Online via zoom

Program with Zoom links is sent to registered attendees by email.

ISPR
INTERNATIONAL
SYMPOSIUM
FOR PRODUCTION
RESEARCH
2023

Schedule overview

Day I	October 5th, 2023 Thursday	
Opening Ceremony		9:00 – 10:00 Türkiye Time
Keynote Forum 1		10:00 – 12:30 Türkiye Time
Group Photo		12:30 – 12:40 Türkiye Time
Lunch Break		12:40 – 14:00 Türkiye Time
Keynote Forum 2		14:00 – 15:50 Türkiye Time
Keynote Forum 3		16:00 – 16:40 Türkiye Time
Keynote Forum 4		16:50 – 17:50 Türkiye Time
Keynote Forum 5		18:00 – 19:00 Türkiye Time

Day II   **October 6th, 2023 Friday**

Parallel Sessions   9:30 – 11:10 Türkiye Time
- Industry 5.0 Applications, IoT and Production Systems, Healthcare Systems and Management
- Sustainability
- Big Data and Analytics, Decision Making, Fuzzy Logic

Parallel Sessions   11:30 – 12:45 Türkiye Time
- Industrial Applications
- Sustainability
- Supply Chain Management

Lunch Break   12:45 – 14:00 Türkiye Time
TU Wien Pilot Factory Virtual Tour   14:00 – 14:45 Türkiye Time
Parallel Sessions   15:00 – 16:40 Türkiye Time
- Industry 4.0 Applications, Process Management
- Sustainability, Production Economy
- Optimization, Simulation and Modelling

Special Session   17:00 – 17:30 Türkiye Time
Parallel Sessions   17:40 – 19:30 Türkiye Time
- Productivity and Performance Management, Stock Control and Inventory Management, Demand Management
- Clustering, Facility and Capacity Management, Lean Production
- Simulation and Modelling, Quality Management

Day III   **October 7th, 2023 Saturday**

Special Session   10:30 – 11:00 Türkiye Time
Parallel Sessions   11:00 – 12:15 Türkiye Time
- Capstone Projects – 1
- Capstone Projects – 2
- Capstone Projects – 3
- Capstone Projects – 4

Lunch Break   12:15 – 13:45 Türkiye Time
TU Wien Tec-Lab Virtual Tour   13:45 – 14:05 Türkiye Time
Parallel Sessions   14:05 – 14:55 Türkiye Time
- Capstone Projects – 5
- Capstone Projects – 6
- Capstone Projects – 7

Capstone Projects – 8
Closing Session   14:55 – 15:15 Türkiye Time
Virtual Concert   15:15 – 16:00 Türkiye Time

All times given in the schedule are in **UTC+3, Türkiye local time**. Please refer to below **Time-zone Conversion Table** to match your local time.

Symposium time Antalya, Türkiye	Vancouver, BC, Berkeley, CA	Auburn, AL, Iowa City, IA	Dayton, OH New York, NY	Buenos Aires	Dublin, London	Central European Summer Time (CEST) Belgrade, Bratislava, Budapest, Prague, Rome, Vienna, Warsaw	Türkiye Time Antalya, İstanbul, Kuwait City, Moscow Eastern European Summer Time (EEST) Athens, Bucharest	Tehran	Beijing
9:00	11:00 PM	1:00 AM	2:00 AM	3:00 AM	7:00	8:00	9:00	9:30	14:00
10:00	12:00 AM	2:00 AM	3:00 AM	4:00 AM	8:00	9:00	10:00	10:30	15:00
11:00	1:00 AM	3:00 AM	4:00 AM	5:00 AM	9:00	10:00	11:00	11:30	16:00
12:00	2:00 AM	4:00 AM	5:00 AM	6:00 AM	10:00	11:00	12:00	12:30	17:00
13:00	3:00 AM	5:00 AM	6:00 AM	7:00 AM	11:00	12:00	13:00	13:30	18:00
14:00	4:00 AM	6:00 AM	7:00 AM	8:00 AM	12:00	13:00	14:00	14:30	19:00
15:00	5:00 AM	7:00 AM	8:00 AM	9:00 AM	13:00	14:00	15:00	15:30	20:00
16:00	6:00 AM	8:00 AM	9:00 AM	10:00 AM	14:00	15:00	16:00	16:30	21:00
17:00	7:00 AM	9:00 AM	10:00 AM	11:00 AM	15:00	16:00	17:00	17:30	22:00
18:00	8:00 AM	10:00 AM	11:00 AM	12:00 PM	16:00	17:00	18:00	18:30	23:00
19:00	9:00 AM	11:00 AM	12:00 AM	13:00 PM	17:00	18:00	19:00	19:30	00:00

