| | |
|---|---|
| ![UPT logo 1951 1991] | **Joint International Conference**<br>**10th Textile Conference & 4th Conference on Engineering and Entrepreneurship 2023**<br>**Tirana 19 – 20 October 2023**<br>**Program**<br><br>**(GMT+2 time zone)** |

| | |
|---|---|
| Thursday, October 19th, 2023<br>Palace of Congresses, Tirana<br>Chair**: Genti Guxho** | |
| 17.00– 17.30 | Registration& coffee |
| 17.30 – 17.50 | Greeting message<br>**Professor Andrea Maliqari – Rector of Polytechnic University of Tirana** |
| 17.50 – 18.00 | Greeting message<br>**Professor Genti GUXHO – Dean of Mechanical Engineering Faculty** |
| 18.00 – 18.20 | Virtual reality and 3D experiences to IMProve territorial Attractiveness, Cultural Heritage smart Management and Touristic development.<br>**"Doctor Honoris Causa"** from **Polytechnic University of Tirana**<br>**Prof. Dr. Luigi Maria Galantucci *Dr. h.c***<br>**Politecnico di Bari, Italy** |
| 18.20 – 18.40 | Plenary Lecture 1<br>Resource efficiency and clean production assessment for the Albanian textile manufacturing sector<br>**Professor Ermira Shehi**<br>**Polytechnic University of Tirana** |
| 18.40 – 19.00 | Plenary Lecture 2<br>Systems engineering for aerospace: new challenges in modern on-board systems.<br>**Professor Matteo D. L. Dalla Vedova**<br>**Politecnico di Torino, Italy** |
| **20.00**<br>**Dinner** | |

| | Friday, October 20th, 2023<br>Polytechnic University of Tirana |
|---|---|
| | Online Session I, Faculty of Mechanical Engineering, Room 205<br>Energetics<br>Chair: **Panagiotis Kyratsis** and **Klodian Dhoska** |
| 9.00 – 9.15 | *Flow Induced Forces on Pipe Elbows*<br>***Lydia Lymperopoulou*** *and George Varelis* |
| 9.15 – 9.30 | *CAD-based automated USV hulldesign*<br>***Anastasios Tzotzis****, Nikolaos Efkoliodis, César García-Hernández and Panagiotis Kyratsis* |
| 9.30 – 9.45 | *Flow Induced Vibration Assessment of a Gas Piping System*<br>***Deborah Ibrahimi****, George Varelis, Greg Peng, Graeme Campsie and Jeroen Hoefakker* |
| 9.45 – 10.00 | *The effects of the drill microgeometry on the induced thrust force and cutting torque*<br>***Anastasios Tzotzis****, Athanasios Manavis, Ioannis Sarris, Panagiotis Kyratsis* |
| | Online Session II, Faculty of Mechanical Engineering, Room 205<br>Textile (cloth, footwear, and leather)<br>Chair: **Evridiki Papachristou** and **Ermira Shehi** |
| 10.00 -10.15 | Comparison of Computer aided design and manual pattern making<br>Maja   Jankoska and **Ruzica Stevkovska Stojanovka** |
| 10.15 – 10. 30 | *The Effect of Regionally Specific Anthropometrical Measurements upon the Results of Garment 3D Fitting*<br>***Eugenija Strazdiene*** *and Desara Gjini* |
| 10.30 – 10.45 | *Encouraging 3D Virtual Design in Fashion Education: Best practices*<br>***Evridiki Papachristou*** *and Nefeli Zolota-tatsi* |
| 10.45 – 11.00 | The Use of Innovative 3D Simulation Tools in Fashion Boutiques<br>Nesligül Kiliç and **Özgür Ceylan** |
| 11.00 – 11.15 | *The Perception of Athleisure Trend for Denim Brands: The Case of Mavi*<br>***Özgür Ceylan****, Nesligül Kiliç, Özgen Özturan, Cihad Sünbül and Özge Polat* |
| 11.15 – 11.30 | **Coffee Break** |
| | Online Session III, Faculty of Mechanical Engineering, Room 205<br>Textile (cloth, footwear and leather)<br>Chair: **Andrea Ehrmann** and **Lilia Sabantina** |
| 11.30 – 11.45 | *Electrospun nanofiber mats for mammalian cell growth*<br>***Andrea Ehrmann*** |
| 11.45 – 12.00 | Characterization of Electrical Conductivity and Electrical Heating of RGO/MWCNT coated Nonwoven Fabrics<br>Nergis Demirel Gültekin, **Özgen Özturan** and İsmail Usta |
| 12.00 – 12.15 | *The Influence of Bio-Innovative Pretreatment to Cotton Fabric Whitness*<br>***Anita Tarbuk****, Tihana Dekanić, FrankaKarin and Irena  Šabarić* |
| 12.15 – 12.30 | Polypyrrole treated leather and triboelectricity.<br>**Aristeidis Repoulias**, Majlinda Hylli, Ilda Kazani, Sotiria Galata, Sindi Cela and Savvas Vassiliadis |

