



GJCIE 2016

Global Joint Conference on Industrial Engineering and Its Application Areas

14 – 15 July 2016 – Istanbul, Turkey

“Building Successful University-Industry Alliances”



FINAL PROGRAM

14 JULY 2016, THURSDAY

09:00 - 16:00 REGISTRATION

09:30 - 09:40 WELCOME ADDRESS BY FETHI CALISIR
ROOM: GALATA

09:40 - 10:40 KEYNOTE SESSION - I

ROOM: GALATA

KRISHNASWAMI SRIHARI, PHD

- Executive Vice Provost for International Initiatives and Chief Global Officer
- Dean and SUNY Distinguished Professor – Thomas J. Watson School of Engineering and Applied Science Binghamton University – State University of New York, USA

TITLE: “ENGINEERING EDUCATION IN A GLOBAL WORLD”

10:40 - 11:10 BREAK - GALATA FUAYE

11:10 - 12:30 PARALLEL SESSION - I

ROOM: AYASOFYA

CHAIR: GULSAH HANCERLIOGULLARI

ID: 26	Understanding Facebook Usage of Undergraduate Students in Turkey	Ecem Basak (Istanbul Technical University) Fethi Calisir (Istanbul Technical University)
ID: 69	A Framework to Assign Forklift Drivers to Relevant Duties Based on Physical and Cognitive Factors	Firat Ozkan (Eskisehir Osmangazi University) Berna Ulutas (Eskisehir Osmangazi University)
ID: 93	Ergonomic Assessment of Hand Tool Design to Reduce Occupational Accidents	Orhan Korhan (Eastern Mediterranean University) Mohammad Yazdi (Eastern Mediterranean University)
ID: 95	An Estimation of Anthropometric Measures of Adult Male Population of Anatolia	Mahmut Eksioglu (Bogazici University) Elif Eren (Bogazici University)



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11:10 - 12:30		PARALLEL SESSION - II
ROOM: RUMELI		CHAIR: OGUZHAN ERDINC
ID: 15	An Empirical Study of Safety Improvement by Risk Management Guidance in Healthcare Organisations	Mecit Can Emre Simsekler (University College London) Bilal Gokpinar (University College London)
ID: 27	Risk Management in Hospital Settings: Understanding and Improving the Current Practice	Gulsum Kubra Kaya (University of Cambridge) Halime Tuba Canbaz (Necmettin Erbakan University) Mecit Can Emre Simsekler (University College London) James Ward (University of Cambridge) John Clarkson (University of Cambridge)
ID: 89	A System Dynamics Model of Medication Waste Problems in the Saudi Arabian Healthcare System	Faisal A Alkhalidi (Tennessee Technological University)
ID: 121	Evaluation of Risk Management Practices: Data Analysis of NHS England Hospitals	Gulsum Kubra Kaya (University of Cambridge) Halime Tuba Canbaz (Necmettin Erbakan University) James Ward (University of Cambridge) John Clarkson (University of Cambridge)

11:10 - 12:30		PARALLEL SESSION - III
ROOM: PIER LOTI		CHAIR: EMRE CEVIKCAN
ID: 42	Operators' Assignment in Cellular Manufacturing Systems: A Review of Recent Applications	Yeliz Buruk Sahin (Eskisehir Osmangazi University) Serafettin Alpay (Eskisehir Osmangazi University)
ID: 88	Role of Entrepreneur Orientation on Employee Work Outcomes	Gaye Karacay Aydin (Istanbul Technical University) Efe Eris (Istanbul Technical University)
ID: 111	Minimizing Total Earliness Subject to Minimum Number of Cells and $n_T=0$	Gursel A. Suer (Ohio University) Casey Davis (Ohio University) Kyle Good (Ohio University)
ID: 140	Factors Effecting Job Satisfaction in Pharmaceutical Industry: A Turkish Company Application	Cahit Ali Bayraktar (Istanbul Technical University) Murat Durucu (Istanbul Technical University)

