars Durukan** (Gazi University); Yasemin Oztekin Ciftci (Gazi Universitty)
	ID90 Effect of Pressure on Physical and Vibrational Properties of YbS Compound	**İlknur Kars Durukan** (Gazi University); Yasemin Oztekin Ciftci (Gazi Universitty)
	ID87 First principles calculation of TlPdF3 compound	**Belgin Koçak** (OSTIM Technical University); Yasemin Oztekin Ciftci (Gazi Universitty)
	ID47 Quality assessment of autofocusing criteria on noisy holograms in off-axis digital holography	**Nedjoua Refis** (Ferhat abbas university)
	ID58 Design and Optimisation Microstrip Bowtie Antenna Based on Graphene Material for Terahertz Applications	**Hamzah M. Marhoon** (Al-Esraa University College)*; Hussein A. Abdulnabi, Yasin Yousif Al-Aboosi (AL-Mustansiriyah University)

	ID67 Mathematical model for excited state fluid dynamics	**Peng Yue** (University of Electronic Science and Technology of China); Dewei Peng (China Aerodynamics Research and Development Center); Jingping Xiao(National Aerospace University);Sibei Wei (China Aerodynamics Research and Development Center)*; Jinghui Zhang (National Aerospace University)

KEYNOTE SESSION 2
Chairman: Prof. Dr. Erol KURT - Gazi University Turkey

13:15-14:15	**Enabling Technology for Wind Turbine Inspection and Maintenance** Prof. Dr. Peter R.N. Childs Imperial College London, UK
	Electrical and Biological Space Microgrids Prof. Dr. Josep M. Guerrero Aalborg University, Denmark

Plenary Session 2
Chairman: Dr. Mahendra Gooroochurn, University of Mauritius

14:15-16:15	ID8 Parameter Identification for Simplfied Set Current Predictive Control of SynRM Drives	**Hazem Hadla** (Polytechnic institute of Viseu)*; Fernando Santos (Polytechnic institute of Viseu)
	ID27 Controlled Islanding Solution for Blackout Prevention in Transmission Systems	**Adil ALAHMAD** (Istanbul University-Cerrahpaşa); Abdulhamid Kayal (Gazi University)*
	ID29 Design and implementation of a robust ANN-PID corrector for the improvement of high penetration photovoltaic solar energy connected to the grid	**Daouda Gueye** (Univertsité Alioune Diop de Bambey)*; Alphousseyni Ndiaye (Universite Alioune Diop de Bambey-Senegal); Amadou Diao (Université Cheikh Anta Diop de Dakar-Sénégal)
	ID46 ANN Estimation based on the parametric simulations of stator current THD values of an asynchronous motor	**Tuğba Atar** (Karamanoğlu Mehmetbey University); Selami Balcı (Karamanoğlu Mehmetbey University)*; Ahmet Kayabaşı (Faculty of Engineering, Electrical and Electronics Engineering, Karamanoglu Mehmetbey University)
	ID63 Double SLERP Gravity-Magnetic Vector (GMV-D) orientation correction in a MARG sensor for hand orientation and position tracking	**Neeranut Ratchatanantakit** (Florida International University); Nonnarit O-larnnithipong(Florida International University); Pontakorn Sonchan(Florida International University); Malek Adjouadi(Florida International University);Armando Barreto(Florida International University)
	ID94 Electromagnetic shielding tests of a permanent magnet generator	Mehmet Sarıkahya (Gazi University); **Nihan Merve Sarıkahya** (Gazi University); Erol KURT (Gazi University)*
	ID64 Processing Vibrational Signals For Fiber-Optic Sensor With Tilted Bragg Grating	Aliya Kalizhanova(Kazakhstan Al-Farabi Kazakh National University); **Murat Kunelbayev** (Kazakhstan Al-Farabi Kazakh National University); Ainur Kozbakova(Kazakhstan Al-Farabi Kazakh National University); Didar Yedilkhan(Astana IT University);

		Zhasulan Orazbekov; Zhalau Aitkulov(Kazakhstan Al-Farabi Kazakh National University)
	ID84 Experimental and Simulation study of an air-based horizontal ground-coupled heat exchanger	**Mahendra Gooroochurn**(University of Mauritius); Maheshsingh Mungur(University of Mauritius); Santaram Venkannah(University of Mauritius); Heman Shamachurn(University of Mauritius); Yashwansingh Surnam(University of Mauritius); Fardeen K Mandarkhan(University of Mauritius); Devin Boodhoo (University of Mauritius)
	ID85 Investigation of the Improvement of Thermal Properties of Concrete Blocks with Natural Fibres	**Yashy Raghoo**(University of Mauritius); Mahendra Gooroochurn(University of Mauritius); Hareenanden Ramasawmy (University of Mauritius); Damien Mallet (University of Mauritius); Neil Brown (De Monfort University); Jaykumar Chummun(University of Mauritius); Asish Seeboo (University of Mauritius)

