



# **PROGRAMME BOOK (Online sessions)**

**2. INTERDISCIPLINARY CONFERENCE  
ON  
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**07 OCTOBER 2022 Friday  
(VIRTUAL PARTICIPATION)**

**KEYNOTE SESSION 2 Hall A**

**Chairman:** Prof. Dr. Erol Kurt - Gazi University, Turkey

09:00-09:30	<p><b>Real-Time Monitoring of Evaluation Landslide on IoT Platform using LoRA</b> Prof. Dr. Ajay Roy    Lovely Professional University, India</p>
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**Hall A Paralel Session 10    Computer Science & Informatics**

**Chairman: Krassimira Stoyanova**

09:30-11:30	ID1 Use of Machine Learning Algorithms in Fatigue Prediction	<b>Jaromir Kaspar</b> , Vaclav Cvancara
	ID39 Find The Optimized Path for Public Transportation (Case Study: Incheon-South Korea)	<b>Sooror Malekmohammadi Faradounbeh</b> , Hongle Li, Mangkyu Kang, Choongjae Im
	ID51 A Video Dataset for Substance Abuse Detection	<b>Amin Khaksar Pour</b> , Omid Haselforosh, Nor Badrul Anuar
	ID63 Optimizing Power Management in Printed electronics Smart Label System	<b>Harri Määttä</b> , Tuomas Leipivaara, Tomi Tuomaala
	ID75 IoT Security/IPv6 Protocol: A Survey	<b>Mbaye Serigne</b> , Khadidiatou wane Keita, Idy Diop
	ID80 Hardware Prototype Implementation of a Low Cost IoT Enabled Fire Detection System for Local Urban Markets Using Fuzzy Application Methods	<b>Emmanuel Lule</b> , Chomora Mikeka, Alexander Ngenzi, Didacienne Mukanyiligira, Parwoth Musdalifa, Bateesa Saul Tobias
	ID84 Group Drop of Sustainability: Trade-Off Solutions between Low Returns and Portfolio Stability	<b>Krassimira Stoyanova</b> , Vassil Guliashki
	ID100 Comparing Deep Learning Approaches Against 5 Traditional Machine Classifiers in The Task of Music Genre Classification	<b>Ritesh Ajoodha</b>
	ID114 Real-Time Sentiment Analysis of Twitter data Regarding The Moroccan Higher Education using Machine Learning Techniques	<b>Imane Lasri</b> , Anouar Riadsolh, Mourad ElBelkacemi, Soumia Ziti, Hamid Ez-Zahraouy
ID115 RIAWELC: A Novel Dataset of Radiographic Images for Automatic Weld Defects Classification	Benito Totino, <b>Fanny Spagnolo</b> , Stefania Perri	

**Hall B Paralel Session 11    Mechanics & Material Science**

**Session Chair: Funda Battal**

09:30-11:30	ID36 Testing The Growth of Pleurotus Ostreatus in Simulated Microgravity by a Clinostat	Angela Heide, Philip Wiebe, Lilia Sabantina, Tomasz Blachowicz, <b>Andrea Ehrmann</b>
	ID99 Using Hybrid Models Made of Two Neural Networks to Forecast Groundwater Levels in The Grootfontein Aquifer	<b>Ritesh Ajoodha</b>
	ID167 Assessing Constructive Heuristics for Solving Hydro unit Commitment and Loading Problem	<b>Daniel Firmo Kazay</b> , Carlos Roberto Mendonça da Rocha, Murilo Reolon Scuzziato
	ID202 Automatic Metal Workpiece Measurement System Using Machine Vision	<b>Haiming Gan</b> , Kun Yan, Zhi Li