Online via zoom

Opening Ceremony	Oct 5th, 2023 Thu	**9:00 – 10:00 Türkiye Time**	8:00 – 9:00 CEST
			Moderator: Prof. Dr. Hatice Camgöz Akdağ

Prof. Dr. Hatice Camgöz Akdağ
İstanbul Technical University
Prof. Dr. M. Güneş Gençyılmaz
President of UAD (Society for Production Research)
Prof. Dr. Numan M. Durakbasa
TU Wien, Member of UAD
Prof. Dr. Kurt Matyas
Vice Rector for Academic Affairs, TU Wien
Prof. Dr. Daniela Popescu
Vice Rector for University Management and Relations with the Economic Environment, TU Cluj-Napoca, Romania
Prof. Dr. Šooš Ľubomír
Dean of Faculty of Mechanical Engineering
Slovak University of Technology in Bratislava, Slovakia
Prof. Dr. Friedrich Bleicher
Head, Institute of Production Engineering and Photonic Technologies, TU Wien

Keynote Forum 1	Oct 5th, 2023 Thu	**10:00 – 12:30 Türkiye Time**	9:00 – 11:30 CEST
			Moderator: Prof. Dr. Hatice Camgöz Akdağ

Prof. Dr. Duc T. Pham,
Birmingham University, UK
"The Bees Algorithm and Its Applications"

Prof. Dr. Peter Kopacek,
TU Wien, Austria
"From Engineering Management EM to Technology Management TEM"

Dr. Ing. Ömer Ganiyusufoğlu,
Industrial Development Consultant, QIAP – Qingdao International Academician Park, China
"Intelligent Machine Tools and Intelligent Manufacturing of the Future"

Group Photo	Oct 5th, 2023 Thu	**12:30 – 12:40 Türkiye Time**	11:30 – 11:40 CEST
Screenshots from Zoom gallery view of the participants will be taken.			

Lunch Break	Oct 5th, 2023 Thu	**12:40 – 14:00 Türkiye Time**	11:40 – 13:00 CEST

Keynote Forum 2	Oct 5th, 2023 Thu	**14:00 – 15:50 Türkiye Time**	13:00 – 14:50 CEST
			Moderator: Prof. Dr. Hatice Camgöz Akdağ

Prof. Dr. Hasan Mandal, TÜBİTAK President, Ankara, Türkiye
"Revolutionizing the Smart and Sustainable Future through co-creation with Human-Centric Industry"

Prof. Dr. Mahmut Akşit, TEI CEO, Ankara, Türkiye
"Development journey of the TEI-TF6000 turbofan jet engine"

Prof. Dr. Lütfihak Alpkan,
Deputy Minister of Labour and Social Security, Ankara, Türkiye
"Society 5.0"

Coffee Break	Oct 5th, 2023 Thu	**15:50 – 16:00 Türkiye Time**	14:50 – 15:00 CEST

Keynote Forum 3	Oct 5th, 2023 Thu	**16:00 – 16:40 Türkiye Time**	15:00 – 15:40 CEST
			Moderator: Prof. Dr. Hatice Camgöz Akdağ

Dr. Yüksel Yalçın
General Manager, İstanbul Enerji A.Ş., İstanbul, Türkiye
"Industrial Technology at Power Plants: Biomass Energy Applications"

Prof. Dr. Birgit Oberer
International Society of Engineering Pedagogy (IGIP), Austria
"Fostering Innovation and Entrepreneurship in Industrial Engineering Education: A Paradigm Shift"

Coffee Break	Oct 5th, 2023 Thu	**16:40 – 16:50 Türkiye Time**	15:40 – 15:50 CEST
Keynote Forum 4	Oct 5th, 2023 Thu	**16:50 – 17:50 Türkiye Time**	15:50 – 16:50 CEST
			Moderator: Prof. Dr. Hatice Camgöz Akdağ

