



3rd International Conference on Industrial Engineering & Operations Management

July 3 - 6, 2012
Istanbul, Turkey
Venue: Istanbul Technical University



Submission Received from the Following Countries / Territories:

- | | | | |
|---------------|----------------|-----------------|--------------------------------|
| 1. Albania | 16. Finland | 31. Kuwait | 46. Saudi Arabia |
| 2. Algeria | 17. France | 32. Lebanon | 47. Slovakia |
| 3. Andorra | 18. Gambia | 33. Libya | 48. South Africa |
| 4. Australia | 19. Germany | 34. Malaysia | 49. Spain |
| 5. Bahrain | 20. Ghana | 35. Mexico | 50. Sri Lanka |
| 6. Bangladesh | 21. Greece | 36. Morocco | 51. Taiwan |
| 7. Botswana | 22. India | 37. Namibia | 52. Thailand |
| 8. Brazil | 23. Indonesia | 38. New Zealand | 53. Tunisia |
| 9. Bulgaria | 24. Iran | 39. Niger | 54. Turkey |
| 10. Canada | 25. Iraq | 40. Nigeria | 55. United Arab Emirates (UAE) |
| 11. Chile | 26. Ireland | 41. Oman | 56. United Kingdom (UK) |
| 12. China | 27. Italy | 42. Pakistan | 57. United States (USA) |
| 13. Colombia | 28. Japan | 43. Philippines | 58. West Bank and Gaza |
| 14. Cyprus | 29. Jordan | 44. Portugal | 59. Zimbabwe |
| 15. Egypt | 30. Kazakhstan | 45. Qatar | |

WELCOME MESSAGE FROM CONFERENCE CHAIRS

The Third International Conference on Industrial Engineering and Operations Management (IEOM) Istanbul Technical University, Management Faculty, Macka, Istanbul, Turkey, July 3 – 6, 2012

On behalf of the IEOM Forum Organizing Committee, we welcome you to the Third International Conference on Industrial Engineering and Operations Management (IEOM) in Istanbul, Turkey. The conference aims to provide a forum for academics, researchers and practitioners to exchange ideas and recent developments in the field of Industrial Engineering and Operations Management. The conference is also expected to foster networking, collaboration and joint effort among the conference participants to advance the theory and practice as well as to identify major trends in Industrial Engineering and Operations Management. After a peer reviewing process, we have accepted about 570 papers from 60 countries. The proceeding covers many cutting edge research areas of industrial engineering and operations research. All full papers are published in the proceeding after thorough peer-review.

Continuous improvement will be significant focus for the 21st century. This conference is going to focus on continuous improvement for quality and service. Perhaps the most important example is the current financial crisis, which not only represents extraordinary challenges, but may well represent important opportunities for future industrial growth and new directions. We have selected four outstanding keynote speakers: Dr. Louis A. Martin-Vega, Dean of Engineering at North Carolina State University, USA and Past IIE President; Dr. Gündüz Ulusoy, Professor, Manufacturing Systems Engineering, Sabanci University, Istanbul, Turkey; Mr. Akın Aydemir, Industrial Operations Director of TOFAS (a JV between FIAT and KOC), Turkey's leading automotive company, which produces 300K light commercial vehicles annually in Bursa, Turkey; and Dr. Robert D. Austin, Dean of the Faculty of Business Administration at the University of New Brunswick at Fredericton, Canada. As you can see from the enclosed list of speakers, an outstanding array of presentations is arranged at the conference.

Istanbul is the largest city in Turkey and 3rd largest city proper in the world with a population of 13 million, also making it the largest metropolitan city proper in Europe and the second largest metropolitan area in Europe by population. Istanbul is also a megacity, as well as the cultural, economic, and financial center of Turkey. It is located on the Bosphorus Strait and encompasses the natural harbor known as the Golden Horn, in the northwest of the country. It extends both on the European (Thrace) and on the Asian (Anatolia) sides of the Bosphorus, and is thereby the only metropolis in the world that is situated on two continents. Istanbul is a designated alpha world city. Istanbul was chosen as a European Capital of Culture for 2010 and European Capital of Sports for 2012. Istanbul is one of the most important tourism spots of Turkey. There are thousands of hotels and other tourist oriented industries in the city, catering to both vacationers and visiting professionals. Istanbul is also one of the world's major conference destinations and is an increasingly popular choice for the world's leading international associations. You will have a pleasant trip to Istanbul.

We would like to welcome you to the third IEOM Conference. Wish you a wonderful time in Turkey!

With best wishes,



Ahad Ali, Ph.D.
Conference Chair, IEOM 2012



Fethi Çalışır, Ph.D.
Conference Co-Chair, IEOM 2012

WELCOME MESSAGE FROM PROGRAM CHAIRS

**The Third International Conference on Industrial Engineering and Operations Management (IEOM)
Istanbul Technical University, Management Faculty, Macka, Istanbul, Turkey, July 3 – 6, 2012**

On behalf of the Program Committee, we welcome you to the 3rd International Conference on Industrial Engineering and Operations Management (IEOM 2012).

The IEOM is a place for industrial intellectuals to share experiences, pathways, and research. We are so enchanted to have the opportunity to be a part of this conference. Although, there are a number of excellent industrial engineering conferences currently present, the IEOM is unique with its multinational and multicultural audience, which hosts speakers over 50 countries.

As a member of IEOM team, we cooperate, share and support each other. Also, it had been a treat to go through all conference papers, abstracts and reviews and know people who are presenting.

Our hope with future IEOM conference is to push interdisciplinary events further by encouraging greater inclusion of stochastic process, meta-heuristic approaches, and digital and/or virtual industry practices and management research. We like to invite the participants to seek out these cutting edge research areas, and gradually improve their research contents and paper editing, and continue to participate in future IEOM conferences.

We have a great program and fantastic keynote speakers this year. The participants will receive a wide range of perspectives of industrial approaches and out of academia knowledge from these esteemed keynote speakers.

Our sincere gratitude to the participants of the host country Turkey and the participants who travel long distance to help, share and support to make this conference a success. Their presence is inspiring to all of us. We look forward to seeing all the participants and hope for a great conference!

With best wishes,



Mohammad Khadem, Ph.D.
Program Chair, IEOM 2012



Mohammad Anwar Rahman, Ph.D.
Program Co-Chair, IEOM 2012

CONFERENCE COMMITTEE

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Dr. Ahad Ali, Lawrence Technological University, Southfield, Michigan, USA

Dr. Fethi Calisir, Istanbul Technical University, Turkey

Program Chairs

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Dr. Mohammad Anwar Rahman, University of Southern Mississippi, USA

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Cagatay Iris, Turkey

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Dr. Junzo Watada, Waseda University, Japan

Dr. Li Zheng, Tsinghua University, China

Track Chairs

Artificial Intelligence: Dr. M. El-Sharkh, University of South Alabama, USA

Computer and Information Systems: Dr. Elkanah Oyetunji, University for Development Studies, Ghana

E-Business and E-Commerce: Dr. Josef Herget, Donau-Universität Krems, Austria

Energy Engineering: Dr. Bonfils Safari, National University of Rwanda, Huye District, South Province, Rwanda

Project Management: C.G. Sreenivasa, University B.D.T College of Engineering, Davangere, Karnataka, India

Engineering Economy: Dr. Tauseef Aized, University of Engineering and Technology, Lahore, Pakistan

Engineering Education: Dr. Grace Kanakana, Tshwane University of Technology, South Africa

Facilities Planning and Management : Dr. Karem Dhouib, ÉSSTT, University of Tunis, Tunisia

Healthcare Systems: Dr. Gerard O'Connor, Adelaide and Meath Hospital, Dublin, Ireland

Human Factors and Ergonomics: Dr. Selim Zaim, Fatih University, Istanbul, Turkey

IE in Asia / Europe: Dr. Alaa A. A-Ameer, British University in Dubai, UAE

Inventory Management: Dr. Gede Agus Widyadana, Petra Christian University, Surabaya, Indonesia

Lean and Six Sigma: Dr. Wong Wai Peng, Universiti Sains Malaysia, Malaysia

Logistics and Supply Chain: Dr. Md. Mamun Habib, American International University - Bangladesh

Manufacturing and Design: Dr. Ramy Harik, Lebanese American University, Lebanon

Modeling and Simulation: Dr. Zeki Ayağ, Kadir Has University, Turkey

Operations Research / Management: Dr. Farooq Sheikh, State University of New York (SUNY), Geneseo, USA

Production Planning and Management: Dr. Ayodeji E. Oluleye, University of Ibadan, Nigeria

Quality Control and Management: Dr. Valerie Cook, Penn State University - Behrend, USA

Rapid Product Development: Dr. Pisut Koomsap, Asian Institute of Technology, Thailand

Reliability and Maintenance: Samuel John, Polytechnic of Namibia, Windhoek, Namibia

Service Systems: Dr. Eng Chew, University of Technology - Sydney, Australia

Sustainability and Green Systems: Dr. Ing. Maria Grazia Gnoni, University of Salento, Lecce, Italy

Systems Engineering: Dr. M. El-Sharkh, University of South Alabama, USA

Case Studies / Tutorials: Dr. Gulnara Abitova, L. N. Gumilev Eurasian National University, Kazakhstan

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Dr. Khasan Karimov, Centre of Renewable Energy Resources of Physical Technical Institute of Tajikistan

Dr. Onur Kuzgunkaya - Concordia University - Montreal, Quebec, Canada

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Dr. Ali Mostafaeipour, Yazd University, Iran

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Dr. Ravi Shankar, IIT-Delhi, India

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Dr. Ing Eckart Uhlmann, Fraunhofer-Institute for Production Systems and Design Technology IPK, Germany

Dr. Nubia Velasco, Universidad de los Andes, Bogotá, Colombia

Dr. Sachin D. Waigaonkar, BITS Pilani K.K. Birla-Goa Campus, India

Dr. Li Xu, Old Dominion University, USA

Dr. Suhaiza Zailani, Universiti Sains Malaysia, Malaysia

Dr. Linda L. Zhang, IESEG School of Management, Lille-Paris, France

KEYNOTE SPEAKERS

The Future of Industrial Engineering: Challenges and Opportunities



Dr. Louis A. Martin-Vega

Dean of Engineering

North Carolina State University, USA

Past IIE President

Opening Keynote Speaker, July 3, 2012

Keynote Abstract

Industrial Engineers are well-known for helping others make things "better, easier and more efficiently". If we are, however, to be a "leading profession" we must also be recognized for the uniqueness and value of "what we make" and our impact on global and societal needs. Building on this premise, this presentation will discuss a few key challenges and opportunities that IE's need to address to assure that our profession will be increasingly more relevant in the 21st century.

Bio: Dr. Louis A. Martin-Vega is the Dean of Engineering at North Carolina State University in Raleigh, North Carolina. With more than 8,500 students, 700 faculty and staff, and \$129 million in annual research expenditures, NC State's College of Engineering is internationally recognized for the excellence of its research, education and outreach programs. In 2008, the College received an \$18.5 million award from the National Science Foundation (NSF) to establish FREEDM, an Engineering Research Center focused on developing the next generation of distribution and management systems for renewable energy sources.

Martin-Vega came to NC State in 2006 after spending five years as dean of engineering at the University of South Florida in Tampa, Florida. He has also held several prestigious positions at NSF including acting head of its Engineering Directorate and director of NSF's Division of Design, Manufacture and Industrial Innovation. He has also served as chairman of the Department of Industrial and Manufacturing Systems Engineering at Lehigh University, Lockheed Professor in the College of Engineering at Florida Institute of Technology and held tenured faculty positions at the University of Florida and the University of Puerto Rico at Mayaguez. He is the author or co-author of more than 100 journal articles, book chapters and other publications and has made numerous keynote and related presentations at national and international forums.

His research and teaching interests are in production and manufacturing systems, logistics and distribution, operations management and engineering education. His work has been supported by NSF, the National Institute of Standards and Technology, the US Air Force, Harris Semiconductor, and Hewlett-Packard, among other sources. A registered professional engineer in Florida and Puerto Rico, he is a Fellow of the Institute of Industrial Engineers (IIE) and the Society of Manufacturing Engineers (SME) and a member of INFORMS, ASEE, Tau Beta Pi, Alpha Pi Mu and Sigma Xi.

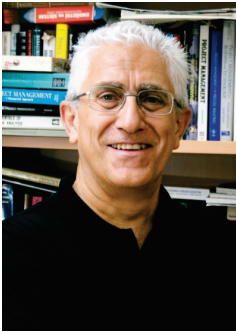
Martin-Vega received the Albert Holzman Distinguished Educator Award from IIE in May 1999 and served as President of IIE in 2007-08. He was also inducted into the Pan American Academy of Engineering in 2002. His efforts in college education and promotion of diversity were nationally recognized in 2000 through his receipt of the Hispanic Engineering National Achievement Award – Higher Education Category from HENACC. In 2007 he received the Tampa Museum of Science and Industry (MOSI) National Hispanic Scientist Award and was named that same year by Hispanic Business magazine as one of its 100 Most Influential Hispanics. He was recognized in 2008 as the Outstanding Engineer in North Carolina by the North Carolina Society of Engineers.

He received the Industrial and Systems Engineering Alumni Leadership Award from the University of Florida in 2009, the Institute of Industrial Engineers' UPS Award for Minority Advancement in Industrial Engineering in 2010, and is currently on the executive board of the National GEM Consortium.

Martin-Vega received his BS in industrial engineering from the University of Puerto Rico at Mayaguez, an MS in operations research from New York University and ME and PhD degrees in industrial and systems engineering from the University of Florida.

KEYNOTE SPEAKERS

Competitiveness and Innovativeness in Manufacturing: An Empirical Study



Dr. Gündüz Ulusoy

Professor, Manufacturing Systems Engineering

Sabanci University

Istanbul, Turkey

Second Day Keynote Speaker, July 4, 2012

Keynote Abstract

In the last decades, companies are increasingly turning to innovation and innovativeness to improve the added value of their products and services, which is under threat as a result of rapidly changing technologies and extreme global competition. Manufacturing industries in Turkey also feel this threat. The remedy they turn to lately for not being wiped out of the global markets and being able to increase their wealth creating capability is the innovation process - both technological and non-technological. In this presentation, we will report some of the major findings obtained from a research project into innovation models and applications in manufacturing industry. The results are based on data collected from 184 manufacturing firms in Northern Marmara region of Turkey.

In the first part of this presentation a comprehensive integrated model of innovation will be presented. The integrated model consists of two sub-models focusing on answering what the determinants of innovativeness are and what impact they have on firm performance. In the second part of the presentation, the results obtained from the analysis of the relationship between business strategies (defined here as operations priorities, technology development and market focus) and innovativeness will be reported. In both parts, structural equation modeling is employed. The third part of the presentation will deal with how innovative capabilities are related with the manufacturing firm's operations priorities and corporate performance. A proposal for taxonomy of innovativeness is introduced by clustering firms according to their innovative capabilities pertaining to various innovation types. It is shown that different innovation clusters possess different operations priorities and that different innovation clusters demonstrate different corporate performance levels. The managerial implications of the results will be elaborated upon and the industrial engineers' role in the innovation process will be addressed.