	ID206 Flow Deflection of Excited Jets Produced by Asymmetric Slot	<b>Takumi Ito</b> , Koichi Nishibe, Donghyuk Kang, Kotaro Sato
	ID 208 Modeling of Contact Interaction of a Wheel with a Rail in Conditions Magnetization	<b>Vadim Olegovich Korchagin</b> , Andrey Sergeevich Kosmodamianskiy, Vladimir Ivanovich Vorobiev, Yuri Moiseevich Inkov, Nikolay Ivanovich Klimenkov
	ID217 Transfer Function of Electromechanical Coupling in The Motor Unit	Sergey N. Grishin, <b>Adel E. Khairullin</b> , Igor A. Larionov, Alexander Yu. Teplov, Dina V. Efimova, Ayrat U. Ziganshin
	ID230 The Impact of Low Emissivity Coating on Concrete Icing	<b>Al Shenawa Amaal</b> , Abaza Hussien, Semmelink Scott
	ID461 Research of hydrodynamic processes in the flow part of a low-flow thermopressor	<b>Dmytro Konovalov</b> , Halina Kobalava, Roman Radchenko, Anatolii Zubarev, Felix Tsaran
<b>Hall C Paralel Session 12 Electrical Engineering</b> <b>Session Chair: Ladjal Brahim</b>		
09:30-11:30	ID81 New Experimental Analytical Approach to Study The Effects of Temperature and Irradiance on The Physical Parameters of The Photovoltaic Solar Module in Sunny and Temperate Zones	<b>Cheikh Saliou Toure</b> , Papa Lat Tabara Sow, Senghane Mbodji
	ID86 EDGE device and analytics for Secondary Power Distribution Substation	<b>Jason Mavromatakis</b> , Nikolaos-Antonios Livanos, Vagelis Alifragis, Sami Hammal
	ID132 Comparison Study Between P&O Method and Closed-Loop PID Controller to Control The MPPT of PV System	<b>Ream Mohammed Jassim</b> , Kadhim H. Hassan, Issa Ahmed Abed
	ID142 A Real-time Visualization of Electromagnetic Field Distribution with Marker-less Augmented Reality	<b>Ken Sato</b> , Gen Otomo, Yoshitsugu Kamimura
	ID148 Development of a New Tool for Voltage Stability Analysis in a Free and Open Source Software Package for Power System Studies	<b>Samuel Souto de Oliveira</b> , Geraldo Caixeta Guimarães, Thales Lima Oliveira
	ID180 Segmented Stator Switched Reluctance Motor Drive for Light Electric Vehicle	<b>Pere Andrada</b> , Balduí Blanqué, Marcel Torrent, Pol Kobeaga
	ID181 Automated Design of Neural Networks for FPGAs using Approximated Computing	Anatoliy Doroshenko, Volodymyr Shymkovych, <b>Tural Mamedov</b> , Olena Yatsenko
	ID199 Differential Games in The Problem of Controlling A Wind Power Plant in Conditions of Unsteady Load	<b>Ladjal Brahim</b>
ID207 Analysis of a WPT System in Terms of Coupling Factor and Compliance with Magnetic Flux Density Limits	<b>Schoenfelder Tristan</b> , Kindl Vladimir	
<b>Hall D Paralel Session 13 Mechanical Engineering &amp; Material Science</b> <b>Session Chair: Chinnu Mary George</b>		
09:30-11:30	ID235 Kinematic Analysis of Rat Motion After Spinal Cord Injury	<b>Maxim E. Baltin</b> , Viktoriya V. Smirnova, Oskar A. Sachenkov, Adel E. Khairullin, Tatyana V. Baltina
	ID264 Improved Flow Rate and Pressure ANN Estimators for a Centrifugal Fan with Induction Motor Drive	<b>Cebraill Tukeri</b> ; Oleh Kiselychnyk
	ID309 Battling The Rise Of Procrastination With The Implementation Of Agile Methodology	<b>Aisha Abdur Rahim</b> , Chinnu Mary George
	ID323 The Levelized Cost of Storage of Compressed Air Energy Storage System for The Case of Morocco	<b>Youness Masaaf</b> , Youssef Ait El Kadi, Fatima Zahra Baghli
	ID349 A Multibody Dynamics Approach to Predict The Gear Shift Force	<b>Salah A Sabri</b> , Sachin Ahirrao, Bruno Mussulini, Rafael Garcia, Carlos Sena, Guilherme Biagio

	ID357 A Novel Vehicle's Velocity Estimation Observer Based on Wheel-carriers Inertial Measurements	<b>Dimitrios Papagiannis</b> , Evangelos Tsioumas, Nikolaos Jabbour, Markos Koseoglou, Christos Mademlis
	ID366 Two Dimensional Fluids Flow Through Bend Microchannels in Smoothed Particle Hydrodynamics	<b>P.C.Harisankar, Tapas Sil</b>
	ID390 Chiller Fault Evaluation using Dempster-Shafer Theory	<b>Daniel Baptista</b> , Miguel Cavique
	ID394 Flow Characteristics of Two-Dimensional Plane Impinging Synthetic Jets	<b>Michiya Yasumiba</b> , Koichi Nishibe, Donghyuk Kang, Kotaro Sato
	ID421 Flow Direction Control Using a Circular Cylinder with a Single/Double Slot	<b>Daiki Yaguchi</b> , Kohei Okuma, Kotara Sato