Prof. Dr. Gül E. Kremer,
School of Engineering, University of Dayton, Ohio, USA
"Algorithm Development for Integration of an Automated Visual Defect Inspection System"

Prof. Dr. Ing. Jorge Bauer,
TU Wien, Austria & UTN-FRBA Buenos Aires, Argentina
"Autonomation, Automation, AI, and Industry-Agriculture 5.0 in Sustainable Agro-Ecological Food Production"

Coffee Break	Oct 5th, 2023 Thu	**17:50 – 18:00 Türkiye Time**	16:50 – 17:00 CEST
Keynote Forum 5	Oct 5th, 2023 Thu	**18:00 – 19:00 Türkiye Time**	17:00 – 18:00 CEST
			Moderator: Prof. Dr. Hatice Camgöz Akdağ

Prof. Dr. Andrew Kusiak,
The University of Iowa, Iowa, USA
"Digitization and Hyperautomation"

Prof. Dr. William P. Fisher,
University of California, Berkeley, California, USA
"How "Deterministic Chaos" Defines Natural Laws Applicable to Both Nature and Culture"

End of Day I events	Oct 5th, 2023 Thu	**19:00 Türkiye Time**	18:00 CEST

Parallel Sessions	Oct 6th, 2023 Fri	**9:30 – 11:10 Türkiye Time**	8:30 – 10:10 CEST

	Meeting chair: Prof. Dr. İsmail Böğrekçi
## Industry 5.0 Applications	

- **Revolutionizing Industry 5.0: Harnessing the Power of Digital Human Modelling**
  Donmezer, Semih; Demircioglu, Pinar; Bogrekci, Ismail; Baş, Gökçen; Durakbasa, M. Numan
- **The Global Apprentice: Adaptive, Versatile and a Lifelong Learner**
  Doyle-Kent, Mary M; Walsh Shanahan, Breda

IoT and Production Systems

- **On The Material Selection of Gauge for The Comparison of X-Ray and Neutron Tomography**
  Marczis, Attila; Kis, Zoltán; Dregelyi-Kiss, Agota

Healthcare Systems and Management

- **Creating a Tool for HSE and Social Performance Assessment in Healthcare Facilities**
  Masoudian, Fatemeh; Faeghinezhad, Shiva; Lennerts, Kunibert

	Meeting chair: Prof. Dr. Hatice Camgöz Akdağ
## Sustainability	

- **The Impacts of 6G Technologies on Achieving Economic Sustainability Goals in Digital Transformation Point of View: Literature Review**
  Selma Aysegul Gunes; Hatice Camgöz Akdağ
- **Application of Sustainable Lean Supply Chain Management for a Textile Company**
  Tuğba Alper; Ömer F. Kandaz; Hatice Camgöz Akdağ
- **Relationship Between Sustainable Entrepreneurship and The UN Sustainable Development Goal 12: A Bibliometric Approach**
  Nur Eradlı; Nihan Yıldırım; Hatice Camgöz Akdağ
- **The Relationship Among Sustainable Development, GDP, and Greenhouse Gas Emission in Turkey**
  Ömer Faruk Kandaz; Hatice Camgöz Akdağ

	Meeting chair: Assoc. Prof. Dr. Atik Kulaklı
## Big Data and Analytics	

- **Comparative Analysis of Public Transportation through Sentiment Analysis and Topic Modeling**
  Aslıgül Aksan; Hatice Camgöz Akdağ
- **The COVID-19 Outbreak's Impact on Customer Purchasing Behavior in E-commerce**
  Pınar, Artun; Yenice, Onur Halit; Özcan, Tuncay; Konyalioglu, Kemal; Beldek Apaydın, Tuğçe

Decision Making

- **A Sustainability Score Development for A Social Responsibility Network**
  Işık, Mehmet Ali; Yılmaz, Uğur; Cengiz, İsmail Cenk; Temur, Gül Tekin

Fuzzy Logic

- **The Measurement of Stores' Efficiency in a Retail Chain using Fuzzy Data Envelopment (Fuzzy DEA) Analysis**
  Kemal Konyalioglu; Sibel Çayır; Nehir Yiğit; Tuncay Özcan