| | ROOM A– Session I, Faculty of Electrical Engineering, Room 205<br>Materials, Transport and Construction<br>Chair: **Irida Markja** |
|---|---|
| 9.00 – 9.15 | "Streamlining Design Workflow: Converting AutoCAD<br>to SolidWorks, Utilizing SolidCAM, and Cost Analysis Integration Analysis"<br>Granit Arifaj, **Ramë Likaj** and Besart Berisha |
| 9.15 – 9.30 | Analyzation of general displacements of mechanical structures using self<br>equilibrated forces<br>Anis Sulejmani, OdhiseaKoça and **Parid Milo** |
| 9.30 – 9.45 | NDE of the integrity of a CLINCER 40.000-ton concrete structure<br>**Enkelejda Konda**, MigenaZeqo and DhimitraqSotja |
| 9.45 – 10.00 | Analysis of vehicle inventory and their characteristics in Albania<br>**Erjon Selmani**, Koçi Doraci, Leonard Çomeni, Arben Dushi and Miranda Kullolli |
| | ROOM A – Session II, Faculty of Electrical Engineering, Room 205<br>Materials, Transport and Construction<br>Chair: **Edmondo Minisci** |
| 10.00 – 10.15 | *A Modified Webster Model for a Useful Traffic Signal Timing Plan*<br>***Arlinda A. Rrecaj**, Ramadan Mazrekaj and Gëzim Hoxha* |
| 10.15 – 10.30 | *Machine Learning based Prognostics of On-Board Electromechanical Actuators*<br>***Edmondo Minisci**, Matteo D.L.Dalla Vedova, Parid Alimhillaj, Leonardo Baldo, Paolo Maggiore* |
| 10.30 – 10.45 | Coulombian Friction Model Analysis, Acting on an Aerospace Servocommand<br>**Parid Alimhillaj**, Majlinda Alcani, Mateo D.L. Dalla Vedova, Luis Lamani and Spartak Poçari |
| 10.45 – 11.00 | Comparison of wind action calculation according to Albanian norms and Eurocode<br>**Igli Kondi**, Elvis Capo and Julian Kasharaj |
| 11.00 – 11.30 | **Coffee Break** |
| | ROOM A – Session III, Faculty of Electrical Engineering, Room 205<br>Materials, Transport and Construction<br>Chair: **Odhisea Koça** |
| 11.30 – 11.45 | *Graphical and analytical analysis in the field of Mohr's circle*<br>*Anis Sulejmani, Odhisea Koça and **Mentor Cejku*** |
| 11.45 – 12.00 | *Quality of Control of the Steel Bar Production for Usage in Construction Applications*<br>***Klodian Dhoska**, Irida Markja, Elena Bebi, Brisilda Kacorri and Agus Pramono* |
| 12.00 – 12.15 | "Asphalt Pavement Recycling Technology with Reclaimed Asphalt Pavement (RAP) according to the standard EN 13108-8 and EN 13108-1"<br>**Irida Markja**, Klodian Dhoska, Mentor Fraholli, Giorgio Mustafaraj, Blerta Ahmetaj and Dervish Elezi |
| 12.15 – 12.30 | *The advantages and efficiency of using the 5S Methodology in vehicle repairs and maintenance companies.*<br>***Dhimitraq Sotja**, Enkelejda Konda and Migena Zeqo* |
| 12.30 – 13.30 | **Lunch** |