**11:30- 11:40 BREAK**

**Hall A Paralel Session 14 Electrical Engineering  
Session Chair: Gabriela Dana Petropol Serb**

11:40- 13:40	ID258 Hybrid Method in Engineering Education: Case Study Applied to Electrical Engineering	<b>Emília Oliveira Lima Leal</b> , Ana Carolina Oliveira Lima, Dalmir Pacheco de Souza, Mabel Alicia Berges, Renan Lima Baima, Stefane Rego Gandra, Rosimeire Araujo Silva, Luis D Rojas Puron
	ID260 Identification of Vibration for Balancing in Fehn Pollux Ship with ECO Flettner Rotor	<b>Chetan Parmar</b> , Farzaneh Nourmohammadi, Elmar Wings
	ID337 Quenching Chaos in a Power System Using Fixed-Time Fractional-Order Sliding Mode Controller	<b>Abdul-Basset A. Al-Hussein</b> , Fadhil Rahma Tahir
	ID344 A Fast Fault Detection and Location in Multi-Terminal HVDC Transmission Line	<b>Jalal Sahebkar Farkhani</b> , S. Hassan Ashrafi Niaki, Claus Leth Bak, Zhe Chen
	ID350 Virtual Tools to Analyze The Energetics of an Induction Motor	<b>Gabriela Dana Petropol Serb</b> , Ion Petropol Serb
	ID373 A Novel Lithium-Ion Battery Equivalent Circuit Model Based on a Hybrid Parametrization Approach	<b>Evangelos Tsioumas</b> , Markos Koseoglou, Iordanis Panagiotidis, Dimitrios Papagiannis, Nikolaos Jabbour, Christos Mademlis
	ID375 A Novel Approach to The Lithium-Ion Battery Current Dependency on The Interfacial Resistance	<b>Markos Koseoglou</b> , Evangelos Tsioumas, Iordanis Panagiotidis, Dimitrios Papagiannis, Nikolaos Jabbour, Christos Mademlis
	ID377 Transient Analysis of a Wind Farm Connected to Albanian Power System using PSS/E	<b>Eduart Serdari</b> , Pellumb Cacaj
	ID391 An Enhanced Equalization and Energy Support Algorithm for Lithium-ion Battery Storage Systems in Electric Motor Drives	<b>Nikolaos Jabbour</b> , Evangelos Tsioumas, Markos Koseoglou, Dimitrios Papagiannis, Christos Mademlis
ID401 The Bus Selection Based on PV Curve for The Photovoltaic Integration into Power Grid	<b>Eduart Serdari</b> , Urim Buzra	

**Hall B Paralel Session 15 Computer Engineering & Informatics  
Session Chair: Ekaterina Gospodinova**

11:40- 13:40	ID119 Adaptive Admittance Control for Physical Human-Robot Interaction within Delay-Related Boundaries	<b>Yuliang Guo</b> , Jianwei Niu, Renluan Hou, Tao Ren, Bing Han, Xiaolong Yu, Qun Ma
	ID144 Research on Method for Building an Adaptive, Modal Interface for City Information Infrastructure	<b>Ekaterina Gospodinova</b> , Yuri Zhelyazkov, Kremena Dimitrova
	ID157 Implementation of Smart Saver, Logged-in Device Protector	<b>Gyudong Park</b> , Hocheol Jeon, Kyungshik Yi
	ID188 Application of Machine Learning in Identification of Best Teaching Method for Children with Autism Spectrum Disorder	Zarin Tassnim Zoana, <b>Mahmudul Wahed Shafeen</b> , Nasrin Akter, Tanvir Rahman

	ID192 Accessibility Evaluation of Saudi Health-Related Websites	<b>Redhwan Nour</b>
	ID209 Ownership and Use of Energy Raw Materials as A Instrument of Political Pressure for Profitability and Blackmail Purposes	<b>Nicolae Daniel Fiță</b> , Mihai Sorin Radu, Roland Iosif Moraru, Sorina Stanilă, Mila Ilieva Obretenova, Dragoș Păsculescu
	ID213 Machine Learning Based User Activity Analysis and Behavior Evaluation for More Energy Efficient Environments	<b>Omar Abdulaziz Alorainan</b> , Emad Sami Jaha
	ID228 Pansharpening Through Orthogonal Projection of Data	<b>Bidyarani Devi Mutum</b> , Rajagopalan Devanathan
	ID234 Automatic Detection and Measurement of Drilled Holes of a Section of Aerospace Assembly Unit using Image Processing Techniques	<b>Gunjan Parihar</b> , K Ramesh, Sandip S. Deshmukh, Chandu Parimi, Tathagata Ray
	ID238 Mobile Fire Evacuation Model for Large Public Buildings Using Particle Swarm Optimization with The Internet of Things	<b>Muralitharan Krishnan</b> , Yongdo Lim
	ID484 Starting Large Induction Motors Alternatives for Emergency Generation System	<b>Elaine C. Carmo</b> , Maia, Thales, Victor F. Mendes, Leonardo A. Silva
<b>Hall C Paralel Session 16 Electrical Engineering</b> <b>Session Chair: Alejandro Velázquez Jiménez</b>		
11:40- 13:40	ID402 Fourier-Bessel Series Neural Networks for Regression	Shyh-Haur Chen, <b>Li-Jeng Huang</b> , Duc-Hien Le
	ID423 Simulating The Impact of Tractive Power on The Operating Fuel Economy of Light Duty Vehicles on Driving Cycles	<b>Surath Gajanayake</b> , Saman Bandara, Thusitha Sugathapala
	ID472 Method of Allocating Electric Vehicle Charging Stations in Urban Centers	Elisama R. de Carvalho Durães, <b>Henrique Amorim Braun</b> , Estéfany de Medeiros Ferreira, Marcelo Brunoro
	ID482 A Method for The Contents Curation using Receiver Operating Characteristic (ROC) Curve	<b>Hyun Jung Lee</b> , Euisin Kim, Mye Sohn,
	ID519 Plasma System with HgCdTe Infrared Quantum Detectors	Hatice Hilal Kurt, <b>Selçuk Utaş</b>
	ID3 Modeling and Simulation of a Hybrid Electromagnetic Accelerator	Erol Kurt, Kayhan Çelik, Ahmet Yasir Teksar, Hakan Gormus, <b>Emin Özdemir</b>
	ID82 Supercapacitors Categorization, Modelling Techniques and Applications: A Review	Muhammad Omar, <b>Muhammad Usman</b> , Hamza Atiq, Saad Khan, Stephen Larkin
	ID135 E-Bike Load Demand Estimation for Transport Using Cartographic Data	<b>Aimable Ngendahayo</b> , Adria Junyet Ferre, Etienne Ntagwirumugara, Joan Marc Rodriguez Bernuz
	ID160 Peak Demand Control for Load Shedding with Auto-Tuning Load Factors	<b>Alejandro Velázquez Jiménez</b> , Fernando Martell Chávez, Irma Yolanda Sánchez Chávez
ID176 Research on Technology of Fast Deployable In-Cable Submarine Observation Node	<b>Zhiyong Duan</b> , Anzhe Yi, Yurui Zhang, Yanhu Chen	
<b>Hall D Paralel Session 17 Mechanical Engineering &amp; Material Science</b> <b>Session Chair: Diamantis Koutsandreas</b>		
11:40- 13:40	ID427 Assessment of Sealing Systems Impact on The Vibration and Environmental Safety of Rotary Machines	<b>Oleksandr Shevchenko</b> , Serhii Shevchenko, Mykola Radchenko
	ID431 Accurate Degradation Sensory in Low Stress Operation of FinFET Devices	<b>Emmanuel Bender</b> , Joseph B. Bernstein
	ID435 Interaction between Continuous and Synthetic Jets Based on Slot Distance	<b>Masaharu Mori</b> , Masahiro Takano, Nanami Ajino, Koichi Nishibe Kotaro Sato
	ID466 Decarbonizing Greece's Power Sector By 2035: Land use, Capital Requirements and Socio-Macroeconomic Implications	<b>Diamantis Koutsandreas</b> , Hera Neofytou, Alexandros Nikas, Haris Doukas
	ID489 Innovative Approaches and Modified Criteria to Improve A Thermodynamic Efficiency of Trigenation Plants	Andrii Radchenko, <b>Mykola Radchenko</b> , Serhiy Fordui, Oleksandr Rizun, Oleksii Zielikov, Victor Khaldobin