Coffee break	Oct 6th, 2023 Fri	**11:10 – 11:30 Türkiye Time**	10:10 – 10:30 CEST

Parallel Sessions	Oct 6th, 2023 Fri	**11:30 – 12:45 Türkiye Time**	10:30 – 11:45 CEST

Industrial Applications	Meeting chair: Prof. Dr. Kemal Güven Gülen

- **Characterization of Polyethylene Pipe Properties through Advanced Metrology Techniques**
  Meryem Didar Bayrakçıl; Osman Bodur; Martin Klein; Eva Maria Walcher; Günther Poszvek; Marcelina Jałowiec
- **Improving Diplomatic Mission Service Production with Big Data: The Case of Indonesian Embassy in Moscow**
  Muhamad Winata; Peter B Panfilov
- **Research Regarding the Development of An Android Application Presenting Roughness Parameters, Measurement and Drawing Indications**
  Pop, Grigore Marian G; Crisan, Liviu Adrian; Tripa, Mihai Sorin; Andresan, Dragos

Sustainability	Meeting chair: Prof. Dr. Serpil Erol

- **Sustainable Process Innovation and Digital Transformation Linkages: Multiple Case Study Research**
  Nur Eradlı; Hatice Camgöz Akdağ
- **Connection between Sustainable Process Innovation and Digital Transformation in Logistics – Multiple Case Study Research**
  Selma Aysegul Gunes; Hatice Camgöz Akdağ
- **Overcoming Barriers in Circular Economy Implementation with Industry 4.0 Technologies: The Case of Defense Industry**
  Çebi, Sümeyye; Baki, Birdoğan; Özçelik, Gökhan

Supply Chain Management	Meeting chair: Prof. Dr. Berna Dengiz

- **A Last Mile Delivery Problem with Multitrip and Time Window Constraints In E-Logistics**
  Duygu Nurcan Kızgın; Ferhan Cebi
- **Determining a New Warehouse Location for an Electrical Home Appliances Company**
  İlayda Kızılkaya, Tolgahan Kevser, Hande Ofluoğlu, Feyza Ölçücüer, Duygun Fatih Demirel
- **Analysis of a Turkey Meat Production Agri- Chain: A Simulation Study**
  Karataş Aygün, Nazlı; Kandiller, Levent; Bulut, Önder

Lunch Break	Oct 6th, 2023 Fri	**12:45 – 14:00 Türkiye Time**	11:45 – 13:00 CEST
Pilot Factory Virtual Tour	Oct 6th, 2023 Fri	**14:00 – 14:45 Türkiye Time**	13:00 – 13:45 CEST

Virtual Tour in the **Industry 4.0 Pilot Factory** at the TU Wien.

Moderator:
Ece Soyuer
TU Wien

Presenter:
Dr. Claudia Elisabeth Schickling, Alexander Kinzer
Industry 4.0 Pilot Factory, TU Wien

Coffee Break	Oct 6th, 2023 Fri	**14:45 – 15:00 Türkiye Time**	13:45 – 14:00 CEST

Parallel Sessions	Oct 6th, 2023 Fri	**15:00 – 16:40 Türkiye Time**	14:00 – 15:40 CEST