12:30 - 13:30	LUNCH BREAK - ELITE RESTAURANT
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13:30 - 14:30		
PARALLEL SESSION - IV		
ROOM: AYASOFYA		CHAIR: REZA TAVAKKOLI-MOGHADDAM
ID: 21	The Impacts of Economic Sanctions on Supply Chain Management: Empirical Analysis of Iranian Supply Chains	Ehsan Shakeri (Eastern Mediterranean University) Bela Vizvari (Eastern Mediterranean University) Ramtin Nazerian (Eastern Mediterranean University)
ID: 62	A Particle Swarm Optimization Algorithm for Integrated Forward-Reverse Supply Chain Network Decisions	Seval Ene (Uludag University) Nursel Ozturk (Uludag University)
ID: 78	Collision and Conflict-Free Airport Ground-Traffic Management	Ali Akgunduz (Concordia University)

13:30 - 14:30		
PARALLEL SESSION - V		
ROOM: RUMELI		CHAIR: HATICE CAMGOZ AKDAG
ID: 13	Wind Farm Layout Optimization to Reduce Noise	Esma Sedef Kara (Eastern Mediterranean University) Orhan Korhan (Eastern Mediterranean University) Huseyin Guden (Eastern Mediterranean University)
ID: 30	A Simulation Model to Evaluate Treatment Services Reconfigurations for Patients with Parkinson's Disease	Reda M. Lebcir (University of Hertfordshire) Eren Demir (University of Hertfordshire) Tahar Boukhobza (University of Algiers) David Southern (Pathways Communications Ltd)
ID: 87	Prioritized Scheduling and Routing for Home Healthcare Services	Ahmet Cinar (Koc University) F. Sibel Salman (Koc University) Burcin Bozkaya (Sabanci University)

13:30 - 14:30		
PARALLEL SESSION - VI		
ROOM: PIER LOTI		CHAIR: MECIT CAN EMRE SIMSEKLER
ID: 16	Heuristic Evaluation: Overview and a Proposed Framework with User Experience Perspective	Oguzhan Erdinc (Turkish Air Force Academy)
ID: 35	The Effects of Knowledge Sharing and Types of Learning on Individual Creativity: A Structural Equation Model	Gozde Kadioglu (Istanbul Technical University) Beril Gul (Istanbul Technical University) Ayberk Soyer (Istanbul Technical University) Umut Asan (Istanbul Technical University)
ID: 67	The Factors Affecting Knowledge Transfer between Individuals in Organizations	Omer Faruk Gurcan (Istanbul Technical University) Cigdem Altin Gumussoy (Istanbul Technical University)



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14:40 - 15:40		PARALLEL SESSION - VII
ROOM: AYASOFYA		CHAIR: ORHAN KORHAN
ID: 63	Network Design for Closed Loop Supply Chains Using Multi-Objective Optimization Model	Seval Ene (Uludag University) Nursel Ozturk (Uludag University)
ID: 107	Volume Flexibility in Robust Design of Supply Flow under Operational and Disruption Risks	Alireza Ebrahim Nejad (Concordia University) Onur Kuzgunkaya (Concordia University)
ID: 117	A New Methodology for Solving Real Time Quay Crane Scheduling Problem	Aybuke Alper (Pamukkale University) Mustafa Egemen Taner (Pamukkale University) Osman Kulak (Pamukkale University) Yusuf Yilmaz (Pamukkale University)

14:40 - 15:40		PARALLEL SESSION - VIII
ROOM: RUMELI		CHAIR: REDA M. LEB CIR
ID: 36	A Computer-Aided Grading System for Clinical Evaluation of Dry Eye Syndrome	Ayse Arslan (Yildirim Beyazit University) Baha Sen (Yildirim Beyazit University) Dursun Delen (Oklohama State University) Betul Seher Uysal (Ataturk Education and Research Hospital) Fatih Vehbi Celebi (Yildirim Beyazit University) Hasan Basri Cakmak (Hacettepe University Hospital)
ID: 60	Integrated Consumption and Provision Map Implementation in Healthcare Sector	Nurcan Deniz (Eskisehir Osmangazi University) Feristah Ozcelik (Eskisehir Osmangazi University)
ID: 84	Implementation of Computer Assisted Voice Search Engine for Medical Transcription	Ayse Arslan (Yildirim Beyazit University) Baha Sen (Yildirim Beyazit University) Dursun Delen (Oklohama State University) Fatih Vehbi Celebi (Yildirim Beyazit University)

