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## 2018 IEOM Awards – Paris, France

July 26-27, 2018

### IEOM Leadership Award

- Dr. Jean-Philippe Ammeux, Dean, IÉSEG School of Management, Lille, France

### IEOM Distinguished Academic Award

- Caroline ROUSSEL, Academic Dean – IESEG School of Management

### IEOM Research Leadership Award

- Ing. Jacobo Tijerina Aguilera, Director – Division of Extension, Consulting and Research, Univeristy of Monterrey, San Pedro Garza García, N.L., México

### IEOM Outstanding Researcher Award

- Prof. Khumbulani Mpopu, Gibela Research Chair in Manufacturing and Skills Development, Professor of Industrial Engineering Department, Tshwane University of Technology (TUT), Pretoria, South Africa

### IEOM Distinguished Educator Awards

- Pr. Alexandre Dolgui, Distinguished Professor (Full Professor of Exceptional Class in France), Head of Automation, Production and Computer Sciences Department, IMT Atlantique, Nantes Cedex 3, France
- Dr. Bart L. MacCarthy, Professor of Operations Management, Division Head – Operations Management and Information Systems, Nottingham University Business School, University of Nottingham, United Kingdom (UK)
- Dr. Yugang YU, Executive Dean, School of Management, University of Sci. & Tech of China (USTC), Hefei, Anhui, China

### IEOM Distinguished Industry Awards

- Pascale Herman, Marketing Director, Valeo Thermal Systems Business Group, Paris, France
- Charles Sagna, Thermal Academy Director, Valeo Thermal Systems Business Group, Paris, France
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- Charles Sagna, Thermal Academy Director, Valeo Thermal Systems Business Group, Paris, France
- Dr. Frédéric MORET, Industrial Director of Faurecia, Paris, France
- Nicolas SILVESTRE, Digital Transformation Director, Faurecia, Paris, France
- Stéphane COUDURIER CURVEUR, Industrial Process Performance Excellence, Injection Senior Manager & Senior Expert, Faurecia - Interiors - Central Manufacturing, Méru, France

### IEOM Woman in Industry and Academia Award

- Dr. Linda Zhang, Professor of Operations Management, IESEG School of Management, Paris La Défense, France

### IEOM Distinguished Service Awards

- Dr. Linda Zhang, Prof. of Operations Management, IESEG School of Management, Paris La Défense, France
- Celine LESUUN, IESEG School of Management, Paris, France

### IEOM Industry Solutions Awards

- Rubén Elvira-Herranz, Services Program Manager, Military Aircraft, Airbus, Madrid, Spain
- Foad Hosseinkhanli, Director of Quality Assurance, Performance and Business Improvement, Amor Health Services, Inc., Brownsville, Texas, USA

### IEOM Global Engineering Education Awards

- Dr. Matteo Mario Savino, Professor, University of Sannio, Benevento, Italy

### IEOM Outstanding Service Appreciation Awards

- Dr. Chavi Chen, IÉSEG School of Management, Paris, France
- Dr. Tanja Mlinar, IÉSEG School of Management, Paris, France
- Dr. Ali Siadat, Professor, Arts et Métiers ParisTech de METZ, Metz, France

## Undergraduate Student Paper Competition Awards Sponsored by SIEMENS

### 1<sup>st</sup> Place

**ID 485 Design of a Centralized Warehouse Layout and Operation Flow for the Automotive Industry: A Simulation Approach**  
Adriana Margarita Verduzco Guzmán, Kathia Montserrat Montalvo González, Mariana Frías Canales, María Teresa Verduzco Garza, Universidad de Monterrey, N.L., Mexico  
Fátima Briceño de la Rosa, Daimler AG, N.L., Mexico

### 2<sup>nd</sup> Place

**ID 471 Line Balancing in Assembly Line - A Case Study**  
Fabiola Mercedes Arango García, Michelle Eugenia Sánchez Barrientos, Valeria Argumedo Hinojosa, Teresa Verduzco-Garza, Fernando González-Aleu and Jesús Vázquez, Universidad de Monterrey, México