Bio: Gündüz Ulusoy received his BS in mechanical engineering from Robert College, Istanbul in 1970; MS in mechanical engineering from University of Rochester in 1972 and PhD in operations research from Virginia Tech in 1975. He worked as a researcher in Marmara Research Center in 1976. From 1976 to 1999 he was a faculty member in the Industrial Engineering Department of Boğaziçi University, Istanbul. He was a postdoctoral fellow at Lancaster University in 1982. During the years (1984-1985), he was on leave from Boğaziçi University and worked as a manufacturing systems engineer at a white goods manufacturer in Istanbul. He served as the Chairman of the Industrial Engineering Department (1985-1993) and Vice Rector of Boğaziçi University (1992-1994). He was a member of the Executive Committee of the Turkish Scientific and Technical Research Council (1993-1997) and Chairman of the Marmara Research Center (1995-1997). In 1999, he joined the Faculty of Engineering and Natural Sciences at Sabancı University in Istanbul as the Founding Coordinator of the Manufacturing Systems Engineering Program. In 2001, he initiated the Leaders for Industry Program – a double degree joint program between the Faculty of Engineering and Natural Sciences and the Graduate School of Management and was the Co-Director till 2004. In 2003, he founded the TUSIAD – Sabancı University Competitiveness Forum and has served as the Founding Director of the Forum till 2008. Between 2007-2010 he was a member of the Standing Committee on Sustainable Competitiveness of the Manufacturing Industry established by the Office of the Prime Minister of Turkey.

His current research focuses on technology and manufacturing strategies and on scheduling and evolutionary algorithms in production and project management. He has published research articles in Interfaces, Operations Research, Journal of the Operational Research Society, European Journal of Operational Research, International Journal of Production Economics, International Journal of Production Research, IIE Transactions, International Journal of Production and Operations Management, Journal of Operations Management, Computers & OR, and Flexible Services and Manufacturing. He was an Associate Editor of the European Journal of Operational Research (1981-2000) served as a Contributing Editor to the International Abstracts in OR (1978-1992) and is currently on the Editorial Board of the Journal of Operations and Logistics and the Turkish Transactions on Operational Research. He edited several journal issues as Guest Editor and several Conference Proceedings.

He is a founding member of the Informatics Foundation, Science Center Foundation, and Scientific and Technical Research Foundation. During 1994–2000 he served on the Board of Elginkan Foundation. He was the Chairman of the National Quality Award Committee during 1998-2002. He is a member of INFORMS, Turkish Quality Society, Turkish Machine Design and Manufacturing Society, and Turkish Operational Research Society.

KEYNOTE SPEAKERS

Developing a Lean Strategy



Mr. Akin Aydemir

Industrial Operations Director

TOFAS (a JV between FIAT and KOC)

Bursa, Turkey

Third Day Keynote Speaker, July 5, 2012

Keynote Abstract

Many companies blindly try to imitate the Toyota Production System in order to improve quality and reduce cost. In most of them the result is a disappointment. They spent valuable time and resources just to see that they made little progress for their effort. There are two main reasons for this failure.

- 1- The concept of lean manufacturing is not well enough understood by the upper management and just forced down through consultants in to the organization in the expectation of quick wins in a short period of time.
- 2- The lean implementation strategy is not well thought and detailed action plan is lacking due to limited resources. Therefore convenient tools are selected and partial instead of system implementation is preferred.

I will focus on how companies can effectively implement lean and get the full benefits in safety, quality, cost and delivery. In addition it will give an insight on how other companies are structuring their lean strategies.

Bio: Akin started his professional life as an Engineer at Olmuksa (currently International Paper) in 1988. After completing his military obligation, he was transferred to Toyotasa in 1990 and left the company as the Welding Shop Assistant Manager in 1996. In 1997, he joined Honda as the Production Manager and was assigned to Honda Canada as the Engineering Manager in 1999. He started consulting to Ford, Chrysler and GM with RWD in 2001 and joined Gates in 2003 as their Lean Implementation Manager. Starting from 2005, he carried out Lean implementations as Alcoa Operations Management Consulting Account Manager in Europe. He joined CNH Canada of FIAT group in the second half of 2009. Since the last two years he is the Industrial Operations Director of TOFAS (a JV between FIAT and KOC) which produces 300K light commercial vehicles annually in Bursa, Turkey.

Akin graduated from Middle East Technical University, Department of Mechanical Engineering in 1988 and received his MBA degree from Thunderbird School of Global Management.

He was born in 1964, in Ankara. He has a daughter. He speaks English, German and Japanese.

KEYNOTE SPEAKERS

The Soul of Design: Value Creation in the Age of Apple



Dr. Robert D. Austin

Dean, Faculty of Business Administration
University of New Brunswick at Fredericton
Canada

Fourth Day Keynote Speaker, July 6, 2012

Keynote Abstract

In August of 2011, Apple became the world's most valuable company when its market capitalization surpassed that of oil giant Exxon Mobil. In the spring of 2012, Apple's value exceeded \$600 billion; only one other company has ever been this valuable (Microsoft, over a decade earlier, but for only 13 days). What explains this magnitude of business value creation?

It's not just technology and functionality. What is most striking about Apple—as has been made very clear by the ubiquitous posthumous biography of its founder, Steve Job—is the role that design can play in creating business value. To the people who buy them, Apple's products are not just functional, they are special.

What makes a product or service special? In this keynote, professor Austin will present conclusions from a multiyear research project that address exactly this question: What accounts for the uncanny power of some products to grab and hold attention—to create desire. To understand what sets a product apart in this way, we must push past personal taste and individual response to adopt a more conceptual approach. Drawing on detailed casework, which shows how innovators and makers have successfully brought special products to market, professor Austin suggests a sensible and clear approach to conceiving special products and services.

The Soul of Design, a book by Lee Devin and Robert D. Austin, will be available from Stanford University Press, in September, 2012.

Bio: Robert D. Austin is Dean of the Faculty of Business Administration at the University of New Brunswick (UNB) at Fredericton (Canada). During his academic career, he has published in highly regarded academic and professional venues, such as Harvard Business Review, Information Systems Research, Management Science, MIT Sloan Management Review, Organization Science, and the Wall Street Journal. His books include The Adventures of an IT Leader (Harvard Business Press, 2009, coauthored with Richard L. Nolan and Shannon O'Donnell, listed on several "Best Books" lists for the year), Corporate Information Strategy and Management (McGraw Hill, 2009, 8th edition, coauthored with Lynda Applegate and Deborah Soule/Warren McFarlan), The Broadband Explosion: Leading Thinkers on the Promise of a Truly Interactive World (Harvard Business Press, co-edited with Stephen P. Bradley), Artful Making: What Managers Need to Know About How Artists Work, (Financial Times Prentice Hall, 2003, coauthored with Lee Devin, and recipient of the Elliot Hayes Award), Creating Business Advantage in the Information Age (McGraw Hill, 2001, coauthored with Lynda M. Applegate and F. Warren McFarlan), and Measuring and Managing Performance in Organizations (Dorset House, 1996). Two new books, Harder Than I Thought: Adventures of a 21st Century Leader (Harvard Business Review Press, a sequel to Adventures of an IT Leader, with same coauthors) and The Soul of Design: The Power of Plot to Create Extraordinary Products (Stanford University Press, with Lee Devin) are forthcoming in 2012. In addition, he's the faculty author of the "Project Management Simulation: Scope, Resources, Schedule" (Harvard Business School Publishing, 2009).

Before becoming Dean at UNB, Austin held the Chair in Management of Creativity and Innovation in the Department of Management, Politics, and Philosophy at Copenhagen Business School (CBS); before that he was an Associate Professor of Technology and Operations Management at the Harvard Business School, where he taught MBA courses related to Creative Economy, Operations Management, IT, and Accounting, and also extensively in Executive Education.

He's also had extensive experience as a practicing manager, primarily at Ford Motor Company, but also as chief operations executive for new business incubated by a major tech company. Over the years, Dr. Austin has consulted and delivered education experiences for many multinational corporations, working with C-level executives, and he has served on numerous advisory boards, especially for technology companies. He is a member of the international jury for the CIO 100 Awards and he has advised the European Commission on "e-Competencies for Innovation."

Professor Austin received a Ph.D. in Management and Decision Sciences from Carnegie Mellon University, where his dissertation won the Herbert A. Simon Award for Behavioral Research in the Administrative Sciences. He holds an M.S. in Industrial Engineering/Management Science (Operations Research Concentration) from Northwestern University, a B.A. (with Distinction) in English Literature and a B.S. (with Distinction) in Engineering (Mechanical Concentration) from Swarthmore College. He is a member of Phi Beta Kappa and Tau Beta Pi.

CONFERENCE SCHEDULE

July 2, 2012 (Monday)

11:00 – 16:00 Registration

DAY 1

July 3, 2012 (Tuesday)

08:30 – 17:00 Registration
08:30 – 09:00 Opening Ceremony
09:00 – 09:45 Opening Keynote: Dr. Louis A. Martin-Vega, Dean of Engineering, North Carolina State University, USA and Past IIE President
09:45 – 10:00 Break
10:00 – 11:15 Parallel Sessions
11:15 – 11:30 Tea Break
11:30 – 12:45 Parallel Sessions
12:45 – 14:00 Lunch Break
14:00 – 15:15 Parallel Sessions
15:15 – 15:30 Tea Break
15:30 – 16:45 Parallel Sessions
19:00 – 21:00 WELCOME RECEPTION

DAY 2

July 4, 2012 (Wednesday)

08:00 – 17:00 Registration
09:00 – 09:45 Keynote 2: Dr. Gündüz Ulusoy, Professor, Manufacturing Systems Engineering, Sabanci University, Istanbul, Turkey
09:45 – 10:00 Break
10:00 – 11:15 Parallel Sessions
11:15 – 11:30 Tea Break
11:30 – 12:45 Parallel Sessions
12:45 – 14:00 Lunch Break
14:00 – 15:15 Parallel Sessions
15:15 – 15:30 Tea Break
15:30 – 16:45 Parallel Sessions
19:00 CONFERENCE DINNER AND AWARD CEREMONY

DAY 3

July 5, 2012 (Thursday)

08:30 – 17:00 Registration
09:00 – 09:45 Keynote 3: Mr. Akin Aydemir, Industrial Operations Director, TOFAS (a JV between FIAT and KOC), Turkey's Leading Automotive Company, Busra, Turkey
09:45 – 10:00 Break
10:00 – 11:15 Parallel Sessions
11:15 – 11:30 Tea Break
11:30 – 12:45 Parallel Sessions
12:45 – 14:00 Lunch Break
14:00 – 15:15 Parallel Sessions
15:15 – 15:30 Tea Break
15:30 – 16:45 Parallel Sessions

DAY 4

July 6, 2012 (Friday)

07:00 – 11:00 Registration
09:00 – 09:45 Keynote 4: Dr. Robert D. Austin, Dean of the Faculty of Business Administration at the University of New Brunswick at Fredericton, Canada
09:45 – 10:00 Break
10:00 – 11:15 Parallel Sessions
11:15 – 11:30 Tea Break
11:30 – 12:45 Parallel Sessions

IEOM 2012 CONFERENCE PROGRAM

DAY 1 , Tuesday, July 3, 2012

9:00 - 9:45 Keynote 1 - **Dr. Louis A. Martin-Vega**, Dean of Engineering, NC State University, USA & Past IIE President

TIME	Room F133	Room F134	Room F135	Room F233	Room F234	Room F235
10:00 – 11:15	Operations Research / Management 1	Production Planning and Management 1	Quality Control and Management 1	Sustainability and Green Systems 1	Logistics and Supply Chain 1	Manufacturing and Design 1
11:30 – 12:45	Operations Research / Management 2	Production Planning and Management 2	Quality Control and Management 2	Sustainability and Green Systems 2	Logistics and Supply Chain 2	Manufacturing and Design 2
14:00 – 15:15	Operations Research / Management 3	Production Planning and Management 3	Quality Control and Management 3	Sustainability and Green Systems 3	Logistics and Supply Chain 3	Manufacturing and Design 3
15:30 – 16:45	Operations Research / Management 4	Production Planning and Management 4	Quality Control and Management 4	Sustainability and Green Systems 4	Logistics and Supply Chain 4	Manufacturing and Design 4

DAY 2, Wednesday, July 4, 2012

9:00 - 9:45 Keynote 2: **Dr. Gündüz Ulusoy**, Professor, Sabanci University, Istanbul, TURKEY

TIME	Room F133	Room F134	Room F135	Room F233	Room F234	Room F235
10:00 – 11:15	Operations Research / Management 5	Undergraduate Student Paper Competition	Quality Control and Management 5	Computer and Information Systems 1	Logistics and Supply Chain 5	Modeling and Simulation 1
11:30 – 12:45	Operations Research / Management 6	Energy 1	Artificial Intelligence 1	Computer and Information Systems 2	Logistics and Supply Chain 6	Modeling and Simulation 2
14:00 – 15:15	Operations Research / Management 7	Energy 2	Artificial Intelligence 2	Operations Research / Management 12	Logistics and Supply Chain 7	Modeling and Simulation 3
15:30 – 16:45	Operations Research / Management 8	Energy 3	Artificial Intelligence 3	Inventory Management 1	Logistics and Supply Chain 8	Modeling and Simulation 4

DAY 3, Thursday, July 5, 2012

9:00 - 9:45 Keynote 3 - **Mr. Akın Aydemir**, Industrial Operations Director, TOFAS (a JV - FIAT & KOC), Bursa, TURKEY

TIME	Room F133	Room F134	Room F135	Room F233	Room F234	Room F235
10:00 – 11:15	Operations Research / Management 9	Production Planning and Management 5	Case Studies 1	Lean and Six Sigma 1	Logistics and Supply Chain 9	Modeling and Simulation 5
11:30 – 12:45	Operations Research / Management 10	Production Planning and Management 6	Case Studies 2	Lean and Six Sigma 2	Engineering / Project Management 1	Manufacturing and Design 5
14:00 – 15:15	Operations Research / Management 11	Engineering Education 1	E-Business and E-Commerce 1	Lean and Six Sigma 3	Engineering / Project Management 2	Reliability and Maintenance 1
15:30 – 16:45	Human Factors and Ergonomics 1	Engineering Education 2	E-Business and E-Commerce 2	Healthcare Systems 1	Engineering / Project Management 3	Reliability and Maintenance 2

DAY 4, Friday, July 6, 2012

9:00 - 9:45 Keynote 4 - **Dr. Robert Austin**, Dean, Business Administration, UNB at Fredericton, CANADA

TIME	Room F133	Room F134	Room F135	Room F233	Room F234	Room F235
10:00 – 11:15	Human Factors and Ergonomics 2	Case Studies 3	Facilities Planning and Management 1	Healthcare Systems 2	Inventory Management 2	IE in Asia / Europe
11:30 – 12:45	Human Factors and Ergonomics 3	Service Systems	Facilities Planning and Management 2	Healthcare Systems 3	Manufacturing and Design 6	Engineering / Project Management 4

DAY 1: July 3, 2012 (Tuesday)

09:00 – 09:45 **Opening Keynote Speaker:** Dr. Louis A. Martin-Vega, Dean of Engineering at North Carolina State University, USA and Past IIE President

Tuesday: 10:00 – 11:15 Operations Research / Management 1 Room F133

Session Chair: Dr. Abdur Rahim, University of New Brunswick at Fredericton, CANADA

ID	Title	Author(s)
089	Integrating production scheduling and maintenance	Alhadidi, L., Al-Turki, U., Rahim, A.
090	Time-risk tradeoff of hazmat routing problem in emergency situation	Mahmoudabadi, A., Seyedhosseini, S.M
099	Advanced sensitivity analysis of the semi-assignment problem	Zeng, S., Lin, C., Wen, U.
114	Inventory location routing problem - A column generation approach	Gutierrez, M., Wills, C., Rodriguez, N.M.V.