14:40 - 15:40		PARALLEL SESSION - IX
ROOM: PIER LOTI		CHAIR: FETİH YILDIRIM
ID: 32	A Timetabling Approach: Optimal Exam Schedule in a University	Gulsah Hancerliogullari (Istanbul Technical University) Miray Gurmen (Istanbul Bilgi University) Onur Akdeniz (Istanbul Bilgi University) Emrah Koksalmis (Istanbul Technical University)
ID: 92	A Genetic Algorithm for the P-Median Facility Location Problem	Mehmet Kursat Oksuz (Istanbul Technical University) Sule Itir Satoglu (Istanbul Technical University) Gulgun Kayakutlu (Istanbul Technical University) Kadir Buyukozkan (Karadeniz Technical University)
ID: 125	MIP Model and Hybrid Heuristic Solution Method for Milkrun	Duygu Yilmaz Eroglu (Uludag University)



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15:40 - 16:10

BREAK - GALATA FUAYE

16:10 - 17:30

PARALLEL SESSION - X

ROOM: AYASOFYA

CHAIR: ONUR KUZGUNKAYA

ID: 52	Performance Analysis of Meta-heuristic Algorithms for a Quadratic Assignment Problem	Zohreh Raziei (University of Tehran) Reza Tavakkoli-Moghaddam (University of Tehran) Siavash Tabrizian (Sharif University of Technology)
ID: 55	A Tri-Level r-Interdiction Median Model for a Hierarchical Facilities Location Problem	Maryam Akbari-Jafarabadi (University of Science and Technology of Mazandaran) Mehdi Mahmoodjanloo (University of Science and Technology of Mazandaran) Reza Tavakkoli-Moghaddam (University of Tehran)
ID: 71	Coral Reefs Optimization Algorithm's Suitability for Dynamic Cell Formation Problem	Nurcan Deniz (Eskisehir Osmangazi University) Feristah Ozelik (Eskisehir Osmangazi University)
ID: 122	Dynamic Scheduling of Generalized Flowshop Problems Using Mathematical Programming	Burcu Caglar Gencosman (Uludag University) Duygu Yilmaz Eroglu (Uludag University)

16:10 - 17:30

PARALLEL SESSION - XI

ROOM: RUMELI

CHAIR: MAHMUT EKŞİOĞLU

ID: 43	An Optimization Approach for Balancing Multi Model Walking-Worker Assembly Systems	Peiman Alipour Sarvari (Istanbul Technical University) Emre Cevikcan (Istanbul Technical University)
ID: 49	Assessment of 5S and Overall Equipment Effectiveness Contributions Towards Promoting Total Productive Maintenance Implementation	Abdullatif Ben Hassan (University of Windsor) Walid Abdul-Kader (University of Windsor)
ID: 72	Event Driven Dynamic Job Shop Scheduling Under Capacity Constraints	Adil Baykasoglu (Dokuz Eylul University) Fatma Selen Karaslan (Dokuz Eylul University)
ID: 48	Multi-factor Frameworks and Models for Innovation Risk Management	Kerron O. Boothe (Karlsruhe Institute of Technology)