### 3<sup>rd</sup> Place

**ID 158 Autonomous Container Crane to Simplify Crane Operational Based on Image Processing and Distance Calculation**  
Wikandhana Rajasa, Septia Sari, Rasyid Fajar and Muhammad Habibie, Institut Teknologi Sepuluh Nopember, Indonesia

### ID 370 Redesigning a Retail Store Based on Association Rule Mining

Dalal Al Attal, Mariam Naser, Nourah AlBaghli, Nourah Al Muhaimed and Sarah Al Awadh, American University of the Middle East, Eqaila, Kuwait

## Graduate Student Paper Competition Awards sponsored by EATON Corporation

### 1<sup>st</sup> Place

**ID 458 The Effect of Ceiling Height on Thermal Comfort for Ceiling-Based Air Distribution Systems Vs Underfloor Air Distribution Systems in an Office Space**  
Meshal AlOtaibi, University of Kansas, USA

### 2<sup>nd</sup> Place

**ID 347 Introducing Statistical Process Control Techniques into a Headliner Subassembly Process**  
Torie G. Rose, Lawrence Technological University, USA

## Senior Design Project Competition Award

### 1<sup>st</sup> Place

**ID 374 Improvement of Diabetes Awareness: Applying Six Sigma to Increase Teachers Awareness Regarding Diabetic Children in Primary Schools in Kuwait**  
Fatemah Al-Juhaim, Layali Al-Dhefeeri, Rawan Al-Shatti, Shaikha AlDaboos, and Walid Smew, American University of the Middle East (AUM), Eqaila, Kuwait

## Best Poster Awards

### 1<sup>st</sup> Place

**ID 158 Autonomous Container Crane to Simplify Crane Operational Based on Image Processing and Distance Calculation**  
Wikandhana Rajasa, Septia Sari, Rasyid Fajar and Muhammad Habibie, Institut Teknologi Sepuluh Nopember, Indonesia

### 2<sup>nd</sup> Place

**ID 162 Investigating the Awareness of Decision-Making Heuristics and Biases in the Selection and Definition of Infrastructure Projects**  
Mohamed Al-Ali, Michael Emes and Raúl Leal, University College London, UK

### ID 164 Appointment Scheduling Optimization for Specialist Outpatient Services

C. K. M. Lee, KKH Ng and M. C. Cheng, The Hong Kong Polytechnic University, China

### 3<sup>rd</sup> Place

**ID 324 Discrete Event Simulation for Chemotherapy Patient Flows**  
Dang Khoi Pham and Christine Di Martinelly, IESEG School of Management, France  
Alejandra Duenas, ICN Business School (CEREFIGE), France

### ID 400 Thermography Monitoring and Diagnostic Tool in Predictive Maintenance

Amal Boukili and Mohammed Mesrar, Sidi Mohamed Ben Abdellah University, Fez, Morocco

## Undergraduate Research Competition Awards

### 1<sup>st</sup> Place

**ID 369 Dynamic Programming Approach to Unit Commitment Problem for Kuwait Power Generations**  
Nadine Awadah, Rawan AlShikh Ali, Shaikha AlBaijan, Ghaliya Al-Qallaf, Muneerah Al-Hassawi, and Suat Kasap, American University of the Middle East – AUM, Eqaila, Kuwait

## High School and Middle School STEM Presentation Competition Awards

### 1<sup>st</sup> Place

### ID 382 An Alerting Device to Prevent Death Risk in Dental Treatment

Kanticha Hothai, Thanadon Pitakwarin and Yupaporn Premkamol, Princess Chulabhorn's College Chonburi, Banbuang, Chonburi, Thailand

## High School and Middle School STEM Poster Competition Awards

### 1st Place

**ID 405 Developing of an Open Source Eletrocardiogram Prototype**

Suppakit Chantarasittipol and Thanut Bumrungsawat, Princess Chulabhorn's College Chonburi, Thailand

### 2nd Place

**ID 375 Developing Thai and English Braille Fonts by using FontForge.**

Sathaphon Cheratummakool and Punthat Siriwan, Princess Chulabhorn's College Chonburi, Thailand