Tuesday: 10:00 – 11:15 Production Planning and Management 1 Room F134

Session Chair: Dr. William Msekiwa Goriwondo, National University of Science and Technology, ZIMBABWE

ID	Title	Author(s)
007	Location and job shop scheduling problem with minimizing maximum completion time	Dastpak, M., Poormoaiied, S., Naderpour, M.
060	Product scheduling in a multi-product colour processing facility-case study at TN Textiles (Pvt) Ltd	Goriwondo, W. M., Chipambwa, W., Mhlanga, S., Mutingi, M.
064	A mathematical model for profit maximization general lot-sizing and scheduling problem	Sereshti, N., Bijari, M., Moslehi, G.
069	Integrated cellular manufacturing system design - An evolutionary algorithm approach	Mutingi, M., Mbohwa, C., Mhlanga S., Goriwondo, W. M.

Tuesday: 10:00 – 11:15 Quality Control and Management 1 Room F135

Session Chair: Abdussalam Shibani, Coventry University, UK

ID	Title	Author(s)
012	Gauge imprecision and process capability analysis	Hamadani, A.Z.
021	Investigation of Total Quality Management in Libya - A proposed guideline of implementation	Shibani, A., Saidani, M., Sagoo, A., Gherbal, N.
389	Linear profile forecasting using regression analysis	Razavi, H., Ghazvini, S.S.
490	Helical coil springs life quality assessment	Masithulela, F.

Tuesday: 10:00 – 11:15 Sustainability and Green Systems 1 Room F233

Session Chair: Dr. Massimo Tronci, University of Rome "La Sapienza", ITALY

ID	Title	Author(s)
136	Sustainable supply chain management evaluation in Turkey using AHP and ANP approach	Kus, H. T., Demirel, Ö. F., Zaim, S., Kıymaz, G.
138	Eco-maintenance - The improvement of environmental sustainability by means of maintenance	De Minicis, M., Fagnoli, M., Tronci, M.
176	The technology, technical skill, and R&D capability in increasing to the competitive advantage in Indonesia telecommunication service companies	Chumaidiyah, E.
187	Sustainable management in the synfuels sector in South Africa	Maimbo, T. T., Mbohwa, C., Mutingi, M.

Tuesday: 10:00 – 11:15 Logistics and Supply Chain 1 Room F234

Session Chair: Dr. Raid Al-Aomar, Abu Dhabi University, UAE

ID	Title	Author(s)
073	Foreign exchange transaction exposure in a news vendor setting	Srinivasan, G., Gor, R., Arcelus, F.
077	A practical framework for a lean and green supply chain	Al-Aomar, R., Weriakat, D.
330	The design of product recovery network: A new mixed integer programming model	Demirel, N., Gokcen, H.
396	Analysis of demand satisfaction probability and network costs in warehouse relocation	Bashiri, M., Rezaei, H., Tootooni, B.

Tuesday: 10:00 – 11:15	Manufacturing and Design1	Room F235
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Session Chair: Dr. Ankush Anand, Shri Mata Vaishno Devi University, INDIA

ID	Title	Author(s)
031	Response surface methodology optimization applied to composite material of recycling plastic with wood waste	Salgado, J.C., Romero, S.A., Morales-Torres, V.
067	Important characteristics and critical dimensions of an effective manufacturing performance manufacturing system	El Mola, K. M. G.
068	Economic evaluation of rapid prototyping systems	El Mola, K. M. G.
373	Optimization of multi-pass turning operations using genetic algorithms	Aryanfar, A., Solimanpur, M.
518	Design evaluation of mechanical brakes at system conceptual design stage: A MADM approach	Anand, A., Wani, M. F.

11:15 – 11:30 Tea Break

Tuesday: 11:30 – 12:45	Operations Research / Management 2	Room F133
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Session Chair: Dr. Fadime Üney-Yüksektepe, İstanbul Kültür University, Istanbul, TURKEY

ID	Title	Author(s)
030	A mathematical model for train routing and scheduling problem with fuzzy approach	Jamili, A.
129	A variable capacity parallel machine scheduling problem	Akyol, E., Saraç, T.
153	Quadratic multiple knapsack problem with setups and a solution approach for it	Dogan, N., Bilgiçer, K., Saraç, T.
179	Multi objective mixed model assembly line balancing	Ozdemir, R. G., Üney-Yüksektepe, F., Karaca, N.

Tuesday: 11:30 – 12:45	Production Planning and Management 2	Room F134
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Session Chair: Dr. Soroor K. H. Al-Khafaji, Baghdad University, IRAQ

ID	Title	Author(s)
074	A case study of production improvement by using lean with simulation modeling	Al-Khafaji, S.K.H., Al-Rufaifi, H.M.R.
075	Genetic algorithm based on some heuristic rules for job shop scheduling problem	Boushaala, A. A., Shouman, M. A., Esheem, S.
188	New routing rules for dynamic flexible job shop scheduling with sequence-dependent setup times	Shalaby, M. A., Abdelmaguid, T., Abdelrasol, Z.
215	Minimizing the makespan in a flow shop scheduling problem with sequence-dependent setup times and periodic maintenance	Gholizadeh, H., Tavakkoli-Moghaddam, R., Tootooni, B.

Tuesday: 11:30 – 12:45	Quality Control and Management 2	Room F135
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Session Chair: Dr. Amirhossein Amiri, Shahed University, Tehran, IRAN

ID	Title	Author(s)
055	A proposed prediction approach for manufacturing processes performance using ANNs	El-Midany, T. T., El-Baz, M. A., Abd-Elwahed, M. S.
137	Multi-objective economic-statistical design of MEWMA control chart	Amiri, A., Mogouie, H., Doroudyan, M.H.
140	T2 based methods for monitoring Gamma profiles	Amiri, A., Koosha, M., Azhdari, A.
184	Effect of managerial changes on the corporation performance: DEA based method	Noorossana, R., Izadbakhsh, H., Esmaelian, M., Ghasemi, M.

Tuesday: 11:30 – 12:45	Sustainability and Green Systems 2	Room F233
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Session Chair: Dr. Fazleena Badurdeen, Institute for Sustainable Manufacturing, University of Kentucky, Lexington, USA

ID	Title	Author(s)
216	Visualizing sustainability performance of manufacturing systems using sustainable value stream mapping (Sus-VSM)	Faulkner, W., Templeton, W., Gullett, D., Badurdeen, F.
259	Noise in the workspace - Proposal for decreasing noise pollution	Kaliakatsos, D., Mirabelli, G., Pizzuti, T.
274	A framework for estimating the sustainability index of new product based on AHP and BP neural network	Hassan, M. F., Saman, M.Z.M., Sharif, S., Omar, B.
592	Conquering environmental inconsistencies during the New Product Development (NPD) activity lead to corporate sustainable success	Asiya, S., Kazmi, Z.

Tuesday: 11:30 – 12:45	Logistics and Supply Chain 2	Room F234
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Session Chair: Dr. Michael Mutingi, University of Botswana, Gaborone, BOTSWANA

ID	Title	Author(s)
087	A taxonomic framework for formulating strategies in green supply chain management	Mutingi, M., Mbohwa, C.
109	The importance of e-integration in supply chain and its effect on performance	Mari, S. I., Marri, H.B., Memon, M. S.
120	A multi-agent architecture for distributed supply chain	Bansal, B., Mishra, N., Chan, F. T.S., Prakash, A., Kumar, V.
128	Applying labeling algorithm to improve sensitivity analysis for transportation problems	Ma, K., Lin, C., Wen, U.

Tuesday: 11:00 – 12:45	Manufacturing and Design 2	Room F235
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Session Chair: Dr. Safwan Al Qawabah, Tafila Technical University, JORDAN

ID	Title	Author(s)
164	Multi-objective mathematical model for time and space assembly line balancing problem	Solimanpur, M., Jaber, B.
169	An integrated CAD/CAPP system based on STEP features	Amaitik, S.
171	A decision support system for robot selection based on axiomatic design principles	Bahadir, M., Satoglu, S.
223	Tensile and fatigue characteristics of lower-limb prosthetic socket made from composite materials	Sahbah, P., Al-Khazraji, K., Kadhim, J.
230	Effect of grain refining aluminum by titanium or titanium plus boron on its weldability using gas tungsten arc welding, GTWA	Zaid, A., Qawabah, S.

12:45 – 14:00 Lunch Break

Tuesday: 14:00 – 15:15	Operations Research / Management 3	Room F133
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Session Chair: Dr. Iraj Mahdavi, Mazandaran University of Science & Technology, Babol, IRAN

ID	Title	Author(s)
197	Empirical evidence on supply chain strategy adoption and selection of performance measures metrics for ketchup companies in Malaysia	Malek, A., Ma'aram, A.
219	Developing a mathematical model for team configuration in creativity process	Mahdavi, I., Fazlollahtabar, H., Aalaei, A., Yahyanejad, M. H.
232	A new mathematical model for a multi-criteria group scheduling problem in a CMS solved by a branch-and-bound method	Gholipour-Kanani, Y., Tavakkoli-Moghaddam, R., Cheraghalizadeh, R.
238	Prioritizing criteria and contractors for payment of their claims	Monfared, A. H.D., KianiMavi, R., Khakiani, S.A.

Tuesday: 14:00 – 15:15	Production Planning and Management 3	Room F134
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Session Chair: Dr. Mehdi Bijari, Isfahan University of Technology, IRAN

ID	Title	Author(s)
194	An algorithm for lot sizing and cutting stock problem	Suliman, S. M. A.
240	Flexible labor assignment in cellular manufacturing system (A simulation and DEA approach)	Rafiei, F.M., Dehghan, A.
243	Stochastic lot-sizing: Maximising probability of meeting Target Profit	Bijari, M., Shirmeshan, H.
266	Minimizing maximum earliness and tardiness on a single machine using a novel heuristic approach	Poursheikhali, S., Bijari, M.

Tuesday: 14:00 – 15:15	Quality Control and Management 3	Room F135
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Session Chair: Dr. Taylan A. Ula, Yeditepe University, Istanbul, TURKEY

ID	Title	Author(s)
218	A scheme for balanced monitoring and accurate diagnosis of bivariate correlated process mean shifts	Masood, I., Hassan, A.
257	Investigating the relationships between integrated management system (IMS) implementation and organization survival and continuous improvement	Ziaeeian, M., Zarabadi Pour, Z., KianiMavi, R.
270	A statistical evaluation of variance estimation and subgrouping in XBAR control charts	Ula, T. A.
305	Status of quality management in Australian manufacturing SMEs	Khurshid, K. K., Kumar, M., Waddell, D.

Tuesday: 14:00 – 15:15	Sustainability and Green Systems 3	Room F233
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Session Chair: Dr. Victor Esteves, Federal University of Rio de Janeiro, BRAZIL

ID	Title	Author(s)
023	Critical success factors of TQM - Impact on business performance of construction sector in Libya	Gherbal, N., Shibani, A., Saidani, M,
282	A multi-criteria sustainability model for an effective WEEE management system	Gnoni, M. G., Tornese, F.
327	Risk governance and policy strategies proposals for carbon capture and geological storage in Brazil	Esteves, V., Morgado, C.
370	A mathematical model for sustainable supplier selection in the apparel industry	Ersoy, H., Bulut, E., Aktin, T., Gergin, Z.

Tuesday: 14:00 – 15:15	Logistics and Supply Chain 3	Room F234
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Session Chair: Dr. Saeed Poormoaiied, Ferdowsi University of Mashhad, IRAN

ID	Title	Author(s)
134	Managing sustainability in the EU food industry: The high level forum for a better functioning food supply chain	Oberer, B., Erkollar, A.
163	Inventory model involving controllable lead time through new approach	Poormoaiied, S., Dastpak, M.
177	The research of supplier quality management and development in a washing machine factory	Zawawi, R., Akçaoğlu, Ö, Akpolat, H., Bagia, R.
189	An investigation exploring the advantages and disadvantages of outsourcing the development of new products in the Indian pharmaceutical industry	Soriano-Meier, H., Garza-Reyes, J.A., Lal, S.J., Rocha-Lona, L.

Tuesday: 14:00 – 15:15	Manufacturing and Design 3	Room F235
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Session Chair: Dr. Samuel John, Polytechnic of Namibia, NAMIBIA

ID	Title	Author(s)
233	Optimal cutting parameters for turning operations with quality costs and tool wear compensation	Abdelmaguid, T., El-Hossainy, T.
288	Preference extraction from EEG: An approach to aesthetic product development	Aurup, G. M.M., Akgunduz, A.
295	Principles of robust design	Belavendram, N.
365	A two-stage solution approach based on mathematical programming for designing manufacturing cells	Solimanpur, M., Foroughi, A.

15:15 – 15:30 Tea Break

Tuesday: 15:30 – 16:45	Operations Research / Management 4	Room F133
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Session Chair: Dr. Grace Kanakana, Tshwane University of Technology, SOUTH AFRICA

ID	Title	Author(s)
123	Optimal budget allocation of health care resources for end stage renal disease	Chen, Y.-F., Wen, U.-P.
290	An integer programming approach to air traffic management problem	Moeini, G., Akgunduz, A., Jaumard, B.
293	Managing knowledge in aircraft engineering - An operations-based approach	Zawawi, R., Akpolat, H., Bagia, R.
296	Dynamic and stochastic knapsack-type models for foreclosed housing acquisition and redevelopment	Bayram, A., Solak, S.

Tuesday: 15:30 – 16:45	Production Planning and Management 4	Room F134
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Session Chair: Dr. Saad Suliman, University of Bahrain, BAHRAIN

ID	Title	Author(s)
038	Minimizing the tardiness in a single machine batch processing	AlGhamdi, F., Al-Khaldi, M., Khoukhi, A., Al-Slamah, M.
309	Multi-period cell loading in cellular manufacturing systems	Egilmez, G., Süer, G.
310	Designing an effective scheduling scheme considering multi-level BOM in hybrid job shop	Han, S., Seo, J. Park, J.
320	Performance efficiency of Turkish manufacturing SMEs using DEA	Bulak, M. E., Turkiylmaz, A., Satir, M., Demirel, O. F.