### Industry 4.0 Applications	Meeting chair: Prof. Dr. Semra Birgün
- **Advanced Quality Assurance of Additive Manufacturing through Computed Tomography** *Jałowiec , Marcelina; Walcher, Eva Maria; Bodur, Osman; Poszvek, Günther; Klein, Martin; Bayrakçıl, Meryem Didar* - **Industry 4.0 and Business Model Innovation: Bibliometric Co-Word and Content Analyses** *Atik Kulakli; Cenk Lacin Arikan; Semra Birgun* - **Proposal of Industry 4.0 Maturity Model in the Energy Sector** *Nebati, Elif; Avunduk, Zehra Binnur; Akcan, Abdullah Fatih* ### Process Management - **Object-Centric Process Mining: Latest State-of-Art Research Direction** *Solhjoo, Ali; Rezaie, Kamran*	
### Production Economy	Meeting chair: Prof. Dr. Selim Zaim
- **Econometric Analysis of the Impact of Digitalization of the Economy on the Labor Market** *Islamov, Islam Jamal; Huseynli, Ilham; Yagubov, Sakit; Aliyev, Ali* - **Policy Dialogue Approach for Improving the Existing Policy Framework Regarding the Reduction of Carbon Emissions** *Szabo, Denisa; Campean, Emilia; Popescu, Daniela; Neamtu, Calin; Dragomir, Mihai* ### Sustainability - **Research on Service Quality in the E-Commerce Sector** *Yaren Çağlar; Paşa Çiçeklidağ; Selim Zaim* - **Assessment of Environmental Sustainability Performance Using AHP-based CODAS and MARCOS Methods: A Comparative Study** *Ulu, Mesut; Mengüç, Kenan* - **Autonomation, Automation, AI, and Industry-Agriculture 5.0 in Sustainable Agro-Ecological Food Production** *Pinar Demircioglu; Ismail Bogrekci; M. Numan Durakbasa; Jorge M. Bauer*	
### Optimization	Meeting chair: Prof. Dr. Haluk Soyuer
- **Research on Constructive Design of Strut-Based Lattice Structures for Load-Bearing Orthopaedic Implants Manufactured by Selective Laser Melting (SLM) Technology** *Willing, Boglarka* ### Simulation and Modelling - **Mathematical Modeling and Calculation of the Basic Characteristics of a Complex Antenna Array** *Islamov, Islam Jamal; Hunbataliyev, Elmar* - **Maintenance Decision and Spare Part Selection for Multi-Component System** *Kaya, Berk; Karabağ, Oktay; Fadıloğlu, Mehmet Murat* - **A Firefly Algorithm for Bi-Objective Airport Gate Assignment Problem** *Paldrak, Mert; Erdem, Gamze; Örnek, Mustafa Arslan*	

Coffee Break	Oct 6th, 2023 Fri	**16:40 – 17:00 Türkiye Time**	15:40 – 16:00 CEST
Special Session	Oct 6th, 2023 Fri	**17:00 – 17:30 Türkiye Time**	16:00 – 16:30 CEST

### Special Session	Moderator: Asst. Prof. Dr. Zeynep Gergin
Prof. Dr. Alice E. Smith, Auburn University, Alabama, USA *"Innovative Uses of Drones for Logistics in Healthcare and Production"*	

Coffee Break	Oct 6th, 2023 Fri	**17:30 – 17:40 Türkiye Time**	16:30 – 16:40 CEST

Online via zoom

Parallel Sessions	Oct 6th, 2023 Fri	**17:40 – 19:30 Türkiye Time**	16:40 – 18:30 CEST

Productivity and Performance Management

- **A Multi-Criteria Decision-Making Model Integrated with Speech Analytics for the Performance Evaluation of Agents in Express Delivery Industry**
  Helin Oyku Demircioglu; Berna Şimşek; Kemal Konyalioglu; Tuncay Özcan
- **Manufacturing Productivity Increase by Innovative Die Design in High Pressure Die Casting**
  Alev, Ugur; Vanli, Ali Serdar; Mertöz, Cihan; Akdogan, Anil
- **Efficiency analysis of Major Airlines: Exploring the Operational Performance Determinants in Aviation**
  Kübra Çınar, Ali Osman Kuşakçı, Ekrem Tatoğlu

Stock Control and Inventory Management

- **Peak Period Inventory Planning for Apparel Industry**
  Mahmut Ali Gökçe; Russell King

Demand Management

- **An Extreme Gradient Boosting Model Optimized with Genetic Algorithm for Sales Forecasting of Retail Stores**
  Kemal Konyalioglu; Tuğçe Beldek Apaydın; İlhan Turhan; Adil Soydal; Tuncay Özcan

Meeting chair: Prof. Dr. Pınar Demircioğlu

Clustering

- **Clustering Analysis and Comparative Study of Different Clustering Performance Indices**
  Ulu, Mesut; Türkan, Yusuf Sait

Facility and Capacity Management

- **Charging Station Network: A Case Study in Bakırköy, Istanbul**
  Uzuner, Meltem; Dengiz, Orhan; Dengiz, Berna