| | ROOM A – Session IV, Faculty of Electrical Engineering, Room 205<br>Materials, Transport and Construction<br>Chair: **Ilo Bodi** |
|---|---|
| 13.30 – 13.45 | *The application of the DIJKSTRA algorithm in the finding of the optimal solution for the connected road network to center Prishtina*<br>**Ramë Likaj**, Xhevair Bajrami, Gëzim Hoxha and Erjon Shala |
| 13.45 – 14.00 | *Design and Fabrication of the Remote-Control Field Mobile Robot*<br>**Arbnor Pajaziti**, Faruk Selmani, Shaban Buza, Ramë Likaj, Xhavahir Bajrami and Afrim Gjelaj |
| 14.00 – 14.15 | *Path Planning Algorithms of the Mobile Robots Control*<br>**Arbnor Pajaziti**, Lavdrim Panxha, Xhevahit Bajrami, Shaban Buza and Mirlind Bruqi |
| 14.30 – 15.00 | **Coffee Break** |
| | ROOM B – Session I, Faculty of Mechanical Engineering, Room 210<br>Energetics<br>Chair: **Majlinda Alcani** |
| 9.00 – 9.15 | A simplified hydraulic capacity-sensitive fluid dynamics numerical model for monitoring aerospace electro-hydraulic actuators<br>**Matteo D. L. Dalla Vedova**, ParidAlimhillaj, Edmondo Minisci and Paolo Maggiore |
| 9.15 – 9.30 | Decarbonization of the Industrial sector in Albania. Problems and Challenges<br>**Majlinda Alcani**, Elena Bebi and Altin Dorri |
| 9.30 – 9.45 | Analysis of Energy Audit in the Architectural Design Office located in Tirana<br>**Klodian Dhoska**, Elena Bebi, Irida Markja and Giorgio Mustafaraj |
| 9.45 – 10.00 | Comparison of Different Energy Efficiency Techniques Applied to Building Envelope and Air Conditioning Plants<br>**Giorgio Mustafaraj** and Klodian Dhoska |
| | ROOM B – Session II, Faculty of Mechanical Engineering, Room 210<br>Energetics<br>Chair: **Andonaq Londo** |
| 10.00 – 10.15 | *A new approach for drought evaluation by using the SPI methodology*<br>**Petrit Zorba** and Elsuida Hoxha |
| 10.15 – 10.30 | *The Influence of Thermodynamic Parameters on Internal Combustion Engines and the Graphical Presentation of Cycles Diagrams Using Matlab*<br>**Ardit Gjeta**, Majlinda Alcani and Altin Dorri |
| 10.30 – 10.45 | *Energy Performance in the Industry Sector. Case Study of an Industrial Faci*<br>**Edmond ZENELI**, Albert Shira, Flamur Bidaj and Artan Hoxha |
| 10.45 – 11.00 | Performance analysis and optimization of the energy indicators of an axial fan through some constructive changes using computer simulations and experimental confirmation<br>**Spartak Poçari** and Luis Lamani |
| 11.00 – 11.30 | **Coffee Break** |