Tuesday: 15:30 – 16:45**Quality Control and Management 4****Room F135****Session Chair:** Dr. Victor John Cantor, De La Salle University – Manila, PHILIPPINES

ID	Title	Author(s)
308	Factor analysis and response surface optimization for copper removal from aqueous solutions	Gencosman, B.C., Orbak, A.Y., Orbak, S.
318	Proposing an Incorporated model of Balanced Scorecard and Hoshin Kanri based on TQM (Case Study: MSC)	Arbabshirani, B., Muosakhani, H.R.
357	Developing the balanced scoredcard framework for higher education: Conceptual study	Al-Ali, A.
369	Effect of cascade property on the performance of simple linear profiles	Ghahyazi, M. E., Niaki, S. T. A., Soleimani, P., Afroozan, S.
392	Estimating the change point of bivariate binomial processes experiencing step changes in their mean	Afroozan, S., Niaki, S.T.A. , Soleimani, P., Ghahyazi, M. E.

Tuesday: 15:30 – 16:45**Sustainability and Green Systems 4****Room F233****Session Chair:** Dr. Fatima Al Aqoqli, Qatar University, Doha, QATAR

ID	Title	Author(s)
371	A bi-level programming for reverse logistics network design	Dehghanian, F., Mahdavi, F., Edalatpoor, V.
390	System dynamics model for sustainability analysis of mobile phone reverse logistics	Gnoni, M. G., Lanzilotto, A.
391	Modeling electric mobility in Germany: A policy analysis perspective	Turan, F., Tuzuner, A., Goren, S.

Tuesday: 15:30 – 16:45**Logistics and Supply Chain 4****Room F234****Session Chair:** Dr. Md. Mamun Habib, American International University, BANGLADESH

ID	Title	Author(s)
231	Analysis of permissible delay in payment policy for sustainable business development	Widyadana, G. A., Sutapa, N.
255	Logistics activities management in the earthquake response phase - A robust optimization approach	Najafi, M., Eshghi, K.
261	Modelling a traceability system for the agro-food industry - The case of frozen vegetables	Mirabelli, G., Pizzuti, T., Gómez González, F., Sanz Bobi, M.A.
264	Analysis of educational supply chain management model - A case study approach	Pathik, B. B., Chowdhury, M., Habib, M.M.

Tuesday: 15:30 – 16:45**Manufacturing and Design 4****Room F235****Session Chair:** Dr. David Marton, Technická Univerzita v Košiciach (TUKE), SLOVAKIA

ID	Title	Author(s)
105	Metaheuristic approaches for the assembly line balancing problem	Baykasoglu, A., Akyol, S.D.
196	Study of electrochemical polishing applications in some alloys to obtain high surface finish	Abdalkadir, N. J., Yousif, H. M.
360	Implementation of advanced manufacturing technology as a tool for manufacturing industries	Shaikh, G.Y., Marri, H.B., Sohag, R.A., Uqaili, M.A., Aziz, S., Shaikh, S.
418	A size-bed wheelchair design with scaled prototype	Hasnan, K., Saesar, L.B.

19:00 – 21:00 WELCOME RECEPTION

DAY 2: July 4, 2012 (Wednesday)

09:00 – 09:45 **Keynote Speaker:** Dr. Gündüz Ulusoy, Professor, Manufacturing Systems Engineering, Sabanci University, Istanbul, TURKEY

Wednesday: 10:00 – 11:15 Operations Research / Management 5 Room F133

Session Chair: Dr. Umar Al-Turki, King Fahd University of Petroleum and Minerals, SAUDI ARABIA

ID	Title	Author(s)
306	Minimizing the expected number of tardy jobs in dynamic flow shop with stochastic due dates	Elyasi, A., Salmasi, N.
333	A generalized cost Malmquist index to compare the productivities of units with negative data in DEA	Razavyan, S., Tohidi, G.
339	Cross efficiency of decision making units with negative data in data envelopment analysis	Tohidi, G., Razavyan, S.
565	Outsourcing and its impact on operational performance	Nazeri, A., Gholami, R., Rashidi, S.

Wednesday: 10:00 – 11:15 Undergraduate Student Paper Competition Room F134

Session Chair: Dr. Mohammad Anwar Rahman, University of Southern Mississippi, USA

ID	Title	Author(s)
549	Standard operation process applied on Lebanese dairy	Chemali, M., Harik, R.
550	Assessment of reliability of Hamilton-Tompkins algorithm to ECG parameter detection	Rahman, S., Rahman, M.
551	Developing 6D BIM energy informatics for IFC GDL LEED model - Bidirectional green BIM parametric methodology	O'Keeffe, S.

Wednesday: 10:00 – 11:15 Quality Control and Management 5 Room F135

Session Chair: Dr. Fernando Gómez González, Comillas Pontifical University, SPAIN

ID	Title	Author(s)
190	Integrated control chart system: A new charting technique	Shamsuzzaman, M.
444	Adaptive injection molding quality prediction framework using sensor data	Lee, Y., Kim, H., Rhee, J.
509	Combined use of support vector regression and Monte Carlo simulation in quality and process control calibration	Bouhouche, S.
512	Cooling bed of rebar process evaluation using temperature monitoring and soft sensing methods	Ziani, S., Mentouri, Z.

Wednesday: 10:00 – 11:15 Computer and Information Systems 1 Room F233

Session Chair: Dr. Sawat Pararach, Thammasat University, THAILAND

ID	Title	Author(s)
180	Quality assessment of remote sensing digital image processing	Aydin, E.
226	Study of access control issue for web services	Alipour, H. S., Sabbari, M.
361	Impact of awareness for the capability of the end level users in change management: Bangladesh aspects	Pervez, M. S., Ahmad, S.M. T., Sultana, T., Arifuzzaman, S.M., Chowdhury, R.
561	A survey on the e-government business model regarding value creation approach	Sarani, A.

Wednesday: 10:00 – 11:15 Logistics and Supply Chain 5 Room F234

Session Chair: Dr. Vassilis Gerogiannis, Technological Education Institute (TEI) of Larissa, GREECE

ID	Title	Author(s)
323	A heuristic based on integer programming for the vehicle routing problem with backhauls	Yalçın, G. D., Erginel, N.
325	Multi item two stage EOQ model from single source to multiple destinations under varying freight policies	Makkar, S., Jha, P.C.
328	Selecting suppliers for biomass supply networks with an ifs - multi periodic optimization method	Gerogiannis, V., Kazantzi, V.
331	Implementation of set parts system in Malaysian automotive industry	Hos, S., Ramli, R.

Wednesday: 10:00 – 11:15	Modeling and Simulation 1	Room F235
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Session Chair: Dr. Anna Rotondo, Dublin City University, IRELAND

ID	Title	Author(s)
008	Assembly line - New modelling and simulation	Bon, A. T.
093	Cycle time analysis at wet stations	Rotondo, A., Young, D., Geraghty, J.
108	Intelligent approach to simulation software evaluation	Ayag, Z., Samanlioglu, F., Yucekaya, A.
297	Systems dynamics application in project management	Ocak, Z.

11:15 – 11:30 Tea Break

Wednesday: 11:30 – 12:45	Operations Research / Management 6	Room F133
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Session Chair: Dr. Nejib Chouaibi, Polytechnic School of Tunisia, TUNUSIA

ID	Title	Author(s)
343	A development of hybrid cross entropy-tabu search algorithm for travelling repairman problem	Santosa, B.
350	Scheduling with agreements - A MILP-based formulation with a polynomial result	Bendraouche, M., Boudhar, M.
367	Approximation to performance measures in queuing systems	MoghimiHadji, E., Rangan, A.
379	Fuzzy multi-objective parallel machines scheduling problem through new solution method	Asghari, M., Poormoaid, S.

Wednesday: 11:30 – 12:45	Energy 1	Room F134
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Session Chair: Dr. Fadime Üney-Yüksektepe, Istanbul Kültür University, TURKEY

ID	Title	Author(s)
052	Application of renewable energies and new technologies in urban planning	Yeganegi, K., Node, Z. M.
063	The analysis of environmental policies in electricity generation: an empirical study from Yazd regional electricity company in Iran	Dastkhan, H., Owlia, M. S.
085	Designs of some low power renewable energies installations	Karimov, K., Abid, M.
135	A clustering approach to analyze the wind energy potential of Mardin	Üney-Yüksektepe, F.

Wednesday: 11:30 – 12:45	Artificial Intelligence 1	Room F135
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Session Chair: Dedy Suryadi, Parahyangan Catholic University, Bandung, INDONESIA

ID	Title	Author(s)
162	Multiple robot motion planning using Voronoi diagram and tabu search	Shoushtary, M.A.
167	Genetic algorithm for university timetable planning in FTI	Suryadi, D., Pilipus, R.
186	An artificial immune system approach for flexible job shop scheduling problem	Sipahioglu, A., Aladag, A.
474	A viral systems algorithm for the traveling salesman problem	Suryadi, D.

Wednesday: 11:30 – 12:45	Computer and Information Systems 2	Room F233
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Session Chair: Chinho Lin, National Cheng Kung University, Tainan, Taiwan, R.O.C.

ID	Title	Author(s)
040	Designing CRM software for passenger trains system	Karimi, F., Saremi, M.D.
104	Proposal on GIS implementation in resolving urban road traffic and parking problems in Tirana - A case analysis	Yusoff Shah, R.T.M., Hysenaj, M., Arkaxhiu, H.E.
227	Definition of action and attribute based access control rules for web services	Alipour, H. S., Sabbari, M.
237	Effect of information communication technology on human resource productivity of Iranian national oil company	Shoushtary, M. A., Zadeh, A.A., Vahdatzad, M.A.
268	Automatic new topic identification using goal programming	Cavdur, F., Özmutlu, S., Özmutlu, H.C., Gencosman, D.

Wednesday: 11:30 – 12:45	Logistics and Supply Chain 6	Room F234
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Session Chair: Dr. Rodrigo Garrido, Universidad Adolfo Ibañez, CHILE

ID	Title	Author(s)
352	The dynamic design of reverse logistics network with fuzzy incentive-dependent return	Dehghanian, F., Asghari, M.
375	Emergency logistics for natural disasters - A stochastic programming approach	Garrido, R.
400	Game theory under competition in gas industry	Kissani, I., Boukhari, Y.
402	Inventory control for defective goods supply chain by determination of production period length	Ghashimi, S. A., Ramli, R., A. Ghani, J., Saibani, N., Kamalabadi, I. N.

Wednesday: 11:30 – 12:45	Modeling and Simulation 2	Room F235
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Session Chair: Dr. Kingsley Abhulimen, University of Lagos, NIGERIA

ID	Title	Author(s)
158	Computational analysis for optimizing the performance of produced water re-injection in a non-fresh water aquifer	Idialu, P. O., Fashanu, T.A., Ibadapo-Obe, O., Abhulimen, K.
183	Using discrete event simulation to model smelting process with complex constrains	Noorossana, R., Izadbakhsh, H.
185	Monte-Carlo simulation for beam shaping assembly of boron neutron capture therapy	Faghihi, F.
198	Performance analysis in semantic web services composition	Talantikite, H.N., Aissani, D., Adel-Aissanou, K.

12:45 – 14:00 Lunch Break

Wednesday: 14:00 – 15:15	Operations Research / Management 7	Room F133
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Session Chair: Dr. Elkanah Oyetunji, University for Development Studies, GHANA

ID	Title	Author(s)
384	Minimizing the sum of makespan and maximum tardiness on single machine with release dates	Oyetunji, E.
386	Study of the scheduling problem under preemption, release dates and transportation delays constraints	Haned, A., Boudhar, M.
387	A study on line balancing in assembly line at automotive component manufacturer	M. M., Hafizuddin N.K. A., Nazif, Y. M., Needza, D. A. Nadiyah,
401	New genetic algorithm for the travelling salesman problem	Erol, A. H., Bulkan, S.
487	A web-based multi-optimization approach for convergent product networks using Steiner tree	Hassanzadeh, R., Mahdavi, I., Fazlollahtabar, H., Mahdavi-Amiri, N.

Wednesday: 14:00 – 15:15	Energy 2	Room F134
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Session Chair: Dr. Abu Masud, Wichita State University, USA

ID	Title	Author(s)
159	Feasibility study of wind-solar powered fam irrigation system - Case study	Shoushtary, M. A.
283	Three multiple criteria models for power generation expansion planning: A review	Masud, A., Yildirim, M.B.
408	Analysis of resource profile and CO ₂ emissions of the electricity generation sector in Turkey within the framework of a MARKAL based bottom-up national energy model	Yilmazer, K. OR, I.
556	Natural gas purchase commitment for short term contracts under take-or-pay constraint and demand uncertainty	Yucekaya, A.

Wednesday: 14:00 – 15:15	Artificial Intelligence 2	Room F135
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Session Chair: Dr. Oludolapo Olanrewaju, Tshwane University of Technology, Pretoria, SOUTH AFRICA

ID	Title	Author(s)
242	Segmentation analysis with self-organizing maps	Tosunlar, D., Asan, U.
249	Assessing the energy efficiency of industrial sector: Artificial intelligence approach	Olanrewaju, O.A, Jimoh, A.A., Kholopane P.A.
275	A sentiment analysis as a tool to identify the status of universities: The case of ITU	Isik, M., Oztaysi, B., Fenerci, K.
286	Application of data mining techniques in drug consumption forecasting to help pharmaceutical industry production planning	Ghousi, R., Mehrani, S., Momeni, M., Anjomshoa, S.

Wednesday: 14:00 – 15:15	Operations Research / Management 12	Room F233
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Session Chair: Dr. Mohammadreza Hamidi, Iran University of Science and Technology, IRAN

ID	Title	Author(s)
439	A Bayesian model to enhance domestic energy consumption forecast	Rahman, M., El-Sharkh, M., Rahman, A.
473	Minimizing the total weighted completion time on a single machine scheduling with release dates and a learning effect	Babaei, M. H., Hamidi, M., Jahani, E., Ansari Fard, H.
486	An Alpha-cut approach for fuzzy product and its use in computing solutions of fully fuzzy linear systems	Mahdavi, I.
534	Assessing the priority rules of scheduling in job shop manufacturing company	Azila-Nadiah, D., Nazif, N. K. A., Hafizuddin, M. M.

Wednesday: 14:00 – 15:15	Logistics and Supply Chain 7	Room F234
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Session Chair: Dr. Mahdi Bashiri, Shahed University, Tehran, IRAN

ID	Title	Author(s)
420	Multi source - multiple destination EOQ model for constant deteriorating items incorporating quantity and freight discount policies	Gandhi, K., Jha, P.C.
425	Developing an index system for supply chain value measurement: Adopting a holistic view	Golriz Gashti, S.F., Seyedhosseini, S.A., Sedighi, M.
437	An analysis of complex adaptive computer manufacturing supply network evolution in competitive markets	Onel, S., Zeid, A., Kamarthi, S.
443	Collaborative supply chain practices and prospect of companies in Bangladesh	Quddus, M. A., Ahsan, A.M.M. N., Rahman, A.