Lean Production

- **Analysis of a Company's Product Design Process within the Framework of Lean Product Development Principles**
  Çalışkan, Zeynep; Topoyan, Mert
- **DMAIC Methodology for Semiconductor Manufacturing**
  Alimli, Dilek; Elibol, Duygu Melek; Çeliktaş, Ahmet; Tunaboylu, Bahadır

Scheduling

- **Optimizing Integrated Flight-Crew-Aircraft Scheduling: Simulated Annealing for Effective Solutions in the Face of Irregular Operations**
  Güner, Girkan Güven; Erol, Serpil

Meeting chair: Prof. Dr. Bahadır Tunaboylu

Simulation and Modelling

- **A New Approach to Modeling and Synthesis of a Digital Antenna Array Operating in the Microwave Range**
  Islamov, Islam Jamal; Jahangirov, Murad; Rahimov, Agarahim; Abdullayev, Rashid
- **CFD Simulation of the Aerodynamic Characteristics of the NACA 0018 Symmetrical Profile**
  Apostol, Ioana Eliza; Titu, Aurel Mihail
- **Research and Analysis of the Efficiency of Fiber-Optic Communication Lines Based on DWDM Systems**
  Islamov, Islam Jamal; Ibrahimov, Bayram; Orujova, Milana
- **Development and Analysis of an Antenna System for Communication in the Microwave Bands of Radio Waves**
  Islamov, Islam Jamal

Quality Management

- **Quality in Production and Service**
  García, Ángela Moya; Bodur, Osman; Durakbasa, M. Numan

Meeting chair: Asst. Prof. Dr. Zeynep Gergin

End of Day II events	Oct 6th, 2023 Fri	**19:30 Türkiye Time**	18:30 CEST

Online via zoom

Special Session	Oct 7th, 2023 Sat	**10:30 – 11:00 Türkiye Time**	9:30 – 10:00 CEST

Special Session **Prof. Dr. Jan Torgersen,** School of Engineering and Design, Technical University of Munich, Germany *"Towards an industrial relevant process for architectured carbon production"*	Moderator: Dr. Tuğçe Beldek Apaydın

Parallel Sessions	Oct 7th, 2023 Sat	**11:00 – 12:15 Türkiye Time**	10:00 – 11:15 CEST

Capstone Projects – 1 • **Analytic Hierarchy Process (AHP) and Goal Programming Approach for a Real-life Supplier Selection Problem** *Erdinc, Pinar; Gersil, Cagla; Erton, Ceylin; Buduneli, Zeynep; Paldrak, Mert; Staiou, Efthimia* • **Applications of Statistical Process Control, Quality Improvement Tools and Techniques, and a Simulation Model in a Garment Manufacturing Company** *Erdinc, Pinar; Buduneli, Zeynep; Erton, Ceylin; Gerşil, Çağla; Paldrak, Mert; Staiou, Efthimia*	Meeting chair: Prof. Dr. Ferhan Çebi
Capstone Projects – 2 • **Capacity Expansion Through Bottleneck Analysis for an OEM Company** *Coşkunseda, Gülşah; Bayraktar, Arda Ali; Salman, Ege; Toy, Ayhan Ozgur; Karataş Aygün, Nazlı* • **Inventory Management Optimization for Intermittent Demand** *Kaya, Berk; Karabağ, Oktay; Başay, Aleyna Ömrüm; Torun, Bekir Can; Çekiç, Fatma Ravza; Işıklı, Zeynep Eda; Çakır, Çağlar* • **Enhancing Human Safety in Production Environments within the Scope of Industry 5.0** *Serra Aksoy, Pinar Demircioglu, Ismail Bogrekci, M. Numan Durakbasa*	Meeting chair: Prof. Dr. Pınar Demircioğlu
Capstone Projects – 3 • **A Quality Value Stream Mapping Study in a Knitwear Manufacturer** *Gergin, Zeynep; Kılınç, Arda Seden; Aksu, Ozan İbrahim; Akalın, Arda Burak; Albayrak, Abdülbaki; Güneş, Salih* • **Improving Quality Control Applications by Increasing Inspection Efficiency and Decreasing Nonconformance Percentage** *Yılmaz, Başak; Fırat, Sena; Caba, Cihan; Beşir, Berna; Ulku, Ilayda* • **A Lost Sales Make-to-Stock System with Batch Demand and Batch Production** *Ozkan, Sinem; Yandımata, Mert; Bulut, Önder*	Meeting chair: Assoc. Prof. Dr. Zeynep Gergin
Capstone Projects – 4 • **Risk & Project Management in Project Logistics: A Case Study in Wind Turbines** *Salış, Zeynep; Kazançoğlu, Yiğit; Ozbiltekin-Pala, Melisa* • **The Role of Smart Farming on Çamlı Yem** *Çakır, Eda; Börühan, Gülmüş; Ersoy, Pervin* • **The Impact of Value Engineering on Material Selection an Example from The Construction Industry** *İbrahim Ethem Tarhan, Baraa Quffa*	Meeting chair: Prof. Dr. Alptekin Erkollar