## Middle School STEM Competition Awards

### 1st Place

**Garbage to Gold: A concept of using processed wastes to process waste**

Kaustabh Ghamande, Manse Ghamande and Sacchidanand Gogawale, India

## Simulation and PLM Competition Awards

### 1st Place

**ID 395 Digital Human Modeling and Simulation to Correct Work Postures in Dentistry**

Danah Ahmad, Sarah Hashem, Sarah AlAttal, Deema AlQemlas, Kareem Abbady, and Suat Kasap, American University of the Middle East – AUM, Egaila, Kuwait

### 2nd Place

**ID 011 A System Dynamics Approach to Analysis of Development Policies in Occupational Health and Safety Management System**

Mahdi Bastan, Leila Azizi and Alimohammad Ahmadvand, University of Eyvanekey, Iran

## Best Track Papers Awards

### Big Data and Analytics

**ID 526 Application of Big Data Analytics for Recommending V93K Tester Platform Focus Area with High Test Time and Index Time Deviation**

Romero Sunshine Ander, Koh Mei Hwei and Tang Ho Hwa @Howard

Infineon Technologies Asia Pacific Pte. Ltd.

Singapore

### Business Management

**ID 124 The Influence of Leadership on Innovation: a Case Study in the Telecommunications Industry in South Africa**

Pascalis Adams, Hannelie Nel and Annlizé Marnewick

Postgraduate School of Engineering Management

Faculty of Engineering and the Built Environment

University of Johannesburg, Auckland Park, Johannesburg, South Africa

**ID 320: Implications of Human Resource Management against Organizational Culture, Work Motivation, Job Satisfaction and Employee Performance at State Own Enterprise Hospitals in Indonesia (Empirical Study on the 5 Biggest Pertamina Hospitals in Indonesia)**

Uli Wildan Nuryanto, Asep Saefudin and Pantja Djati

University Mercubuana, Jakarta, Indonesia

### Decision Sciences

**ID 325 Desirability Function Approach for Selection of Facility Location: A Case Study**

Prasad Karande

Department of Mechanical Engineering,

Veer mata Jijabai Technological Institute,

Mumbai, India

Prasenjit Chatterjee

Department of Mechanical Engineering,

MCKV Institute of Engineering, Howrah, India

### **ID 546 Comparison of Pension Fund Calculations Using Actuarial Methods of Projected Unit Credit and Pay-As-You-Go**

Sukono, Mochamad Suyudi, Widya Novita Sari  
Department of Mathematics, Faculty of Mathematics and Natural Sciences,  
Universitas Padjadjaran, Indonesia

Yuyun Hidayat  
Department of Statistics, Faculty of Mathematics and Natural Sciences,  
Universitas Padjadjaran, Indonesia

Abdul Talib Bon  
Department of Production and Operations,  
University Tun Hussein Onn Malaysia, Malaysia

### **Energy and Resource Efficiency**

#### **ID 188 Quantifying the Life Cycle Cost of a High Pressure Grinding Roll in a Mineral Processing Plant**

Njabulo Buthelezi, Annlizé Marnewick and Hannelie Nel  
Faculty of Engineering and Built Environment  
University of Johannesburg, South Africa

### **Facilities Planning and Management**

#### **ID 112 Corrosion Management: A Case Study of South African Oil and Gas Company**

Linda Njomane and Arnesh Telukdarie  
University of Johannesburg, South Africa

### **Healthcare**

#### **ID 494 Vehicle Routing Problem for Blood Mobile Collection System with Stochastic Supply**

Andrea Pirabán Ramírez  
Logistic Systems Research Group, School of Engineering  
Universidad de La Sabana  
Campus Puente del Común, Km. 7, Autopista Norte de Bogotá. Chía, Cundinamarca, Colombia  
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### **Human Factors and Ergonomics**

#### **ID 404 An Evaluation of Road Hump Markings in Riyadh: Detectability of the Shapes and Colors**

Ahmed M. El-Sherbeeny, Woo-Hyung Park, Mohammed A. Alghufaili and Abdulrahman I. Al-Husseini  
Industrial Engineering Department, King Saud University, Riyadh, 11421, KSA

### **Information Technology and Information Systems**

#### **ID 73 Fuzzy logic control system in medical field**

Brahmi Samira and Zermane Hanane  
Batna 2 University, Batna, Algeria

### **Inventory Management**

#### **ID 154 Optimal Vendor-Buyer Cooperative Inventory Policy for Order Size Dependent Transportation Cost**

Sharon Orengo, Md. Shahriar J. Hossain and Bhaba R. Sarker  
Department of Mechanical and Industrial Engineering  
Louisiana State University, Baton Rouge, LA, USA