Wednesday: 14:00 – 15:15	Modeling and Simulation 3	Room F235
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Session Chair: Dr. Diego José Gomez Montoya, University Distrital Francisco José de Caldas, Bogotá, COLOMBIA

ID	Title	Author(s)
342	Integration of engineering techniques to characterization of a socioeconomic system	Montoya, D.J.G.
348	Simulation and determination of the laws control of the SRM for the integrated starter generator application	Malik, B., Farid, N.
428	Long-term forecasting of annual electricity consumption by artificial neural networks: A case study in Iran	Giahi, M., Bazargan, H., Rashidinejad, M.
435	Performance assessment of transfer lines with unreliable transfer mechanism and non-negligible transfer times	Dhouib, K.

15:15 – 15:30 Tea Break

Wednesday: 15:30 – 16:45	Operations Research / Management 8	Room F133
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Session Chair: Dr. Gokce Palak, Mississippi State University, USA

ID	Title	Author(s)
412	Optimal control policy for advertising and pricing of two generation durable product in segmented market	Singh, Y., Chaudhary, K., Jha, P.C.
419	Application of static uncapacitated multi-commodity flow models to dynamic capacity-constrained evacuation path networks	Osman, M.S., Ram., B.
426	Transportation mode selection under carbon emissions considerations	Palak, G., Eksioglu, S.D.
571	Selecting the optimum cost management method by FAHP and DOA technique	Saleh, F., Karimi, F., Javanmard, H.

Wednesday: 15:30 – 16:45	Energy 3	Room F134
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Session Chair: Dr. Djalel Dib, University of Tebessa, ALGERIA

ID	Title	Author(s)
239	Option pricing for electricity commodity in Turkish power market	Yücekaya, A., Ayağ, Z., Samanlıoğlu, F.
245	A system design for biomass to energy conversion plants	S. Yilmaz, H. Selim
398	Forecasting electricity demand using dynamic artificial neural network model	El-Sharkh, M., Rahman, M.
564	The Algerian challenge between the trust hydrocarbons and its huge potential in renewable energies	Djalel, D., Hakim, B. A., Samir, M.

Wednesday: 15:30 – 16:45	Artificial Intelligence 3	Room F135
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Session Chair: Dr. Abdus Salam, Southern University and A&M College, Baton Rouge, Louisiana, USA

ID	Title	Author(s)
399	Optimizing the ant colony optimization algorithm using neural network for the travelling salesman problem	Erol, A. H., Er, M., Bulkan, S.
476	Tree-based data aggregation algorithms in wireless sensor networks: A survey	Salam, M.
567	Fuzzy optimal models for gas reservoir management: Case of Sarajeh Gas Field (SGF)	Jabbari, N.

Wednesday: 15:30 – 16:45	Inventory Management 1	Room F233
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Session Chair: Dr. Mehdi Sajadifar, University of Science and Culture, IRAN

ID	Title	Author(s)
017	A framework of supply chain and inventory management system in corporate and service organization	Sharif, K.
147	A unified model for optimizing inventory decisions in a centralized or decentralized supply chain comprising a vendor without/with lot streaming and a buyer with a fixed ratio of partial backorders	Leung, F.
175	Service level within an integrated model for warehouse and inventory planning	Yilmaz, O. F., Baskak, M., Erbiyik, H., Budak, A.,
334	Multi-item EOQ calculation in presence of warehouse constraints: A simulative analysis	Miranda, S., Iannone, R., Riemma, S.

Wednesday: 15:30 – 16:45	Logistics and Supply Chain 8	Room F234
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Session Chair: Dr. Amir Ahmadi Javid, Amirkabir University of Technology, IRAN

ID	Title	Author(s)
338	Different Views of CRM	Piroozfar, S., Yaghini, R.
448	Incorporating price decisions in a profitable multiple-tour problem	Javid, A.A., Amiri, E.
463	The evidential reasoning approach for suppliers prioritization with Group-AHP weights	Massahi, M., Mirzazadeh, A., Phirouzabadi, A.M.
484	Car Recalls: A problem unique to Toyota or for all car makers	Ahsan, K.

Wednesday: 15:30 – 16:45	Modeling and Simulation 4	Room F235
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Session Chair: Dr. Zeynep Ocak, Yeditepe Universitesi, TURKEY

ID	Title	Author(s)
241	Determining optimum number of Kanbans for workstations in a Kanban-based manufacturing line using discrete-event simulation: A case study	Yousefi, M., Hosseinioun, S. Taghikhah, S., F.
529	A simulation study of lot flow control in wafer fabrication facilities	El-Khouly, I. A.
544	CNG refueling station distribution on the intra and intercity networks: A challenge for energy efficient green highway	Mukaddes, A.M.M., Choudhury, N.F.A., Khadem, M., Ali, A.

19:00 CONFERENCE DINER and AWARD CEREMONY

DAY 3: July 5, 2012 (Thursday)

09:00 – 09:45 **Keynote Speaker:** Mr. Akin Aydemir, Industrial Operations Director of TOFAS (a JV between FIAT and KOC), Bursa, TURKEY

Thursday: 10:00 – 11:15 Operations Research / Management 9 Room F133

Session Chair: Dr. Farida Mebrek, USTHB University, Algiers, ALGERIA

ID	Title	Author(s)
407	Obstacles restraining productivity improvement programs in a developing country	Al Riyami, A.M.A., Bashir, H., Alzebdeh, K.
446	An anarchic society optimization algorithm for a flow-shop scheduling problem with multiple transporter between successive machines	Javid, A.A., Tabrizi, P.H.
450	Solving transportation problem with mixed constraints	Mondal, R. N., Hossain, M.R.
458	Optimization over efficient stochastic solutions	Mebrek, F., Chaabane, D.

Thursday: 10:00 – 11:15 Production Planning and Management 5 Room F134

Session Chair: Dr. Onur Kuzgunkaya, Concordia University, Montreal, Quebec, CANADA

ID	Title	Author(s)
287	Mixed-model two-sided assembly line balancing using a modified genetic algorithm	Taha, R. B., El-Kharbotly, A., Afia, N., Sadek, Y.
376	Effect of system configuration and ramp up time on manufacturing system acquisition under uncertain demand	Niroomand, I., Kuzgunkaya, O., Bulgak, A.A.
406	A review of scheduling problems with earliness objective	S. Poursheikhali, M. Bijari
508	Solving no-wait flowshop by heuristic algorithm	Komaki, GH. M., Kayvanfar, V.

Thursday: 10:00 – 11:15 Case Studies 1 Room F135

Session Chair: Dr. Young S. Kwon, Dongguk University, SOUTH KOREA

ID	Title	Author(s)
014	Strategic planning for promoting practical knowledge of R & D organization; a case study in National Iranian Gas Company and subsidiary Companies	Massaeli, A.
091	Determination of costs resulting from manufacturing losses: An investigation in white durables industry	Bayrak, I. T.
157	Evaluation of the organizational structure proportion: Case Study	Shoushtary, M.A., Zadeh, A.A., Vahdatzad, M.A.
558	A sequence pattern matching approach to shopping path clustering	Jung, I. C., Kwon, Y. S.

Thursday: 10:00 – 11:15 Lean and Six Sigma 1 Room F233

Session Chair: Dr. Bernardo Villarreal, Universidad de Monterrey, MEXICO

ID	Title	Author(s)
061	Applying lean six sigma in engineering education at Tshwane University of Technology	Kanakana, M. G., Pretorius, J. H.C., van Wyk, B. J.
098	Lean Routing	Villarreal, B., Sañudo, M, Vega, A., Macias, E.G.
113	A case study of defects reduction in a rubber gloves manufacturing process by applying Six Sigma principles and DMAIC problem solving methodology	Jirasukprasert, P., Garza-Reyes, J.A., Soriano-Meier, H., Rocha-Lona, L.
584	Case Study: Improving Production Planning in steel industry in light of Lean Principles	Fahmi, S. M. Abdelwahab, T. M.

Thursday: 10:00 – 11:15 Logistics and Supply Chain 9 Room F234

Session Chair: Dr. Habibollah Javanmard, Islamic Azad University, Arak Branch, IRAN

ID	Title	Author(s)
355	Design of training program for green marketing sales personnel	Gadekar, A., Gadekar, R.
560	Shipment planning, capacity contracting, and revenue management in the air cargo industry: A literature review	Yeung, J. H.Y., He, W.
572	Determining and ranking strategic actions to improve logistics service using the fuzzy QFD	Javanmard, H., Najmi, M., Saleh, F.
573	Conceptual model of logistics city	Yeganegi, K. Eivazi, E.

Thursday: 10:00 – 11:15	Modeling and Simulation 5	Room F235
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Session Chair: Dr. Nicolo Belavendram, Universiti Tunku Abdul Rahman, Kuala Lumpur, MALAYSIA

ID	Title	Author(s)
254	Truncation in the overflow model	Adel-Aissanou, K., Abbas, K., Aissani, D.
269	Comparison of fitting methods for the generalized lambda distribution and development of improved fitting methods	Kuyzu, M.M., Corlu, C.G.
321	Stochastic data analysis and modeling of a telephone call center	Shafae, M. S., Elwany, M. H., Fors, M. N., Abouelseoud, Y.

11:15 – 11:30 Tea Break

Thursday: 11:30 – 12:45	Operations Research / Management 10	Room F133
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Session Chair: Dr. Fulufhelo Masithulela, University of South Africa, SOUTH AFRICA

ID	Title	Author(s)
488	Mathematical optimization for service marketing via multi-criteria acceptability analysis	Fazlollahtabar, H.
491	Dynamic testing facility delivery problems - A case study	Masithulela, F.
515	Economic lot scheduling problem considering deteriorating items	Kayvanfar, V., Zandieh, M.
538	Applying stochastic goal programming to solve APP problem - A case study	Mezghani, M., Loukil, T., Aouni, L.

Thursday: 11:30 – 12:45	Production Planning and Management 6	Room F134
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Session Chair: Dr. Ilham Kissani, Al Akhawayn University, MOROCCO

ID	Title	Author(s)
433	Zero inventory/production control policy for manufacturing systems subject to quality deterioration	Dhouib, K.
434	Aggregate planning - Opportunities and challenges between developed and developing countries	Kissani, I., El Mokrini, A.
436	Inventory management in multi-product, multi-demand disassembly line using reinforcement learning	Tuncel, E., Zeid, A., Kamarthi, S.
453	Mine waste rock management using Mixed Integer Programming (MIP)	Topal, E., Li, Y., Williams, D. J.

Thursday: 11:30 – 12:45	Case Studies 2	Room F135
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Session Chair: Dr. Budi Santosa, Surabaya Institute of Technology, INDONESIA

ID	Title	Author(s)
111	Fuzzy multi criteria decision making model for prioritizing the investment methods in technology transfer in shipping industries	Radfar, R., Ebrahimi, L.
284	A cross entropy-genetic algorithm approach for multi objective job shop scheduling problem	Santosa, B., Nurkhalida, L.
336	Application of data mining techniques in development of CRM strategies based on customer value - Home appliances case study findings	Gashti, G.S.F.
353	Effective implementation of cycle time reduction in a manufacturing unit - A case study	Bhise, D.

Thursday: 11:30 – 12:45	Lean and Six Sigma 2	Room F233
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Session Chair: Dr. Joseph Chen, Bradley University, Peoria, Illinois, USA

ID	Title	Author(s)
181	Part and inventory control analysis using plan of every part concept	Abdelhadi, A., Seifoddini, H., Almomani, M.
258	Implementing lean methodologies in healthcare systems - A case study	Chen, J., Thota, C.
403	Application of lean manufacturing tools for performance analysis: A case study	Karim, R., Rahman, C.M.L.
498	Challenges of lean manufacturing implementation: A hierarchical model	Cheah, A., Peng, W., Deng, Q.

Thursday: 11:30 – 12:45	Engineering / Project Management 1	Room F234
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Session Chair: Dr. Rubayet Karim, Jessor Science and Technology University, BANGLADESH

ID	Title	Author(s)
048	The effectiveness of Delphi method for eliciting criteria in project manager selection	Afshari, A. R., Yusuff, R.M., Mahmoudabadi, A.
094	Angular fuzzy model for projects delay	Afshari, A. R.,
106	Selection of optimal maintenance policy by using fuzzy multi criteria decision making method	Ding, S.H., Kamaruddin, S.
130	An application of fuzzy numbers in quantitative strategic planning method with MCDM	Nasab, H.H.

Thursday: 11:30 – 12:45	Manufacturing and Design 5	Room F235
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Session Chair: Dr. Matteo M. Savino, University of Sannio, ITALY

ID	Title	Author(s)
524	Prioritization of concurrent design strategies using the multi-criteria decision-making approach	Pourhamidi, M.
546	Optimization of the EDM parameters on the surface roughness of AISI D3 tool steel	Belgasim, O., Abusada, A.
547	Pull-out response of a steel post inserted in bovine bone: fixation of knee prosthesis	Dammak, M.
578	Product traceability information: An approach for information linking	Savino, M. M., Mazza, A.

12:45 – 14:00 Lunch Break

Thursday: 14:00 – 15:15	Operations Research / Management 11	Room F133
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Session Chair: Dr. Omar Elmabrouk, Benghazi University, LIBYA

ID	Title	Author(s)
078	A linear programming technique for the optimization of the activities in maintenance projects	Elmabrouk, O., Aljebali, F.
082	Scheduling project crashing time using linear programming technique	Elmabrouk, O.
464	A New approach to solve an extended portfolio selection problem	Babaei, M. H., Hamidi, M., Jahani, E., Ansari Fard, H.
554	Obstacles restraining productivity improvement programs in a developing country	Bashir, H., Alzebeleh, K., Al Riyami, A.M.A.

Thursday: 14:00 – 15:15	Engineering Education 1	Room F134
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Session Chair: Dr. Behnam Bahrami, Eastern Mediterranean University, Famagusta, CYPRUS

ID	Title	Author(s)
013	Strategic planning for promoting R&D organization skills - Case study: N.I.G.C. and sub companies	Massaeli, A.
116	Analysis of effectiveness factors for engineering graduates in Iran using system dynamics technique - Case of Industrial Engineering	Moslemeni, A., Owlia, M.S.
482	DOE in solving industrial problem: Case study in the application of Taguchi method in riveting process	Ghani, J. A., Jamaluddin, H., Ramli, R., Rahman, M. N. A., Deros, B. M., Haron, C. H. C.

Thursday: 14:00 – 15:15	E-Business and E-Commerce 1	Room F135
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Session Chair: Dr. Egerem Arkaxhiu, University of Tirana, ALBANIA

ID	Title	Author(s)
011	Strategy management and business success	Denni-Fiberesima, D.
256	Development of a real time online procurement method to reduce cost and time in business for central bank of Bangladesh	Ahmad, S.M. T., Uddin, M.R., Jahan, M.
263	E-Commerce adoption of hotels in Turkey	Calisir, F., Bayraktaroglu, A.E., Gumussoy, C.A., Esirgen, E.
559	How ready are organizations to adopt with information technology?	Garmaki, M., Pilevari, N.