Lunch Break	Oct 6th, 2023 Fri	**12:15 – 13:45 Türkiye Time**	11:15 – 12:45 CEST

Online via zoom

Tec-Lab Virtual Tour	Oct 7th, 2023 Sat	**13:45 – 14:05 Türkiye Time**	12:45 – 13:05 CEST

Virtual Tour in the **Tec-Lab Production Engineering Laboratory** at the TU Wien

Presenter:
Dr. Osman Bodur
Institute for Production Engineering and Photonic Technologies,
TU Wien

Parallel Sessions	Oct 7th, 2023 Sat	**14:05 – 14:55 Türkiye Time**	13:05 – 13:55 CEST

Capstone Projects – 5

- **Application of Meta-Heuristic Algorithms for Sequencing Multi-Model Assembly Line with Sequence-Dependent Setup Time in Garment Industry**
  Kuzu, Tunahan; Paldrak, Mert; Örnek, Mustafa Arslan; Can, Yaren; Sarı, Elvin; Ceylan, Sude Dila; Duran, Devin
- **Warehouse Design and Order Picking Algorithms for Apparel Industry**
  Ünlü, Elif

Meeting chair:
Prof. Dr. Selim Zaim

Capstone Projects – 6

- **Determination of Moment of Inertia After Cold Roll Forming Process for Steel Rectangular Profiles**
  Tekyalçın, Ali Burak; Kulavuz, Himmet Ufuk U; Demircioglu, Pinar; Bogrekci, Ismail
- **Cloud-based AI Role in Intelligent Pharmaceutical Manufacturing Facilities**
  Darabseh, Esraa; Tarhan, İbrahim Ethem

Meeting chair:
Prof. Dr. İsmail Böğrekçi

Capstone Projects – 7

- **Integrating Lean into Supplier Selection Problems in Small and Medium-Sized Enterprises**
  Tan Tacoglu, Melis; Caylak, Ece; Özkan Özen, Yeşim Deniz; Kortun, Cemre
- **An Excel-Based Stock Management System for a Leather Label Manufacturer**
  Uçucu, Emine; Eraslan, Fatma Beyza; Kaymaklı, Zeyneb Nur; Emir, Oğuz; Aktin, Tülin

Meeting chair:
Assoc. Prof. Dr. Atik Kulaklı

Capstone Projects – 8

- **A Warehouse Management Decision Support System for Totomak**
  Kurt, Burak; Karakurt, Melis; Şirin, Güner; İspay, Sevde; Güçlükol, Simge; Kandiller, Levent
- **Production Control of a Make-to-Stock System with Non-Identical Parallel Production Lines and Lost Sales**
  Ozkan, Sinem; Deliktaş, Kerem Can; Bulut, Önder

Meeting chair:
Prof. Dr. Kemal Güven Gülen

Closing Session	Oct 7th, 2023 Sat	**14:55 – 15:15 Türkiye Time**	13:55 – 14:15 CEST	

Prof. Dr. Hatice Camgöz Akdağ
İstanbul Technical University

Prof. Dr. M. Güneş Gençyılmaz
President of UAD (Society for Production Research)

Prof. Dr. Numan M. Durakbasa
TU Wien, Member of UAD

Virtual Concert	Oct 7th, 2023 Sat	**15:15 – 16:00 Türkiye Time**	14:15 – 15:00 CEST	

Virtual concert from recordings of Viennese artists.