Plenary Session 3 **Chairman:** Dr. Maria Botsiou, International Hellenic University Greece		
16:15-18:15	ID41 Comparative assay on sentiment analysis on two databases in Bulgarian language	**Daniela Iv Petrova** (Technical university- Varna)*
	ID42 Malware Classification Using Convolutional Neural Network	Muhammed Mutlu Yapıcı (Ankara University); **Adem Tekerek** (Gazi University); Zafer Ayaz (Gazi University)
	ID43 A Survey on Evolution of an Urban Railway Signaling and Control System	**Lokanna Kadakolmath** (Visvesvaraya Technological University); Umesh D R(Visvesvaraya Technological University)
	ID75 Wrinkle Detection for Fingerprint Images using Minutia Density Distribution and Desmos Service	**Firas S. Abdulameer** (College of Science, Mustansiriyah University)*
	ID78 Design and Simulation of V-Shaped Microstrip Patch Antenna for 2.4 GHz Internet of Things Applications	**Kayhan Celik** (Gazi University)*; Erol Kurt (Gazi University)
	ID88 Design of Fuzzy-Neural Adaptive Iterative Learning Control for Alzheimer's Disease	**Wang Ying-Chung** (Huafan University); Chien Chiang-Ju (Huafan University)
	ID93 Flexible, Compact and Efficient Graphene-based Broadband Antenna for Wearable Applications	**Irem Yuksek** (Istanbul Technical University); Mesut Kartal (İstanbul Teknik Üniversitesi)
	ID32 Quasi-Likelihood Detection Algorithm of Ultra-Wideband Quasi-Radio Signal with the Interfering Signal on the Background	Yury Korchagin (Voronezh State University); Konstantin Titov (Voronezh State University); Gregory Uskov (Voronezh State University); Alexey Zhabin (Voronezh State University); **Olga Zavalishina** (Voronezh State University)

	ID91 The Use of Information and Communication Technologies by Greek Beekeepers: Strategies in the Modern Competitive Environment and the Third Level of Digital Divide	**Maria Botsiou** (International Hellenic University); Smaragdi Papadopoulou(International Hellenic University)

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KEYNOTE SESSION 3
Chairman: Prof. Dr. Erol KURT -   Gazi University, Turkey
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18:15-19:15	**Green and flexible district heating and cooling in Turkey** Prof. Dr. Adnan Sözen Gazi University, Turkey
	Intelligent Pattern Recognition (IPR) and Applications Prof. Dr. Patrick Wang Northeastern University, USA

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Plenary Session 4
Chairman: Prof. Dr. Jose Manuel Lopez Guede, University of the Basque Country Spain
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	ID30 A Comparison in Combustion Characteristics in A CVCC with Biodiesel Blends	Nguyen Phi Truong(Hanoi University of Industry), Nguyen Tuan Nghia (Hanoi University of Industry), **Nguyen Xuan Khoa** (Hanoi University of Industry), Le Anh Tuan(Hanoi University of Industry), Nguyen Van Tuan (Hanoi University of Industry)*
	ID36 The co-fermentation of cows manure with paper dust briquettes	**Indulis Straume** (Latvia University of Life Sciences and Technologies)*; Vilis Dubrovskis (Latvia University of Life Sciences and Technologies)
	ID69 Enhanced Cooling Heat Transfer Performance with Usage Fe3O4/POE Nanolubricants	**Mustafa Akkaya** (Karamanoglu Mehmetbey University)*
19:15-21:15	ID77 Energy and environmental analysis of R1234ze(E) as a replacement of R134a in an experimental installation	**Dario Méndez-Méndez** (Universidad de Guanajuato - Campus Irapuato-Salamanca); V. Pérez-García(Universidad de Guanajuato - Campus Irapuato-Salamanca); J.M. Belman-Flores(Universidad de Guanajuato - Campus Irapuato-Salamanca); J.M. Riesco-Ávila(Universidad de Guanajuato - Campus Irapuato-Salamanca)
	ID61 Optimal Perturb and Observe parameter for thermal energy harvesting at roof and attic area due to solar radiation	**Muhammad Nazri Rejab** (Universiti Tun Hussein Onn); Muhammad Akmal Johar(Universiti Tun Hussein Onn); Wan Akashah Wan Jamaludin(Universiti Tun Hussein Onn); Umar Abubakar Saleh(Centre for Atmospheric Research National Space Research and Development Agency)
	ID45 Optimal INC parameter for thermal energy harvesting at roof and attic area due to solar radiation	**Muhammad Nazri Rejab** (Universiti Tun Hussein Onn); Muhammad Akmal Johar(Universiti Tun Hussein Onn); Wan Akashah Wan Jamaludin(Universiti Tun Hussein Onn); Umar Abubakar Saleh(Centre for Atmospheric Research National Space Research and Development Agency)
	ID59 Covid-19 Disruption, Interdisciplinary and Digital Approaches in Entrepreneurship Education	**Ileana Hamburg** (Institut Arbeit und Technik)*

	ID80 Design of continuously variable transmission consisting of closed-link, three-dimensional positive action cam, and sprag clutch	**Toshihiro Yukawa** (Iwate University); Akinori Murakami(Iwate University); Taiyo Fujisawa(Iwate University)
	ID95 Flow control devices to improve heavy vehicles aerodynamic performance: a short review	Zugatz Ansa-Otxoa (University of the Basque Country); Roberto García-Fernandez (University of the Basque Country); Unai Fernandez-Gamiz (University of the Basque Country); Ekaitz Zulueta (University of the Basque Country) **Jose Manuel Lopez-Guede** (University of the Basque Country)
	ID:100 Reinforcement learning local path planning for mobile robot	**Mehmet Gök**(Kahramanmaraş Sütçüimam University); Mehmet Tekerek(Kahramanmaraş Sütçüimam University); Hamza Aydemir(Kahramanmaraş Sütçüimam University)