Thursday: 14:00 – 15:15	Lean and Six Sigma 3	Room F233
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Session Chair: Abdulla Y. Dhafer, Saudi Aramco, Riyadh, SAUDI ARABIA

ID	Title	Author(s)
510	Introduction of lean six sigma principles into refinery plant maintenance	Dhafer, A.
542	RFID- enabled dynamic value stream mapping	Ramadan, M., Al-Karmi, I., Noche, B.
557	Study and implementation of single minute exchange of die (SMED) methodology in a setup reduction kaizen	Pellegrini, S., Shetty, D., Manzione, L.
566	Simulation of dysfunction of a complex industrial process	Ouazraoui, N., Bourareche, M., Nait-Said, R., Touahar, H.

Thursday: 14:00 – 15:15	Engineering / Project Management 2	Room F234
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Session Chair: Dr. A.H.M. Shamsuzzoha, University of Vaasa, FINLAND

ID	Title	Author(s)
228	Sub-contractor selection in general contractor organizations using interval valued fuzzy	Hadipour, H. , Azizmohammadi, R., Mahmoudabadi, A.
236	The application of risk management into the value engineering	Safari, A., Mostafaeipour, A., Yousefi, R.
324	Implementing lean manufacturing strategy at a US automotive manufacturing plant - A CASE Study	Alwerfalli, D., Jawad, B.
588	Entrenching strategic competitive advantage through Transformational Leadership	Kazmi, S. A.Z., Takala, J.

Thursday: 14:00 – 15:15	Reliability and Maintenance 1	Room F235
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Session Chair: Dr. Valerie Cook, Penn State University – Behrend, USA

ID	Title	Author(s)
155	A multi-criterion decision-making on preventive maintenance	Faghihinia, E.
213	Reliability aspects in z-pinned co-cured composites	Soni, S. R., Al-Romaihi, M., Wirthlin, J. R., Badiru, A. B., Clay, S.
543	Preventive maintenance scheduling	Werfalli, A.
593	Statistical and experimental study on the influence of input parameters on the dimensional accuracy of workpiece in EDM	Shabgard, M., Abaspour, R., Seyedzavvar, M.

15:15 – 15:30 Tea Break

Thursday: 15:30 – 16:45	Human Factors and Ergonomics 1	Room F133
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Session Chair: Dr. Reem Alkadeem, Alexandria University, EGYPT

ID	Title	Author(s)
053	Guerilla Transformation - Change an insurgency into a movement	Paris, J.
103	WERA tool for assessing exposure risk factors of work-related musculoskeletal disorders: A reliability and validity study	Rahman, M .N.A.R, Rani, M.R.A., Rohani, J.M.
341	Physical and interactive products usability evaluation method	Alkadeem, R.
555	Evaluating physical demand of palletizing - Depalletizing tasks: An application in a soft drink company	Elfeituri, F., Hammouda, A.

Thursday: 15:30 – 16:45	Engineering Education 2	Room F134
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Session Chair: Dr. Seema Singh, Delhi Technological University, INDIA

ID	Title	Author(s)
303	Indian continuing engineering education: Challenges and Opportunities	Singh, S.
311	Evaluation and student perception of augmented reality-based design collaboration	Ko, C-H., Chang, T.-C.
322	Engineering education and the entrepreneurial mindset at Lawrence Tech	Reimer, D., Ali, A.

Thursday: 15:30 – 16:45	E-Business and E-Commerce 2	Room F135
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Session Chair: Dr. Riadh Ladhari, Laval University, CANADA

ID	Title	Author(s)
415	Online financial services customers: Are They Loyal?	Ladhari, R., Leclerc, A.
417	The impact of customer winning attitude on customer loyalty within KSA mobile telecommunication industry	Alam, A., Salim, M.
579	Operations management research: A 10-year survey	Sheikhzadeh, A.

Thursday: 15:30 – 16:45	Healthcare Systems 1	Room F233
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Session Chair: Dr. Adnan Al-Bashir, Alhosn University, Abu Dhabi, UAE

ID	Title	Author(s)
066	A single-item continuous review inventory system with decision variable lead-time and stochastic demand	Akcan, S., Kokangul, A.
088	Decision-making processes of trauma surgeons during the golden hour	Park, E., de Mattos, P., Miller, D.
586	Implementation of six sigma on corrective maintenance - Case study at the directorate of biomedical engineering in the Jordanian	Adnan, A.-B., Akram, A.-T.

Thursday: 15:30 – 16:45	Engineering / Project Management 3	Room F234
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Session Chair: Dr. Kamrul Ahsan, Victoria University, Melbourne, AUSTRALIA

ID	Title	Author(s)
346	Resource leveling in fuzzy project scheduling	Bagheri, M., Mahmoudi, H.
363	Dynamic resource constrained multi-project scheduling problem with weighted earliness/tardiness costs	Ulusoy, G., Pamay, B., Bulbul, L.
374	An overview of agile project management	Thiyagarajan, S., Ruben, B., Sivaram, N.M.
467	Project price modeling by optimal fixed price incentive contract	Ahsan, K., Debi, C.

Thursday: 15:30 – 16:45	Reliability and Maintenance 2	Room F235
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Session Chair: Dr. Mehmet Savsar, Kuwait University, KUWAIT

ID	Title	Author(s)
054	Modeling of maintenance operations in a service organization: A case application	Savsar, M.
301	Effective preventive maintenance scheduling - A case study	Samat, H.A., Jeikumar, L.N., Basri, E.N., Kamaruddin, N.A.H.
432	Acoustic monitoring of machine tool health using transmitted sound	Cook, V.
541	Preventive maintenance time	Werfalli, A.

DAY 4: July 6, 2012 (Friday)

09:00 – 09:45 **Keynote Speaker:** Dr. Robert Austin, Dean, Business Administration, University of New Brunswick at Fredericton, CANADA

Friday: 10:00 – 11:15 Human Factors and Ergonomics 2 Room F133

Session Chair: Dr. Huseyin Selcuk Kilic, Marmara University, TURKEY

ID	Title	Author(s)
131	An anthropometric computer workstation design to reduce perceived musculoskeletal discomfort	Lale, K., Korhan, O.
193	Effect of gender differences on occupational stress among engineering workshop trainees	Keshvari , B., Abdulrani, M.
362	A hydraulic excavator augmented reality simulator for operator training	Akyeampong, J., Udoka, S., Park, E.
393	Westinghouse method oriented fuzzy rule based tempo rating approach	Çevikcan, E., Kilic, H. S., Zaim, S.

Friday: 10:00 – 11:15 Case Studies 3 Room F134

Session Chair: Dr. Gulnara Abitova, L. N. Gumilev Eurasian National University, KAZAKHSTAN

ID	Title	Author(s)
381	Forecasting NOKIA sale by adaptive neuro fuzzy inference systems (ANFIS)	Esmaeili, M., Fakhrzad, P., Hassanzadeh, M.
485	A study on resistance to change at Jeddah municipality - A case study of automating the correspondence tracking system	Fawzy, M. F.
494	Design of complex automation system for effective control of technological processes of industry	Abitova, G., Nikulin, V., Beisenbi, M.
570	Patterning from nature in architectural modeling	Bemanian, M.R., Ansari, M., Yeganeh, M.

Friday: 10:00 – 11:15 Facilities Planning and Management 1 Room F135

Session Chair: Dr. Indranil Ghosh, West Bengal University of Technology, Kolkata, INDIA

ID	Title	Author(s)
018	Robust optimization model for the capacitated facility location and transportation network design problem	Shafia, M. A., Rahmaniani, R., Rahmaniani, M., Rezaei, A.
035	Evaluating the effects of uncertainty in fuel price on transmission network expansion planning using DABC approach	Jalilzadeh, S., Kimiyaghalam, A., Ashouri, A.
575	The Role of Productivity improvement tools and techniques in the textile sector during manufacturing.	Marri, H. B., Shaikh, G. Y.

Friday: 10:00 – 11:15 Healthcare Systems 2 Room F233

Session Chair: Dr. Victoria Jordan, University of Texas MD Anderson Cancer Center, Houston, Texas, USA

ID	Title	Author(s)
124	Effects of service quality dimensions on customer satisfaction and return intention in different hospital types	Calisir, F., Gumussoy, C.A., Bayraktaroglu, A.E., Kaya, B.
166	Systems engineering in healthcare at The University of Texas	Jordan, V.
267	Mathematical programming technique to evaluate Indian rural health care programs - An empirical study	satyanarayana, G.M, Ramakrishna, H.V., Jayadeva, C. T.
366	A non-traditional vendor managed inventory: a service oriented based supply chain modeling in health services	Turhan, S., Vayvay, Ö.

Friday: 10:00 – 11:15 Inventory Management 2 Room F234

Session Chair: Dr. K. Sharif, Indian Institute of Technology (IIT), Kanpur, INDIA

ID	Title	Author(s)
041	An optimal inventory control planning for an Indian industry: An analysis	Sharif, K.
358	Non-traditional inventory models under stochastic demand	King, R., Warsing, D., Lavin, J., Ahiska, S.S, Buch, N.
574	Vendor managed inventory application in oil and gas industry	Binloutah, A., Sundarakani, B.
404	An optimal production-inventory model for deteriorating items with multiple-market demand under backlogging	Sajadifar, M., Hashempour, M.

Friday: 10:00 – 11:15**IE in Asia / Europe****Room F235****Session Chair:** Dr. Kamran Yeganegi, Islamic Azad University - Zanjan Branch, IRAN

ID	Title	Author(s)
044	Principles of positioning industrial estates	Yeganegi, K., Mojtazadeh, A.
049	To apply the passive defense in positioning Industrial Estates	Yeganegi, K., Bayat, E.
144	Application of text mining in the survey of industrial engineering literature	Abossedgh, S., Owlia, M.S., Vahdatzad, M.A., Zare, M-R.
380	Capacity and availability analysis of power plants in Kuwait	Savsar, M., Alardhi, M., Almazrouee, A.

11:15 – 11:30 Tea Break**Friday: 11:30 – 12:45****Human Factors and Ergonomics 3****Room F133****Session Chair:** Dr. Ismaila Salami, University of Agriculture, Abeokuta, Ogun State, NIGERIA

ID	Title	Author(s)
479	Relationship between standing height and Popliteal Height	Ismalia, O., Akanbi, O., Oriolowo, K.
483	Cardiovascular strain of bricklaying jobs in Southwestern Nigeria	Ismalia, O.
536	A restorative safety model for micro and small enterprises	Anisul, M.I., Khadem, M.

Friday: 11:30 – 12:45**Service Systems****Room F134****Session Chair:** Dr. Volker Grienitz, University of Siegen, GERMANY

ID	Title	Author(s)
051	Conceptual model of health tourism systems	Yeganegi, K.
132	Scenario based service-engineering	Grienitz, V., Schmidt, A.
244	Modeling of value chain processes in conglomerate organizations	Bavar, M., Mehrmanesh, A., Bafande, A.
594	Design for six sigma (DFSS) as a proactive business process	Alwerfalli, D.

Tuesday: 11:30 – 12:45**Facilities Planning and Management 2****Room F135****Session Chair:** Dr. William Msekiwa Goriwondo, National University of Science and Technology (NUST), ZIMBABWE

ID	Title	Author(s)
101	An improved approach to exchange non-rectangular departments in CRAFT algorithm	Pourghannad, B., Aliabadi, D.E.
229	A survey on development of virtual cellular manufacturing systems and related issues	Esmailian, G., Hamed, M.
395	A Model for multilevel location-allocation for market capture in congestion system	Bagherinejad, J., Fakhrzad, P.

Tuesday: 11:30 – 12:45**Healthcare Systems 3****Room F233****Session Chair:** Dr. Abe Zeid, Northeastern University, Boston, Massachusetts, USA

ID	Title	Author(s)
438	Characterization of healthcare mass customization	Boyaci, I., Zeid, A., Kamarthi, S.
525	Developing a safety index using FMEA	Abdolshah, M.
532	Designing a conceptual model for quality measurement in supply chain of e-health care services	Kazemzadeh, R.

Tuesday: 11:30 – 12:45**Manufacturing and Design 6****Room F234****Session Chair:** Dr. Balan Sundarakani, University of Wollongong in Dubai, UAE

ID	Title	Author(s)
281	Three-level service contract between manufacturer, agent and customer (game theory approach)	Gamchi, N.S., Esmaili, M., Monfared, M.A.S.
429	Environmental impact assessment of the platinum nanophase catalyst composite electrode using the eco-indicator 99 methodology	Mabiza, J., Mbohwa, C., Mutingi, M.
585	Mathematical modeling of machining parameters in Electro Discharge Machining of FW4 weld metal	Shabgard, M.R. Shotorbani, R.M.
580	Revitalizing the manufacturing industries through CIM	Bhosle S. M., Patil, S.B. Nandedkar, V.M.
577	Manufacturing and Design Technology : Ford Approach	Arikan, T.

Session Chair: Dr. Kamran Shahanaghi, Iran University of Science and Technology, IRAN

ID	Title	Author(s)
503	Quality Circle: An approach to solve institutional problems - A case study	Khond, M., Devatwal, S. C., Gorade, H. J.
576	Audit business process improvement using a combination of value engineering and data mining	Ebrahimian, F.
589	HRIS - Smart `Knowledge Management` solution Plugging IT Leadership into industrial management	Asiya, S., Kazmi, Z.
590	The effect of IT on organizational agility	Yeganegi, K., Azar, M. S. Z.
591	Design of project management information systems	Yeganegi, K., Safaeian, S.