	ID496 Mehr Interval-Valued Intuitionistic Fuzzy Multi-Attribute Decision-Making Method without using The Concept of Connection Number	<b>Akanksha Singh</b>
	ID70 A Review on Lining Materials for Sea Water Pumped Storage Dams	<b>Muhammad Usman</b> , M. Omar, S. Khan, S. Larkin, W.Saleem
	ID212 Design of A Spring-Loaded Brake for Automated Bikes	<b>Robert Konradt</b> , Lars Junge, Stefan Sass, Stephan Schmidt
	ID278 A Novel Hybrid Model for Prediction of Shear Modulus in Clayey Soil	<b>Ehsan Mehryaar</b> , SeyedArmin MotahariTabari
<b>13:40 – 13:50 BREAK</b>		
<b>Hall A Paralel Session 18 Computer Engineering &amp; Informatics Session Chair: Balaji Dhanasekaran</b>		
13:50-15:50	ID252 Direct Optimization for Multi-Layer Convolutional Dictionary Learning	<b>Guan-Ju Peng</b> , Jason Sung
	ID269 Sentiment Analysis in Tourism: Fine-Tuning Bert or Sentence Embeddings Concatenation?	<b>Ibrahim Bouabdallaoui</b> , Fatima Guerouate, Samya Bouhaddour, Chaimae Saadi, Mohammed Sbihi
	ID273 Vision Controlled Sensorized Prosthetic Hand	<b>Md Abdul Baset Sarker</b> , Juan Pablo S. Sola, Aaron Jones, Evan Laing, Ernesto Sola-Thomas, Masudul H. Imtiaz
	ID276 A multiplayer Simulator Trainer to Use at An Automation Environment Course for Engineer School	<b>Ahmed Musule Alfaro</b> , Eduardo Sanchez Renteria, <b>Leticia Neira-Tovar</b> , <b>Hector Cruz Martínez</b> , Francisco Javier Esparza Mendoza
	ID318 Reconnaissance using Deep Reinforcement Learning	Sameer Dhole, <b>Pranit Maldikar</b> , Shivsevak Negi
	ID320 Finger Movement Multimodal Assistive Wheelchair System for The Disabled and Aged People in Oman	Said Jaboob, <b>Balaji Dhanasekaran</b> , Munesh Singh Chauhan, Senthil Kumar Natarajan
	ID329 An Optimized Image Steganography with High Embedding Capacity Based on Genetic Algorithm	<b>Hadeel Alazzam</b> , Orieb AbuAlghanam, Abdulsalam Alsmady, Esra'a Alhenawi
	ID365 Performance Assessment of End-User Web Mashup Development	<b>Alwi Bamhdi</b>
	ID369 Design and Prototyping of a ROS-Based Autonomous Mobile Robot (AMR)	<b>Mehmet Gök</b> , Mehmet Tekerek, Ekrem Yüce, Alper Kerem
ID216 Analysis of Structural Stiffness Reduction in terms of Electro-Mechanical Impedance Response for A Metallic Beam Structure using PZT Transducer	<b>Umakanta Meher</b> , Mohammed Rabius Sunny	
<b>Hall B Paralel Session 19 Informatics Session Chair: Zahzah Elhadi</b>		
13:50-15:50	ID452 An AAS-Based Approach for IoT-Driven Sustainable Manufacturing	<b>George Siaterlis</b> , Nikolaos Nikolakis, Subrat Kumar Dang, Marco Lewandowski, Evangelos Xanthakis, Karl A. Hribernik, Klaus-Dieter Thoben, Kosmas Alexopoulos
	ID455 A Spectrogram-Based CNN Algorithm for Denoising ECG Signals	<b>Sahar Keshavarzi</b> , Mohammad Soltanian, Mahmoud Keshavarzi
	ID456 TalkingProducts - Integrated Platform for The co-creation of Augmented Reality Interactive Presentations for traditional products	<b>Konstantinos I. Kotsopoulos</b> , Theofanis Alexandridis, Anastasios Babathanasis, Alexandros Papadopoulos
	ID468 Neural Rendering in The Cloud with TPU	<b>Jean Pierre Soto-Chirinos</b> , Henry Ivan Condori-Alejo, Guina Sotomayor Alzamora
	ID55 Tele-Health Security Framework for Medical Image Storage	<b>Mohammed Ayad Saad</b> , Noora Alallaq, Ahmed Hishim Rashid,
	ID66 End to End Neural Network Application for Ultrasonic Computed Tomography Image Recognition	<b>Marwa Fradi</b> , El-hadi Zahzah, Kais Bouallegue , Mohsen Machhout