### Lean and Six Sigma

#### **ID 29 Implementation of Lean Manufacturing System to Eliminate Wastes on The Production Process of Line Assembling Electronic Car Components with WRM and VSM Method**

Muhammad and Yadrifil  
Department of Industrial Engineering , Universitas Indonesia

#### **ID 437 Implementation of Kanban, a Lean tool, In Switchgear Manufacturing Industry – A Case Study Lean and Six Sigma**

Shashwat Gawande and J.S Karajgikar  
College Of Engineering, Pune  
Savitribai Phule Pune University  
Pune, Maharashtra, India

### Logistics Management

#### **ID 217 The extent of the Urban Freight Transport system on the Road Safety**

Nassima LAARAJ, Imane MOUFAD, Fouad JAWAB, Youness Frichi, Kawtar Akoudad and Karim Zehmed  
Sidi Mohamed Ben Abdellah University (SMBAU), Fez, Morocco

### Manufacturing and Design

#### **ID 559 Overall Efficiency Improvement of a Production Line by Using Yamazumi Chart: A Case Study**

Subrata Talapatra, Sharif-Al-Mahmud and Imran Kabir  
Department of Industrial Engineering and Management  
Khulna University of Engineering and Technology  
Khulna 9203, Bangladesh

### Manufacturing and SC

#### **ID 427 Investigating Supply Chain Performance and Supply Chain Integration Linkage in Jordanian Manufacturing Firms**

Vikas Kumar, Jack Zeidan, Archana Kumari  
Bristol Business School  
University of the West of England  
Bristol, BS16 1QY, UK

Jose Arturo Garza-Reyes  
Centre for Supply Chain Improvement  
University of Derby, UK

Jiri Tupa  
Faculty of Electrical Engineering  
University of West Bohemia, Pilsen, Czech Republic

### Operations Research

#### **ID 41 A Game Theoretic Approach to Newsvendor Problems with Censored Markovian Demand**

Parisa Mansourifard  
Ming Hsieh Department of Electrical Engineering  
University of Southern California, Los Angeles, California, 90089 USA

Farzaneh Mansourifard  
Department of Engineering & Technology, Alzahra University, Tehran, Iran

Bhaskar Krishnamachari  
Ming Hsieh Department of Electrical Engineering  
University of Southern California, Los Angeles, California, 90089 USA

#### **ID 444 The Impact of Employee Motivation on Productivity at a Water Treatment and Supply's Laboratory in Johannesburg, South Africa**

Sambil Mukwakungu, Jwalane Elizabeth Mpharoane and Charles Mbohwa  
Department of Quality and Operations Management, University of Johannesburg

### Operations Management and

### **ID 482 Forecast for products with a short life cycle and their relationship with the supply chain Operations Management and Operations Research**

Andrés Velásquez Contreras  
Universidad Autónoma de Colombia

Doctorado en Logística y Dirección de la Cadena de Suministro  
Universidad Popular Autónoma del Estado de Puebla

Diana Sánchez-Partida  
Profesora investigadora en el posgrado de Logística y Dirección de la Cadena de Suministro  
Universidad Popular Autónoma del Estado de Puebla.  
21 Sur 1103, Puebla, Puebla 72410, México

### **Project Management**

#### **ID 117 Real Options for Dealing with Uncertainty in Project Management: A Case Study of Moroccan Infrastructure Project**

Jihane Gharib<sup>1</sup>, Abdelaziz Berrado<sup>2</sup>, Loubna Benabbou<sup>1</sup>  
1 Team MOAD-SCM, 2 Team AMIPS, Department of Industrial Engineering,  
Mohamadia School of Engineers, Mohammed V University, Rabat, Morocco

### **Quality Control and Management**

#### **ID 308 Evaluating Measurement System by Gauge Repeatability and Reproducibility**

Bahar Sennaroglu  
Department of Industrial Engineering  
Marmara University, Istanbul, Turkey

Ozlem Yurtsever  
Vocational School of Technical Sciences  
Marmara University, Istanbul, Turkey