IEOM 2012 POSTERS

ID	Title	Author(s)
005	A case study on SCM structural analysis for a pharmaceutical company based on as-is and to-be model approach	Saha, C., Bhuiya, M.S.H.
009	Multi-disciplinary approach to evaluate companies' performances	Tran, K
027	Nurse rostering through 0-1 multi objective programming for ICU Department of DR Shariati Hospital in Isfahan	Ansari, Z.
036	Impact of improving performance in virtual data warehouse	Hanif, A., Sheikh, S.
081	Developing the green supplier selection procedure based on analytical hierarchy process and outranking methods	Tsui, C-W. Wen, U-P.
100	Hospital site selection in Benghazi City in Libya	Busief, I. M., Shouman, M. A.
121	Berth allocation planning for improving container terminal performances	Ahsan, A.M.M.N., Chan, F.T.S., So, S.
125	Performance evaluation of digital strategy in IRIB-Yazd using the Balanced scorecard model	Hoboubati, M., Owlia, M.S., vahdatzad, M.A., Hoseini Nasab, H.
126	Quality management systems in dairy industry	Yaman-Keskin, O., Gulsunoglu, Z.
127	Lean manufacturing design for fishing net production system	Kuo, Y., Yang, T., Hsieh, C., Li, V.C.
145	Green supply chain management-Creating learning projects in automobile industries	Emmanuel, E., Cheng, C.
146	Local content policy in Nigeria - The need for organizational learning	Emmanuel, E., Amadi-Echendu, J.
152	Sonographers' workplace improvement: ergonomics evaluation using modelling and simulation software	Bertoloni, E., Fenaroli, M., Marciano, F., Rossi, D., Cabassa, P.
209	The circumstance in which architectural space influence on the training concept of design and environment structure	Asl, D. N. Baghbani, M.
224	Genetic Algorithms in speech recognition systems	Benkhellat, Z., Belmehdi, A.
234	Reliability and study for a mechanism aided by asynchronous actuator powered by asynchronous diesel generator	Megloul, H., Cheboub, A., Naoui, Y.
247	Realization of an automatic solar tracker for a concentrator	Malika, Y., Md Sirat, R., Shaharoun, M.A., Hassan, S.A.H.S., Tighidet, S.
252	The effect of thermal residual stresses on the performances of bonded composite repairs in aircraft structures	Rachid, M., Tai, Q., Malik, M.Y., Hong, Y., Park, J.
253	The patch shape effects on the performances of bonded composite repair in aircraft structures	Jaggi, C. K., Rachid, M., Verma, M., Kausar, A.
279	University students' perception and attitudes towards functional foods in Istanbul	Bilgic, S., Yüksel, A.
289	Cycle time reduction using lean six sigma in biopharmaceutical industry	Ismail, A., Ghani, J., A., Rahman, M. N. A., Ramli, R., Haron, C. H. C.
298	Application of failure analysis - A case study in semiconductor industry	Ding, S.H., Muhammad, N.A., Zulkurnaini, N.H., Khaider, A.N., Kamaruddin, S.
299	A fuzzy multi-objective linear programming approach for solving a new multi-objective job shop scheduling with sequence-dependent setup times	Emami, L.
313	The use of statistical quality control charts for the acceptance and sign-off process for web application products	Dweiri, F., Khan, S. A., Shamsuzzaman, M.
315	A new multi objective job shop scheduling with set up times using a hybrid metaheuristics	Emami, L., Fakhrzad, M. B.
319	Fuzzy sliding mode speed controller design of induction motor drives	Naceri, F., Benbrahim, M., Laamayad, T., Belkacem, S.
329	Application of quality tools for failure analysis in mechanical systems of industrial bench drill presses - A case study in a farm harvester factory	Belinelli, M., Kaminski, E., Souza, G., Portugal, E.
344	Improved automated guided vehicle system: The benefit of smart diagnostic tool compared to colored Petri Net method	Jaman, M.
440	Modular products and proprietary interface	Sheikh, F.
445	A model for optimizing the multi-item aggregated order quantity in a two-level supply chain: centralized vs. decentralized decision	Ahsan, A.M.M.N., Quddus, M. A., Sultana, N.
349	Modeling a real-world university timetabling problem	Bagheri, M.,
354	The circumstance of efficacy of professional ethic on management of constructional projects in Iran	Baghbani, M., Asl, N. D.
382	A time based approach for designing cellular manufacturing systems	Mandahawi, N.
385	Structural equation modeling: Software comparative review	Sorooshian, S., Afshari, A.
388	Structural equation modeling: Sample size approach	Sorooshian, S., Salimi, M.
405	A new combined artificial neural networks and ant colony optimization algorithm for energy minimization in pipeline operations	Cheboub, A., Hocine, M.,
430	The application of the graph theory to improve the availability of the Algerian plants	Benmounah, A.
455	Developing an e-business management system based on success factors interrelationship	Sorooshian, S., Salimi, M.
457	Weight variation reduction for baby lido products through six sigma methodology and tools	Mandahawi, N., Mukattash, A. M., Obeidat, S.
459	Three-dimensional numerical analysis of the harmfulness of the defects in oil pipes	Bachir, M.
466	Hybrid model for insulation active component control in an isolated neutral electrical network	Hocine, A., Abdallah, A., Abbas, M.
471	Multi-component preventive maintenance optimization based on availability	Doostparast, M.

ID	Title	Author(s)
472	Solving assembly line balancing problem in the state of multiple-alternative operations sequence using grasp meta-heuristic method and comparing with GA	Saidi, N.
477	Impact of abrasive wear on drilling tools	Abdallah, D.
504	Optimization of material and energy integration in an eco-park network	Kantor, I., Elkamel, A., Fowler, M.
505	Optimal product design of wheat straw polypropylene composites	Fatoni, R., Elkamel, A., Simon, L.
506	Integration of multi-period optimization model for electricity generation planning and operational strategy considering plug-in hybrid electric vehicles penetration	Ahmadi, L., Elkamel, A., Croiset, E., Douglas, P.
507	Computer-aided process simulation modules in ChE education	Almansoori, A., Elkamel, A., Yahya, S. A.
519	Analysis of hydrogen economy for hydrogen fuel cell vehicles in Ontario	Almansoori, A., Liu, H., Elkamel, A., Fowler, M.
520	Wastewater minimization in pulp and paper industries through energy-efficient membrane processes	Saif, Y., Almansoori, A., Elkamel, A.
530	Supply chain network design considering customer service level	Sisman, B.
533	Project management using cost significant items and neural network	Bouabaz, M., Belachia, M., Mordjaoui, M.
535	The effect of electric current on the Human body	Ouazani, A.
539	Virtual optimization of a wireless, solar PV/Wind hybrid system controller for street-lighting based on environmental conditions in Greater Toronto Area	Sarder, S., Ali, A., Wang, D.
540	Problems of the losses of circulation on the surface	Bentriou, A.
545	Mathematical modeling of listeria overgrowth phenomena	Fgaier, H.
558	A sequence pattern matching approach to shopping path clustering	Jung, I.C., Kwon, Y.S., Lee, Y. S.
562	Major difficulties faced to ensure security in food-processing field	Yamina, F.
568	Simulation of dysfunction of a complex industrial process	Ouazraoui, N.
569	Problems of the losses of circulation on the ground surface case	Bentriou, A.

IEOM 2012 TRACK BEST PAPERS AWARDS

Because of the diversity of the research, entries of real case examples and quality reporting in the papers, it was a very hard decision to select the finalists in each track by our panel of judges. After considering all entries the following papers were awarded for the IEOM 2012 Track Best Papers Awards. The awards will be presented at the IEOM 2012 Istanbul Conference Dinner on Wednesday, July 4, 2012.

Artificial Intelligence Track

An Artificial Immune System Approach for Flexible Job Shop Scheduling Problem

Aydin Sipahioglu and Alper Aladag, Department of Industrial Engineering, Osmangazi University, Eskisehir, Turkey

Computer and Information Systems Track

Study of Access Control Issue for Web Services

Hadiseh Seyyed Alipour and Mehdi Sabbari, Department of Software Engineering, Qazvin Islamic Azad University, Qazvin, Iran

E-Business and E-Commerce Track

Development of a Real Time Online Procurement Method to Reduce Cost and Time in Business for Central Bank of Bangladesh

Mohammad Rahat Uddin, S.M. Tofayel Ahmad and Munira Jahan, Bangladesh Bank, Head Office, Dhaka, Bangladesh
Tania Sultana, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

Energy Engineering Track

Forecasting Electricity Demand Using Dynamic Artificial Neural Network Model

Mohammad Y. El-Sharkh, University of South Alabama, Mobile, Alabama, USA
Mohammad Anwar Rahman, University of Southern Mississippi, Hattiesburg, Mississippi, USA

Engineering / Project Management Track

An Application of Fuzzy numbers in Quantitative Strategic Planning Method with MCDM

Hasan Hosseini-Nasab, Department of Industrial Engineering, Yazd University, Yazd, Iran

Engineering Economy Track

Analysis of Hydrogen Economy for Hydrogen Fuel Cell Vehicles in Ontario

Ali Almansoori, Department of Chemical Engineering, The Petroleum Institute, Abu Dhabi, UAE
Hui Liu, Ali Elkamel and Michael Fowler, Chemical Engineering Department, University of Waterloo, Waterloo, Ontario, Canada

Engineering Education Track

Evaluation and Student Perception of Augmented Reality-Based Design Collaboration

Chih-Hsiang Ko and Ting-Chia Chang, Department of Industrial and Commercial Design, National Taiwan University of Science and Technology, Taipei, Taiwan, ROC

Facilities Planning and Management Track

An Improved Approach to Exchange Non-Rectangular Departments in CRAFT Algorithm

Danial Esmaeili Aliabadi and Behrooz Pourghannad, Faculty of Engineering and Natural Sciences, Sabanci University, Orhanli-Tuzla, Istanbul, Turkey

Healthcare Systems Track

Optimal Budget Allocation of Health Care Resources for End Stage Renal Disease

Yu-Fan Chen and Ue-Pyng Wen, Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan

Human Factors and Ergonomics Track

WERA Tool for Assessing Exposure Risk Factors of Work Related Musculoskeletal Disorders - A Reliability and Validity Study

Mohd Nasrull Abdol Rahman, Department of Manufacturing & Industrial Engineering,
Universiti Tun Hussein Onn Malaysia (UTHM), 86400 Parit Raja, Johor, Malaysia

Mat Rebi Abdul Rani and Jafri Mohd Rohani, Department of Manufacturing & Industrial Engineering, Universiti Teknologi Malaysia (UTM), Johor, Malaysia

IE in Asia / Europe Track

To Apply the Passive Defense in Positioning Industrial Estates

Kamran Yeganegi, Industrial Engineering Department, Islamic Azad University, Zanjan Branch, Iran

Elham Bayat, Department of Urban Design, Islamic Azad University, Zanjan Branch, Iran

Inventory Management Track

A Unified Model for Optimizing Inventory Decisions in a Centralized or Decentralized Supply Chain Comprising a Vendor without/with Lot Streaming and a Buyer with a Fixed Ratio of Partial Backorders

Kit-Nam Francis Leung, Department of Management Sciences, City University of Hong Kong, China

Lean and Six Sigma Track

A Case Study of Defects Reduction in a Rubber Gloves Manufacturing Process by Applying Six Sigma Principles and DMAIC Problem Solving Methodology

Ploytip Jirasukprasert, Warwick Manufacturing Group, University of Warwick, Coventry, UK

Jose Arturo Garza-Reyes, School of Technology, University of Derby, Derby, UK

Horacio Soriano-Meier, Northampton Business School, University of Northampton, Northampton, UK

Luis Rocha-Lona, National Polytechnic Institute of Mexico, Business School, Mexico City, Mexico

Logistics and Supply Chain Track

A Multi-Agent Architecture for Distributed Supply Chain

Bharat Bansal, School of Computer Science, University of Nottingham, UK

Nishikant Mishra, School of Management and Business, Aberystwyth University, UK

Felix T.S. Chan and A. Prakash, Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

Vikas Kumar, Department of Management, Dublin City University, Dublin, Republic of Ireland

Manufacturing and Design Track

A Decision Support System for Robot Selection Based on Axiomatic Design Principles

Mehmet Cagatay Bahadir, Department of Management Engineering, Istanbul Technical University, Faculty of Management, Macka, Istanbul, Turkey

Sule Itir Satoglu, Department of Industrial Engineering, Istanbul Technical University, Faculty of Management, Macka, Istanbul, Turkey

Modeling and Simulation Track

Stochastic Data Analysis and Modeling of a Telephone Call Center

M. S. Shafae, M. H. Elwany, M. N. Fors and Y. Abouelseoud, Production Engineering Department, Faculty of Engineering, Alexandria University, Alexandria, Egypt

Operations Research / Management Track

Dynamic and Stochastic Knapsack-Type Models for Foreclosed Housing Acquisition and Redevelopment

Armagan Bayram and Senay Solak, Isenberg School of Management, University of Massachusetts, Amherst, Massachusetts, USA

Production Planning and Management

Integrated Cellular Manufacturing System Design: an Evolutionary Algorithm Approach

Michael Mutingi, Department of Mechanical Engineering, University of Botswana, Gaborone, Botswana

Charles T. Mbohwa, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa

Samson Mhlanga and William Goriwondo, Department of Industrial and Manufacturing Engineering, National University of Science and Technology, Bulawayo, Zimbabwe

Quality Control and Management Track

A Scheme for Balanced Monitoring and Accurate Diagnosis of Bivariate Correlated Process Mean Shifts

Ibrahim Masood, Faculty of Mechanical and Manufacturing Engineering, University Technology Malaysia, Johor, Malaysia

Adnan Hassan, Faculty of Mechanical Engineering, University Technology Malaysia, Johor, Malaysia

Reliability and Maintenance Track

Capacity and Availability Analysis of Power Plants in Kuwait

Mehmet Savsar, Industrial & Management Systems Engineering Department, College of Engineering and Petroleum, Kuwait University, Kuwait

Mohsen Alardhi, Automotive and Marine Engineering Department, College of Technological Studies, PAAET, Kuwait

Abdulla Almazrouee, Manufacturing Engineering Technology Department, College of Technological Studies, PAAET, Kuwait

Service Systems Track

Scenario based Service-Engineering

Volker Grienitz and André-Marcel Schmidt, University of Siegen, Germany

Sustainability and Green Systems Track

Visualizing Sustainability Performance of Manufacturing Systems using Sustainable Value Stream Mapping (Sus-VSM)

William Faulkner, William Templeton, David Gullett and Fazleena Badurdeen, College of Engineering, University of Kentucky, Lexington, Kentucky, USA

System Dynamics Model for Sustainability Analysis of Mobile Phone Reverse Logistics

Maria G. Gnani and Alessandra Lanzilotto, Department of Innovation Engineering, University of Salento, Lecce, Italy

Case Studies Track

Fuzzy Multi Criteria Decision Making Model for Prioritizing the Investment Methods in Technology Transfer in Shipping Industries

Reza Radfar and Leila Ebrahimi, Department of Industrial Management, Islamic Azad University, Science and Research Branch, Tehran, Iran