	ID68 Developing a Model for Digital Marketing Competencies	George Papageorgiou, <b>Stelios Marneros</b>
	ID361 Predicting Student Academic Performance Using Multiple Classification Models	<b>Asma Al-Fakhore</b> , Safaa Hriez
	ID443 Verifiable and Robust Monitoring and Alerting System for Road Safety by AI based Consensus Development on Blockchain	<b>Reshu Verma</b> , Vishnu V S, Kotaro Kataoka
<b>Hall C Paralel Session 20 Computer Science &amp; Informatics</b> <b>Session Chair: Michael Winokur</b>		
13:50-15:50	ID383 Automatic generation of In-Vehicle Images: StyleGAN-ADA vs. MSG-GAN	<b>Sahar Azadi</b> , Sandra Dixe, João Leite, João Borges, Sandro Queirós, Jaime C. Fonseca
	ID385 Developing A Spatio-Temporal Simulation Framework for Urban Energy Consumption using Agent-Based Modeling	<b>Chun Chen</b>
	ID410 Hands-on Detection for Steering Wheels with Neural Networks	Michael Hollmer, <b>Andreas Fischer</b>
	ID415 Management and Detection System for Medical Surgical Equipment	<b>Alexandra Hadar</b> , Natan Levy, Michael Winokur
	ID416 UltraGCN+: Improvement on ultra-simplified Graph Convolutional Networks for Recommendation System	<b>Mustafa Raed Ameen AL-Saadi</b> , Asia Mahdi Naser Alzubaidi
	ID425 Predicting Students That Are At Risk Of Not Graduating In Record Time	<b>Khanyisile Sixhaxa</b> , Lenny Bokgoshi, Ashwini Jadhav, Ritesh Ajoodha
	ID426 Library Book Classification Using an LDA Model	<b>Khanyisile Sixhaxa</b> , Nasiem Ayob, Ashwini Jadhav, Ritesh Ajoodha,
	ID439 NeuralSDF Characterization for Inferring The Arrangement of Arbitrary Shapes in Unorganized Point Clouds	<b>Abdelkader Komti</b> , Alexis Heloir, Aicha Ben Makhlof, Borhen Louhichi
	ID440 Counterfactual Explanations for Employment Services	<b>Raphael Mazzine Barbosa de Oliveira</b> , Sofie Goethals, Dieter Brughmans, David Martens
<b>Hall D Paralel Session 21 Electrical Engineering</b> <b>Session Chair: Tamanna Punia</b>		
13:50-15:50	ID185 Electric Bus Battery Degradation Simulation	<b>Paula Zenni Lodetti</b> , Jessica Ceolin de Bona, Flavio Junior de Faveri, Marcos A. Izumida Martins, Rodolfo Sabino de Moura, Jorge Gustavo Schmidt
	ID203 Novel Reactive Power Sharing and Synchronization Methods for Multi-PCC Microgrids	<b>Ait Ben Hassi Youssef Amine</b> , Hennane Youssef, Berdai Abdelmajid, Valerii Tytiuk
	ID210 Deep Convolutional Neural Network Vectors for Speaker Recognition	<b>Soufiane Hourri</b> , Emmanuel Akeweje, Mary Salami, Jamal Kharroubi, Anthony Soronnadi, Olubayo Adekanmbi
	ID222 An Optimized Model Predictive Control of a Hybrid Standalone Microgrid System	Joy N. Eneh, <b>Solomon C. Nwafor</b> , Oluchi C. Ugbe, Timothy O. Araoye, Henry I. Ugwu, Sochima V. Egoigwe
	ID259 Impacts of The Distributed Generator Based on Renewable Energy on Distribution Grid: Case of Injection into Moroccan HTA Grid	<b>Siham Chakiri</b> , My Tahar Lamchich
	ID261 Platelet and Red Blood Cell Detection Modeling Using Impedance Spectroscopy-Based Microsystem	<b>Shabbir Chowdhury</b> , Mohammad Asif Hussain, Hatem Rmili, Nebras Sobahi
	ID277 Design of a New Flat Fresnel Lens Combining Flat-Curve Equations	<b>Guillermo Luque-Zuñiga</b> , Rubén Vázquez-Medina, G. Ramos-López, H. Yee-Madeira, David Alejandro Pérez-Márquez, Daniel Aguilar-Torres
	ID424 Multifocal THz Emission with Multiple Resonances	<b>Tamanna Punia</b> , Hitendra K. Malik
	ID434 Field Deployable Additive Manufactured Housing for an Electro-optical System: A Case Study	<b>Mark Holloway</b> , Fernando Camisani-Calzolari, Hendrik Theron