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16:10 - 17:30

PARALLEL SESSION - XII

ROOM: PIER LOTI

CHAIR: GAYE KARACAY AYDIN

ID: 53	Statistical Estimation and Test of Hypothesis with a Weibull Distribution: Applications to Industrial Lifetime Data	Fetih Yildirim (Cankaya University) M. Qamarul Islam (Cankaya University)
ID: 61	Reliability Analysis of Product Fleets in Use Phase: Risk Detection and Prognosis Based on Data Logger	Stefan Bracke (University Wuppertal)
ID: 91	Wireless Multimedia Sensor Network Reliability Analysis with Petri Nets	Omer Ozkan (Turkish Air Force Academy) Murat Ermis (Turkish Air Force Academy) Ilker Bekmezci (Turkish Air Force Academy)
ID: 110	Simulation Based Optimization of Stock Levels for Maintenance Logistics with Multi-Skill Parallel Servers	Andrei Sleptchenko (Qatar University) Hasan H. Turan (Qatar University) Shaligram Pokharel (Qatar University) Tarek Y. ElMekkawy (Qatar University)

18:00 - 20:00

WELCOME RECEPTION - BEYLERBEYI



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15 JULY 2016, FRIDAY

09:00 - 16:00 REGISTRATION

09:40 - 10:40

KEYNOTE SESSION II

ROOM: GALATA

DURSUN DELEN, PHD

- Director of Research—Center for Health Systems Innovation, Spears and Patterson Endowed Chairs in Business Analytics
- Professor of Management Science and Information Systems, Spears School of Business, Oklahoma State University

TITLE: “DEMYSTIFYING BIG DATA AND ANALYTICS WITH REAL WORLD APPLICATIONS”

10:40 - 11:10 BREAK - GALATA FUAYE

11:10 - 12:30

PARALLEL SESSION - XIII

ROOM: AYASOFYA

CHAIR: LEVENT ATAHAN

ID: 66	A Decomposition Method to Solve a Game Based Multi-Objective Model for a Scheduling Problem at a Chemotherapy Center under Uncertainty	Javad Ansarifar (University of Tehran) Reza Tavakkoli-Moghaddam (University of Tehran) Faezeh Akhavizadegan (University of Tehran)
ID: 77	Vehicle Routing Problem in Omni-Channel Retail Distribution	Tarek Y. ElMekkawy (Qatar University) Mohamed M.S. Abdulkader (University of Manitoba) Yuvraj Gajpal (University of Manitoba)
ID: 109	Fire Scheduling Problem with Probability of Hit Time Window	Sezgin Kaplan (Turkish Air Force Academy)
ID: 123	Comparison of Dynamic Scheduling Approaches: Predictive/Reactive Scheduling vs. Robust Proactive Scheduling in a Generalized Flowshop Environment	Burcu Caglar Gencosman (Uludag University) Duygu Yilmaz Eroglu (Uludag University)



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11:10 - 12:30		PARALLEL SESSION - XIV
ROOM: RUMELI		CHAIR: JUNG KEUN LEE
ID: 19	Analysis and Validation of Several Emission Models for Automobiles Using Real-Time Data	Ahmet Gurcan Capraz (Fatih University) Pinar Ozel (Fatih University) Mehmet Sevkli (Fatih University)
ID: 41	Literature Review on Modelling, Analysis and Planning of Emergency Evacuation Process For Public Marine Transportation	Peiman Alipour Sarvari (Istanbul Technical University) Emre Cevikcan (Istanbul Technical University) Alp Ustundag (Istanbul Technical University)
ID: 81	Strategic Alignment and Technology Management in FNSS	Kivilcim Ersoy (FNSS)
ID: 82	TOGAF Based Governance Framework Proposition for Technology Management Systems	Nermin Sokmen (The Scientific and Technological Research Council of Turkey - TUBITAK)

11:10 - 12:30		PARALLEL SESSION - XV
ROOM: PIER LOTI		CHAIR: ERCAN HOSKARA
ID: 11	Determining the Optimum Number of Trucks in Pavement Process	Mohammed Al Mohsin (University of Buraimi) Bevian Al Hadithi (University of Technology) Ali Alnuaimi (Sultan Qaboos University)
ID: 39	Customer Profiling for Co-creation in Global New Product Development	Ilhami Burak Safran (Ondokuz Mayıs University) Koray Altun (Bursa Technical University) Turkay Dereli (Iskenderun Technical University - ISTE)
ID: 40	A New Mathematical Model towards the Integration of Cell Formation and Part Scheduling	Yeliz Buruk Sahin (Eskisehir Osmangazi University) Serafettin Alpay (Eskisehir Osmangazi University)
ID: 54	Cooperation Networks Types and Intensity: Descriptive Analysis of Turkish SMEs	Eyup Calik (Yalova University) Fethi Calisir (Istanbul Technical University)