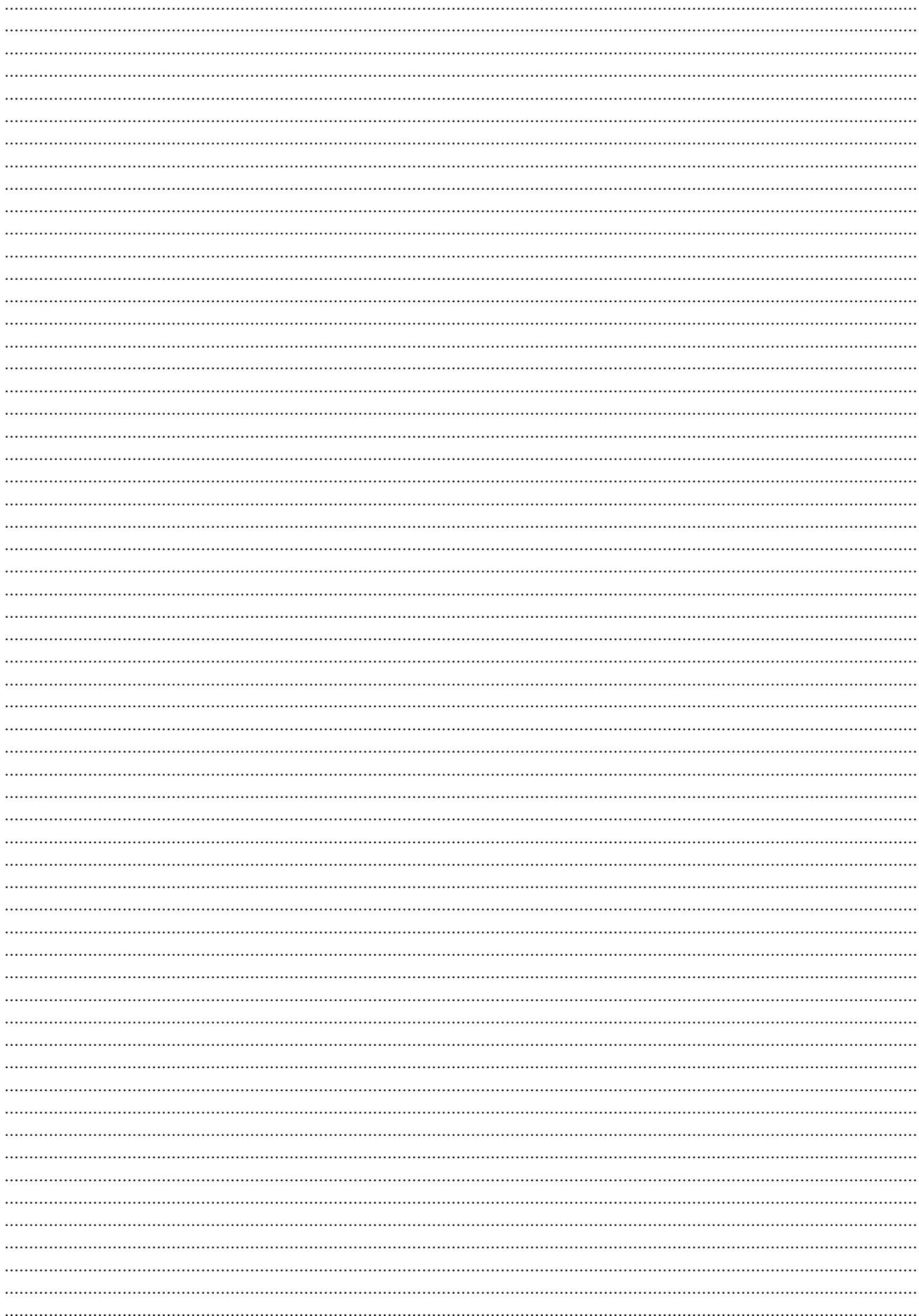
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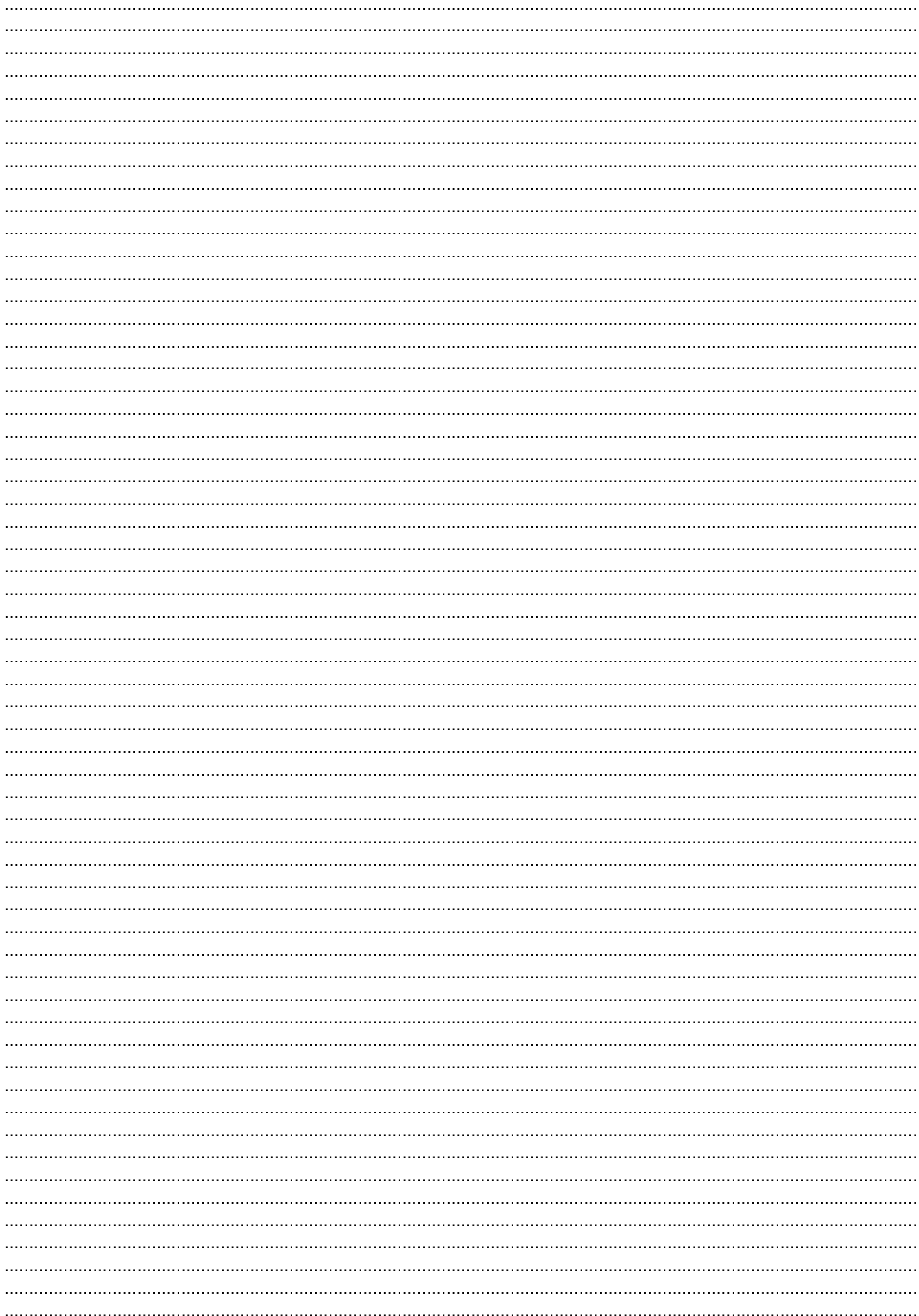
Standard Operation Process Applied on Lebanese Dairy SMEs, Maryse F. Chemali and Ramy F. Harik, Department of Industrial and Mechanical Engineering, Lebanese American University, Blat, Jbeil, Lebanon

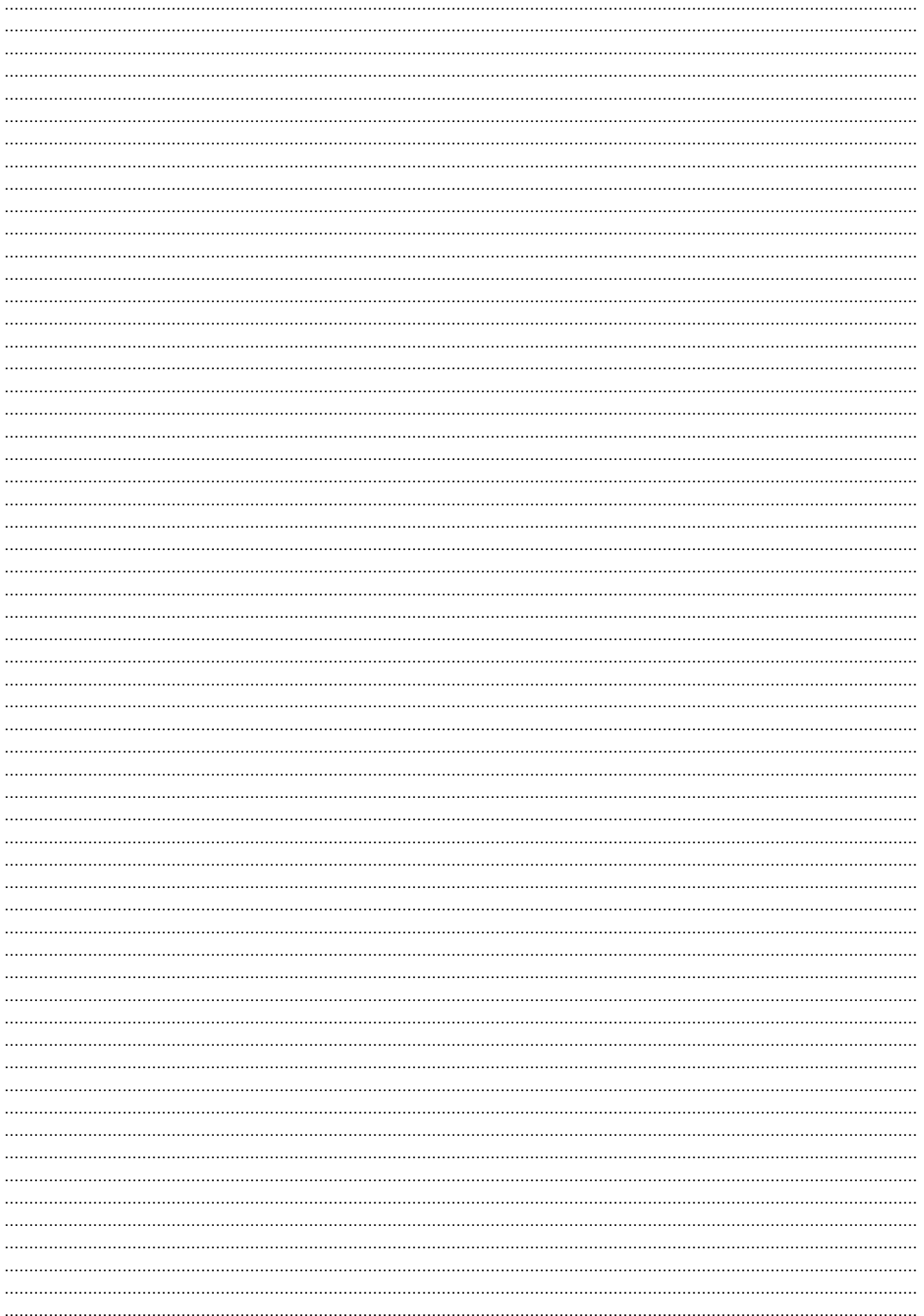
Developing 6D BIM Energy Informatics for GDL LEED IFC Model Elements, Shawn E. O'Keeffe, Department of Science and Technology, School of Computing & School of Construction, University of Southern Mississippi, Hattiesburg, Mississippi, USA

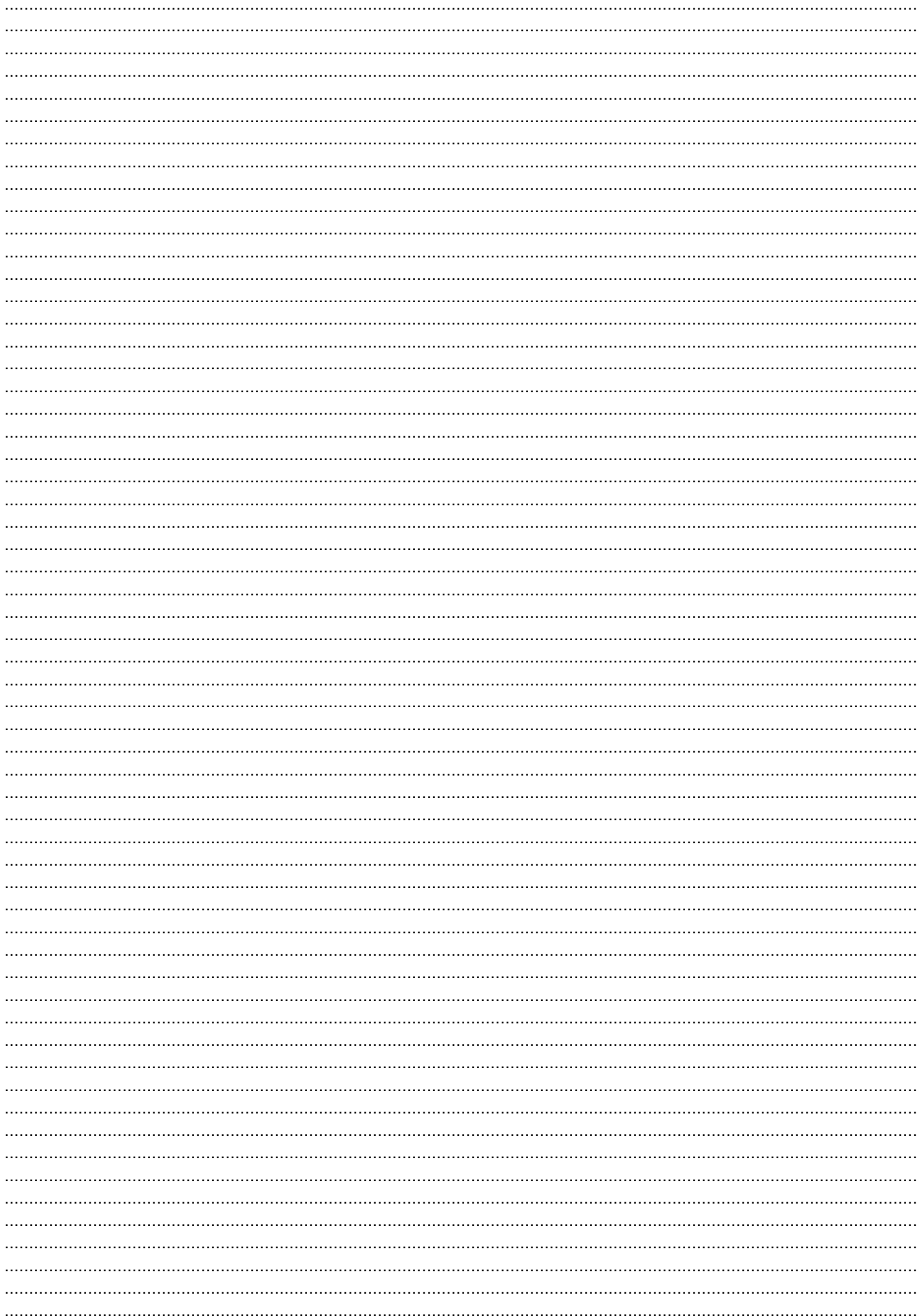
Assessment of Reliability of Hamilton-Tompkins Algorithm to ECG Parameter Detection, Saeka Rahman, Dhaka University, Bangladesh and Mohammad Anwar Rahman, University of Southern Mississippi, Hattiesburg, MS, USA

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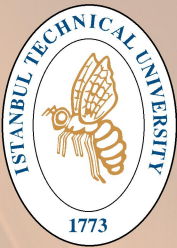
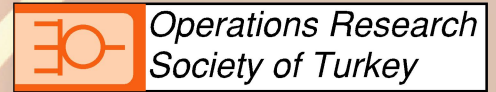






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