### **Reliability and Maintenance**

#### **ID 279 Modeling and Performance Analysis of a Flexible Manufacturing Cell with Machine Failures**

Abdulmajeed Dabwan, Husam Kaid, Abdulrahman M. Al-Ahmari and Tariq Aziz  
1College of Engineering, Industrial Engineering Department, King Saud University, Riyadh, Saudi Arabia

### **Reverse Logistics and Green Systems**

#### **ID 473 An Integrated Approach with MOORA, SWARA, and WASPAS Methods for Selection of 3PLSP**

Arvind Jayant and Shweta Singh  
Department of Mechanical Engineering  
Sant Longowal Institute of Engg. & Technology, Longowal, Sangrur, Punjab – 148106 (INDIA)

S. K. Garg  
Department of Mechanical Engineering, Delhi Technological University, Delhi-110042 (INDIA)

### **Service Systems and Service Management**

#### **ID 6 A Comparison of Ambulance Location Models in Two Mexican Cases**

Jenny Díaz Ramírez, Edgar Granda, Bernardo Villarreal & Gerardo Frutos  
Universidad de Monterrey, San Pedro Garza García, N.L., México

### **Sustainability**

#### **ID 289 Resources Allocation: A moderator of the relationship of recycling strategy and organizational performance**

Ahmed M. Attia, OPIM Department, Effat University, Jeddah, KSA

### **Sustainability in Food Supply Chains**

#### **ID 421 A Simulation Study of Sustainable Agri-Food Supply Chain**

Hagar H. Amer, Noha M. Galal, Khaled S. El-Kilany  
Department of Industrial and Management Engineering  
Arab Academy for Science, Technology, and Maritime Transport, Abo-Kir Campus, Alexandria, Egypt

### Supply Chain Design

#### **ID 430 New Framework to Optimise Leagile Supply Chain Design**

Thi Hong Dang Nguyen and Thien-My Dao

Department of Mechanical/ Manufacturing Engineering

École de technologie supérieure, l'Université du Québec, Montréal, QC, Canada

### Systems Dynamics

#### **ID 393 Developing a comprehensive and multi-objective mathematical model for university course timetabling problem: a real case study**

Amin Jamili, Mahdi Hamid and Hassan Gharoun

School of Industrial Engineering, College of Engineering, University of Tehran, Iran

Roohollah Khoshnoudi, School of Industrial Engineering, Islamic Azad University, South Tehran Branch, Iran

#### **ID 89 Addressing the challenge of lean manufacturing sustainment with system dynamics modeling: a case study on apparel manufacturing in a developing country**

Marc Haddad and Rami Otayek

Department of Industrial and Mechanical Engineering, Lebanese American University, Lebanon

### Systems Engineering

#### **ID 321 Supervision of an Industrial Process of Milk Production using Fuzzy Logic**

Hanane Zermene, Samira Brahmi, Naima Zerari, Rachad Kasmi

Laboratory of Automation and Manufacturing, Industrial Engineering Department, University Batna 2, Algeria

### Transport and Traffic Management

#### **ID 70 Increase of fuel efficiency in a passenger road transportation company**

Jenny Díaz Ramírez, Laura Armendáriz Santinelli, María Fernanda Salcedo Junco and David Castaños Güitrón  
University of Monterrey, Monterrey, Mexico

#### **ID 191 Development of Variable Toll Pricing Strategy to Manage Traffic Congestion at Metro Manila Skyway**

Queen Jean Flores, Bien Carlo Realon, Lindley Bacudio and Giselle Joy Esmeria

Industrial Engineering Department, De La Salle University, Manila, Philippines

### Waste Management

#### **ID 286 Discharge times of ultrafine and superfine powders in a short riser circulating fluidized bed at different humidification conditions**

Emad A. M. Abdelghani

Minia University, Faculty of Engineering, Chemical Eng. Dept., Minia, P.O. Box 61519, Egypt

Yanbu Industrial College, Colleges & Institute Sector, Royal Commission Yanbu, Saudi Arabia (current)

Mohammad W. Hakami

Yanbu Industrial College, Colleges & Institute Sector, Royal Commission Yanbu, Kingdom of Saudi Arabia.