**15:50 – 16:00 BREAK**

**Hall A Paralel Session 22 Electrical and Computer Engineering**  
**Session Chair: Salma Ariche**

16:00-19:30	ID314 Design of a parabolic solar collector for the harnessing of the solar energy in Bucaramanga-Colombia	<b>A D Rincón-Quintero</b> , C A Ángulo-Julio, O Lengerke, C L Sandoval-Rodriguez, A Rodriguez, M A Castellanos-Carreño
	ID331 Generation of electrical energy through human traction on a stationary bicycle	<b>C L Sandoval-Rodriguez</b> , C A Ángulo-Julio, O Lengerke, A D Rincón-Quintero, A Rodriguez, M A Castellanos-Carreño
	ID419 Fuzzy Logic Based Intelligent System For Power Adaptation in a Public Lighting Network	<b>Mohammed Amine Jouahri</b> , Zakaria Boulghasoul, Abdelouahed Tajer
	ID 74 Performance Analysis of Signcryption and Sign-Then-Encrypt Schemes for Resource-Constrained IoT Devices	<b>Mohammed El-Hajj</b>
	ID98 Impact of Accidents Involving Autonomous Vehicles on The Public Acceptance	<b>Kareem Othman</b>
	ID116 Green Manufacturing Practices in SME in Armenia, Quindío. A Performance Analysis and Barriers Detection	<b>Jhully Martínez-Giraldo</b> , Alexis Avirama-Alzate, Kaliyan Mathiyazhagan
	ID121 Reactions to Gendered Voices in Drones	<b>Hwa-Yeon Kong</b>
	ID168 Modeling Characterization of Escherichia Coli and Staphylococcus Aureus Using Microfluidic-Based Impedance Spectroscopy System	<b>Shabbir Chowdhury</b> , Mohammad Asif Hussain, Hatem Rmili, Nebras Sobahi
	ID196 Assessment of Land Use and Land Cover Change Using Satellite Images of Nam Un Dam, Sakon Nakhon Province	<b>Narathip Ruksajai</b> , Supasit Konyai, Vichai Sriboonlue
	ID214 A Method for Multi-Robot Arm System Implementation using The ROS Framework	<b>Ignacio Fidalgo Astorquia</b> , Alberto Tellaecha Iglesias, Juan-Ignacio Vazquez
	ID266 Classification of SPECT-Myocardial Perfusion Imaging Using Deep Neural Networks	<b>Vincent Peter C. Magboo</b> , Ma. Sheila A. Magboo
	ID462 IoT-based System for Remote Monitoring of Elderly Environment	<b>Haneen Atef Ahmad Jaloudi</b>
	ID225 Mixed-radix DFT Matrix Factorization with Conflict-Free Addressing for in-Place Continuous-Flow FFT Accelerators	<b>Sergey Salishev</b>
ID172 Control System for Quasi-Z-source Cascaded Hbridge Multilevel Inverter with PV Power Generation and Battery Energy Storage System	<b>Pablo Horrillo-Quintero</b> , Pablo García-Triviño, Raúl Sarrias-Mena, Carlos Andrés García-Vázquez, Luis Fernández-Ramírez	
ID418 Battery Electric Vehicle Modeling and Range Estimation for a trip in Moroccan roads	<b>Salma Ariche</b> , Zakaria Boulghasoul, Abdelhafid El Ouardi, Abdelhadi Elbacha, Abdelouahed Tajer, Stéphane Espié	

**Hall B Paralel Session 23 Computer Engineering**  
**Session Chair: Robert Hans**

16:00-19:30	ID279 A Hybrid Machine Learning Algorithm for Estimation of Tunnel Boring Machine Rate of Penetration	<b>Ehsan Mehryaar</b> , SeyedArmin MotahariTabari
	ID283 Augmented Reality Supported Quality Assurance in Industrial Environments	<b>Ferdinand Burkhardt</b> , Gerrit Meixner
	ID319 Fuzzy Patterns Recognition for Inferential Sensor of Density	<b>Luis D. Rojas Puron</b> , Joao Evangelista Neto, Idania Aguilera Fernandez, Israel Gondres Torné, Ingrid Sammyne Gadelha, Luis M. Rojas Aguilera
	ID358 Analysis of IoT-Blockchain Technologies Integration into Healthcare Ecosystem	Basseyy Isong, <b>Tshipuke Vhahangwele</b> , Koketso Ntshabele, Adnan Abu-Mahfouz