| | ROOM B – Session III, Faculty of Mechanical Engineering, Room 210<br>Textile (cloth, footwear and leather)<br>Chair: **Diana Tulik** |
|---|---|
| 11.30 – 11.45 | *Contamination threshold values for textile recycling*<br>**Tanita Behrendt** *and Elisabeth Eppinger* |
| 11.45 – 12.00 | The Effect of Aluminum Mordant on the Colour Fastness of Fabrics Made of Cellulose Fibres when Dyeing with Onion Peels<br>**Diana Tuulik** and Merje Beilmann |
| 12.00 – 12.15 | *Assessment of Silk Quality in the Shkodra Region of Albania: A Study on Physical Mechanical Properties*<br>**Ilda Kola**, *Blerina Kolgjini and Suela Ademi* |
| 12.30 – 13.30 | **Lunch** |
| | ROOM B – Session IV, Faculty of Mechanical Engineering, Room 210<br>Textile (cloth, footwear and leather)<br>Chair: **Georgios E. Stavroulakis** |
| 13.30 – 13.45 | *Data-driven multi-scale numerical homogenization*<br>**Georgios E. Stavroulakis** *and Eleftheria Bletsogianni* |
| 13.45 – 14.00 | *Auxetics, theory and technological applications*<br>**Ioannis Ntintakis**, *Georgios E. Stavroulakis and Stavros Karathanasopoulos* |
| 14.00 – 14.15 | *Enhancing Realism in Cloth Simulation: A Review of Methods and Issues*<br>**Lilia Sabantina** |
| 14.30 – 15.00 | **Coffee Break** |
| | ROOM C – Session I, Faculty of Electrical Engineering, Room 206<br>Management and production<br>Chair: **Jonida Teta** |
| 9.00 – 9.15 | "Albania's unsuccessful attempts to rapidly develop the industrial sector (1920-1990)"<br>**Genti Guxho** |
| 9.15 – 9.30 | Implementation of Industry 4.0 Challenges in Developing Countries: A Case Study of Albania<br>**Irma Shyle**, Erisjena Rruplli |
| 9.30 – 9.45 | *"Applying Ishikawa diagram and Pareto Chart for Defect Reduction in a Manufacturing Industry: A case study from Textile Producing Company"*<br>**Eralda Xhafka**, *Elidon Avrami, Gabriele Canton and Artemisa Mazreku* |
| | ROOM C – Session II, Faculty of Electrical Engineering, Room 206<br>Management and production<br>Chair: **John Kechagias** |
| 09.45 – 10.15 | Evaluation of surface flatness and roughness for marble products produced with CNC machining<br>**Ilo Bodi**, Erald Piperi, Mariel Hoxha and Jorgaq Kaçani |
| 10.15 – 10.30 | Experimental investigation of build time during filament material extrusion process<br>Aristidis Tsiolikas, Tatjana Spahiu and **John D. Kechagias** |
| 10.30 – 10.45 | Multi depth camera setup for body scan<br>**Erald Piperi**, Ilo Bodi and Elidon Avrami |
| 11.00 – 11.30 | **Coffee Break** |

| | ROOM C – Session III, Faculty of Electrical Engineering, Room 206<br>Management and production<br>Chair: **Valma Prifti** |
|---|---|
| 11.30 – 11.45 | *Information Technology in Supply Chain Management. Case Study*<br>**Dea Sinoimeri**, *Jonida Teta, Valma Prifti and Armira Lazaj* |
| 11.45 – 12.00 | *Using "Machine Learning" Techniques In Increasing The Efficiency of Sales Forecasting.*<br>*Case Study of A Retail Company in Albania*<br>**Valma Prifti**, *Dea Sinoimeri, Armira Lazaj, Betina Dini and Kevin Luniku* |
| 12.00 – 12.15 | *"Evaluating the Criteria for Choosing Clothing Brands using Analytic Hierarchy Process"*<br>**Elda Lamce** *and Alma Braimllari* |
| 12.30 – 13.30 | *Lunch* |

**Friday, October 20th, 2023**
**14.30 – 15.00**
**Poster session**

Evaluation of Risk Indexes that Affect the Cost of the Under-Construction Infrastructure Project "Extension of the New Ring of Tirana -Phase 2
Idlir Dervishi and Eralda Xhafka

Effect of nozzle geometry on flow characteristics; Mathematical modeling and computer simulation through the Python programming language
Luis Lamani and Spartak Poçari

Energy Key Performance Indicators in Garment Production
Elmira Dumishllari and Silva Spahija

Implementation of Barcode Technology in Clothing Industry in Albania Through a Case Study
Silva Spahija, Albana Leti, Elmira Dumishllari and Luljeta Haderi

Circular Economy: Reuse and recycling solutions of a footwear company in Albania
Albana Leti, Silva Spahija, Ermira Shehi and Enila Qoku

Wear smart wear wealthy: Shielding electroconductive leather for electromagneticprotection
Ilda Kazani, Stelios Mitilineos, Majlinda Hylli, Aulon Shabani, Savvas Vassiliadis and Genti Guxho

Thermo-Physiological Properties of Knitted Fabrics
Megi Basho, Zenun Skënderi, Antoneta Tomljenović and Ilda Kazani

Studying the conductive properties of leather in different time slots preparation
Majlinda Hylli, Aulon Shabani, Ilda Kazani and Genti Guxho

Testing of Usage Properties and Comfort of Casual Men's Cotton Socks
Jonida Haskurti, Antoneta Tomljenović, Ilda Kazani and Zenun Skënderi

Application of smart textile sensors for building occupancy monitoring
Aulon  Shabani, Ilda Kazani and Majlinda Hylli

Case Circular Economy of Serbia
Snežana Urošević, Igor Urošević and Milovan Vuković

**15:00**
**Discussions & Conclusions**