12:30 - 13:30	LUNCH BREAK - ELITE RESTAURANT
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13:30 - 14:30		PARALLEL SESSION - XVI
ROOM: AYASOFYA		CHAIR: KIVILCIM ERSOY
ID: 17	Pessimistic Supply Chain Efficiency Evaluation	Mustapha D. Ibrahim (Eastern Mediterranean University) Sahand Daneshvar (Eastern Mediterranean University)
ID: 37	Sustainability Effect on Optimum Stock Keeping Unit Variety and Profit	Ilkan Sarigol (Yildiz Technical University) Coskun Ozkan (Yildiz Technical University)
ID: 83	A Strategic Supply Chain Network Design Evaluation Based on Mixed-Integer Linear Programming	Peiman Alipour Sarvari (Istanbul Technical University) Alp Ustundag (Istanbul Technical University) Emre Cevikcan (Istanbul Technical University)

13:30 - 14:30		PARALLEL SESSION - XVII
ROOM: RUMELI		CHAIR: ABDULLATIF BEN HASSAN
ID: 12	Effect of Supplier's Assessment on Waste Prevention	Nasim Sadegh (Eastern Mediterranean University) Orhan Korhan (Eastern Mediterranean University) Ramtin Nazerian (Eastern Mediterranean University)
ID: 22	Solving a New Multi-objective Multiple Allocation Hub Covering Location Problem with a Ring-Structured Hub Network by the NSGA-II	Maryam Eghbali-Zarch (University of Tehran) Reza Tavakkoli-Moghaddam (University of Tehran) Kazem Dehghan-Sanej (Islamic Azad University)
ID: 57	Three Meta-Heuristic Algorithms for Efficient Truck-Door Assignment and Product Placement Plans in Cross-Docking Centers	Ilker Kucukoglu (Uludag University) Nursel Ozturk (Uludag University)

13:30 - 14:30		PARALLEL SESSION - XVIII
ROOM: PIER LOTI		CHAIR: GURSEL SUER
ID: 23	A Parallel Kalman Filter for Estimation of Human Body Segment Orientation Using Wearable IMMU	Jung Keun Lee (Hankyong National University)
ID: 47	The Impact of Musculoskeletal Discomfort on Tablet-assisted Education System	Elif Binboga Yel (Girne American University) Banu Numan Uyal (Eastern Mediterranean University) Orhan Korhan (Eastern Mediterranean University)
ID: 139	The Human Physical and Cognitive Roles in Automation Systems	Behice Durgun (Cukurova University)



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14:40 - 15:40		PARALLEL SESSION - XIX
ROOM: AYASOFYA		CHAIR: GULSUM KUBRA KAYA
ID: 104	GSCM for Construction Waste Management in Green Building Operations	Hatice Camgoz Akdag (Istanbul Technical University) Ercan Hoskara (Eastern Mediterranean University) Tugce Beldek (Istanbul Technical University)
ID: 113	Alternative Global Supply Chain Design Strategies for A Blood Sugar Strip Manufacturer Considering Layered Cellular Design	Jue Jiang (Ohio University) Gursel A. Suer (Ohio University)
ID: 118	Various Scenario Analyses for Yard Crane Scheduling Problem	Mustafa Egemen Taner (Pamukkale University) Osman Kulak (Pamukkale University) Yusuf Yilmaz (Pamukkale University) Aybuke Alper (Pamukkale University)