	ID508 Heterogeneous WSN Modeling: Packet Transmission with Aggregation of Traffic (APT)	<b>Canek Portillo</b> , Jorge Martinez-Bauset, Vicent Pla, Vicente Casares-Giner
	ID513 Factors Impacting on Ethical Behavior in South African Software Development Organizations	Robert Hans, <b>Senyeki Marebane</b> , Jacqui Coosner, Livhu Nedzingahe
	ID408 A Qualitative Review on Structural Frameworks and Features of Educational Robots for STEM Education	<b>Ann Greace</b> , Soumya K Manna, M A Hannan Bin Azhar
	ID420 A Web-based Training Method of Agricultural Skills for Temporary Workers	<b>Dai Kusui</b> , Hideo Shimazu, Atsushi Shinjo
	ID436 Cryptocurrency Forecasting using AI	<b>Alexander Iliev</b> , Malvika Panwar
	ID437 Prediction Intervals for Text Analysis through Quantile Regression	Ankitha Raksha, <b>Alexander I. Iliev</b>
	ID465 External Factors and Socioeconomic Influence on Users Acceptance of Online Payments	<b>Fernando Uyaguari</b> , Juan Francisco Cordero, Andrés López, Erwin J. Sacoto-Cabrera
	ID469 Platform to Automate The Document Creation of Design Validation Plan for General and Electronic Industrial Product	<b>Srushti Khatau</b> , Surendra Bhosale, Janhavi Kalyanshetty
	ID479 Sports Video Classification using CNN Transfer Learning Model	Nazneen Mansoor, Shamli, <b>Alexander Iliev</b>
	ID138 Comparative Analysis between the Fast and Basic Scalar Multiplication Used in Elliptic Curve Cryptography	Twan Boeve, <b>Mohammed El-Hajj</b>
	ID73 IoT Based Automation of a Home and Alert System	<b>Zahraa M. Baqir</b>
	ID336 Cyber Security for measuring System of transmission lines in the event of cyber attacks	<b>Mohammad Ebrahimnezhad</b> , Mehran Sepehri, Sara Hemmati
	ID129 Tribological Behaviour of Laser-Deposited AlCoCrCuFeNi High Entropy Alloy	<b>Modupeola Dada</b> , Patricia Popoola, Uyor Uwa
	ID242 How Optimal Series FACTS Devices Placement Can Mitigate the Risk of Cascading Line Outages?	<b>Mohamad Reza Tavakoli</b>
<b>Hall C Paralel Session 24 Mixed Session</b> <b>Session Chair: Claudia Constantinescu</b>		
16:00-19:30	ID356 Optimal Prediction Horizon for The Non-schedulable Loads on Enhancing The Performance of The Energy Management in a Nearly Zero Energy Building	<b>Dimitrios Papagiannis</b> , Nikolaos Jabbour, Evangelos Tsioumas, Markos Koseoglou, Christos Mademlis
	ID392 Application of Hydrogen Fuel Cell for Auxiliary Power Unit (APU) on Aircraft	<b>Truc-Quan Ngo</b> , Nhu Tran
	ID48 A Review of Security Algorithms for Smart Home Internet of Things Devices	Maanda Magidimisa, <b>Topside E. Mathonsi</b> , Tonderai Muchenje, Vusumuzi Malele
	ID85 A Review on Seawater Reverse Osmosis Desalination Brine	<b>Suffian Zaman</b> , Muhammad Usman, Muhammad Omar, Saad Khan, Stephen Larkin
	ID102 A Comparative Analysis of The Computation Cost and Energy Consumption of Relevant Curves of ECC Presented in Literature	Pim Mulder, <b>Mohammed El-Hajj</b>
	ID120 Vision Based Road Profile Estimation for Preview Controlled Vehicle Suspension Systems	<b>Mert Buyukkopru</b> , Erdem Uzunsoy, Xavier Mouton
	ID515 Operation Management of More-Electric Aircraft Using Two-stage Stochastic Model Predictive Control	Xin Wang, <b>Najmeh bazmohammadi</b> , Jason Atkin, Serhiy Bozhko, Juan C. Vasquez, Josep M. Guerrero
	ID449 Energy Management of Hybrid microgrid system using Multi Agent System: A Distributed Control Approach	<b>Balachennaiah Pagidi</b> , J.Chinna Babu
	ID251 2-D Modeling of Transverse-Type Rectangular Piezoelectric Transformers with	<b>Joli Randrianarivelo</b> , Faniry Emilson Ratolojanahary, Mohamed Rguiti, Derandraibe

	Common Ground Electrodes Utilizing The Legendre Polynomial Approach	Jeannot Falimiarmanana, Lahoucine Elmaimouni, Ismael Naciri
	ID 506 Performance and Applications of Lithium Titanite Oxide Cells	<b>Inus Grobler</b>
	ID518 Saturation and Vibration Behavior of High Current- High Frequency Hybrid Core Structure Inductors	<b>Funda Battal</b> , Selami Balci, Necmi Altın, İbrahim Sefa
	ID30 The Influence of Human Tissues on the Patch Antennas' Parameters	<b>Claudia Constantinescu</b> , Claudia Pacurar, Adina Giurgiuman, Calin Munteanu, Sergiu Andreica, Marian Gliga
	ID71 Design Onshore Kelp to Hydrogen Process	<b>Husnain Siddique</b> , Muhammad Omar, Muhammad Usman, Maryam Qaiser, Imran Ali, Stephen Larkin, Saad Khan
	ID341 Infrared thermography for the detection of thermal bridges of envelopes in housing of warm climate	<b>Javier Gonzalo Ascanio-Villabona</b> , Brayan Eduardo Tarazona Romero, Arly Dario Rincon-Quintero, Omar Iengerke, Camilo Leonardo Sandoval-Rodriguez, Karen Tatiana Jaimes Quintero
	ID342 Sustainable Condensation System for the production of Fresh Water Production under the appropriate technology paradigm	<b>Brayan Eduardo Tarazona-Romero</b> , Omar Lengerke Perez, Javier Gonzalo Ascanio-Villabona, Camilo Leonardo Sandoval-Rodriguez, Arly Dario Rincon-Quintero, Alvaro Javier Rodriguez-Nieves
	ID450 Electrical Oscillations as Signals for an Indirect Measurement of Albumin Excreted Rate	<b>Huber Nieto-Chaupis</b>
<b>Hall D Paralel Session 25 Mixed Session Session Chair: Ntshuxeko Makondo</b>		
16:00-19:30	ID481 Derivating Quantum Coherence from Classical Electrodynamics in Physics of Strong Laser	<b>Huber Nieto-Chaupis</b>
	ID500 Theory of Neurogenesis Based at Quantum Mechanics	<b>Huber Nieto-Chaupis</b>
	ID448 Asymmetric Reconstruction of Encrypted Quantum Communications Through the In-Band-Full-Duplex Scheme	<b>Huber Nieto-Chaupis</b>
	ID480 The Feynman Propagator to Model the Intercontinental Infection of Viruses: Covid-19 Versus Monkeypox-22	<b>Huber Nieto-Chaupis</b>
	ID194 Machining vibration spectrum and surface finish analysis of low-alloy steel	Angel Zarate-Villazon, <b>Erick Espinosa-Juarez</b> , Irvine Monroy-Rueda, Alejandro Sanchez-Zavala, Roberto Gonzalez-Ojeda
	ID31 Effort estimation in organizations using agile or non-agile methodologies	<b>Fernando Prieto Bustamante</b>
	ID32 Impact of SCRUM on software Development projects in development companies	<b>Fernando Prieto Bustamante</b>
	ID92 Networked Energy System Digital Twin	<b>Ali Moeini</b> , Ali Hajebrahimi
	ID107 Proposed a solution based on functional dependency graphs for transactional fact table error correction	<b>Bôa Djavph Yoganguina</b> , Camara Mamadou Samba

ID151 A Review Analysis of Fouling Effect on Coal Fired Boiler Efficiency	<b>Bai Kamara</b>
ID152 Bituminous Coal Ash Analysis for fouling investigation Using Induced Coupled Plasma and X-Ray Fluorescence Methods	<b>Bai Kamara</b>
ID346 Geometric Parameterized Modal Superposition based Macromodel of Uniaxial Capacitance Accelerometer	Aleksandr V. Gridchin, Aleksei N. Koleda, Evgenii S. Barbin, Tamara G. Nesterenko, <b>Vladimir A. Kolchuzhin</b>
ID397 Multi-hop and Distributed Proxy Re-encryption Scheme With Dynamic Re-sharing	Juntao Cao, <b>Xin Pei</b> , Xiaochuan Wu
ID460 Analysis of cardiovascular disease risk factors	Fatou Ngom, <b>Ibrahima Fall</b> , Mamadou S Camara, Alassane Bah
ID502 An Enhanced VANET'S Security Model for Mitigating Denial of Service attacks in Smart Cities	<b>Ntshuxeko Makondo</b> , Topside E. Mathonsi, Tshimangadzo M Tshilongamulenzhe
ID507 Discrete models of forest fires constructed using the generalized Pascal's triangle	<b>Boris Starkov</b> , Oleg Kuzmin
ID137 Design of Novel Integrated Data Acquisition System for Multi-Channel Sensing in Landing Gear	<b>Esteve Hassan</b>
ID380 Remote Work Alerting with Artificial Intelligence Technics	Nevra Akbilek, <b>Yunus Akkaya</b>
ID499 Zero-Shot Call Classification	Nevra Akbilek, <b>Yunus Akkaya</b> , Erçin Öztuncel, Kenan Türkyılmaz
ID501 Design and Analysis of a Hgihly Sensitive GeS-based SPR Biosensor for DNA Detection	<b>Md. Saiful Islam</b> , Abbas Z. Kouzani, Shekhar Mahmud, Nasra Al Sharji, George Chen
ID 333 Optimal Method to Monitor Network for IoT Devices Based on Anomaly Detection	<b>Umar Ali</b> , Cenk Calis
ID227 Methodology for the application of data science in breast cancer diagnosis	Jorge A Millán Gómez, <b>Lilia Edith Aparicio Pico</b>