14:40 - 15:40		PARALLEL SESSION - XX
ROOM: RUMELI		CHAIR: MEHMET GUMUS
ID: 29	Analysis of Interactions among the Lean Implementation Barriers	Saliha Karadayi Usta (Istanbul Technical University) Seyda Serdar Asan (Istanbul Technical University)
ID: 56	Hybrid and Intelligent Price Forecasting Using Product Specifications	Ipek Kivanc (Istanbul Technical University) Ayca Altay (Istanbul Technical University)
ID: 127	Genetic Algorithm Based Hybrid Solution for Feature Selection	Duygu Yilmaz Eroglu (Uludag University) Burcu Caglar Gencosman (Uludag University)

14:40 - 15:40		PARALLEL SESSION - XXI
ROOM: PIER LOTI		CHAIR: MOHAMMAD AL MOHSIN
ID: 51	Hybrid Multi-Criteria Decision Making Approach Based on Fuzzy AHP and Fuzzy TOPSIS Methods for the Stock Area Selection Problem	Ilker Kucukoglu (Uludag University) Betul Yagmahan (Uludag University) Ahmet Onayli (Uludag University) Ezgi Didem Cayhan (Uludag University) Merve Unal (Uludag University)
ID: 106	Vehicle Technology Selection with Integrated Fuzzy AHP-TOPSIS Method	Ibrahim Yazici (Istanbul Technical University) Omer Faruk Gurcan (Istanbul Technical University)
ID: 126	Comparison of Neural Network and Wrapper Methods for Decision Making: Acceptance of Fabrics in Quality Control Process	Duygu Yilmaz Eroglu (Uludag University) Burcu Caglar Gencosman (Uludag University)



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15:40 - 16:10

POSTER SESSION

ROOM: GALATA FUAYE

ID: 74	Modeling and Simulation of Transport of Insulin Aerosol into the Lungs at the Level of Trachea	Djerafi-Kaabeche Khatima (National Technical University of Constantine) Nekaa Amine (National Technical University of Constantine) Saouli Ouacil (National Technical University of Constantine)
ID: 120	Simulations of Linear and Nonlinear Respiratory Mechanics on Optimization of the Human Respiratory Control	Shyan-Lung Lin (Feng Chia University - MingDao University) Chieh-Liang Wu (Taichung Veterans General Hospital)

15:40 - 16:10

BREAK - GALATA FUAYE

16:10 - 17:10

PARALLEL SESSION - XXII

ROOM: AYASOFYA

CHAIR: HATICE CAMGOZ AKDAG

ID: 38	Supply Diagnostic Incentives in New Product Launch	Mohammad E. Nikoofal (1Católica Lisbon School of Business & Economics) Mehmet Gumus(McGill University)
ID: 68	A Review of Reverse Logistics Studies and Assessing Future Trends for Turkey	Mustafa Kocabas (Turkish Air Force NCO College) Berna Ulutas (Eskisehir Osmangazi University)
ID: 115	Solving Container Sequencing Problem Using Hybrid Tabu Search Method	Osman Kulak (Pamukkale University) Yusuf Yilmaz (Pamukkale University) Aybuke Alper (Pamukkale University) Mustafa Egemen Taner (Pamukkale University)

16:10 - 17:10

PARALLEL SESSION - XXIII

ROOM: RUMELI

CHAIR: TAREK Y. ELMKAWY

ID: 99	An Effective Heuristic Policy for a Recoverable Manufacturing System with Substitutable Products	S. Sebnem Ahiska (Galatasaray University) Russell E. King (North Carolina State University) Fethullah Gocer (Galatasaray University)
ID: 112	A GA Approach for Minimizing Total Manpower Shortage in Synchronized Manufacturing Cells	Gursel A. Suer (Ohio University) Sara Akbar Ghanadian (Ohio University) Fatih Yarimoglu (Ohio University)
ID: 128	Hybrid Method for Large Scale Scheduling Problem	Duygu Yilmaz Eroglu (Uludag University)

18:00 - 20:00

GALA DINNER - BEYLERBEYI