



**IEOM Society**

*"Achieving and Sustaining Operational Excellence"*

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## 2015 IEOM Orlando Awards

September 10, 2015 (Rosen Plaza Hotel)

### IEOM Global Diversity Collaboration Award

- **PACE** (Partners for the Advancement of Collaborative Engineering Education)

### Distinguished Service Awards

- **Alastair Orchard**, Director Digital Enterprise Projects, Siemens PLM Software, Genoa, Italy
- **Dr. Pamela McCauley**, Professor & Director of the Ergonomics Laboratory, Industrial Engineering and Management Systems Department, University of Central Florida, Orlando, USA
- **Dr. Miguel Gastón Cedillo-Campos**, Professor in Logistics Systems Dynamics, Senior Researcher, Mexican Institute of Transportation and Founding President, Mexican Logistics and Supply Chain Association (AML)
- **Thomas Seubert**, North American Delivery Lead for Manufacturing Execution Systems (MES), Tata Technologies, Novi, Michigan, USA

### Distinguished Educator Awards

- **Dr. Uriel Cukierman**, Universidad Tecnológica Nacional – Facultad Regional Buenos Aires, Argentina; President of International Federation of Engineering Education Societies and GEDC (Global Engineering Deans Council) Committee Member
- **Jairo Alfonso Vargas**, Department Head, Department of Industrial Engineering, Fundación Universitaria Konrad Lorenz, Bogotá Colombia
- **Dr. Hamid Parsaei**, Professor of Industrial and Systems Engineering, Texas A&M University (College Station) and Professor of Mechanical Engineering and Director of Academic Outreach, Texas A&M University Qatar

### Outstanding Service Awards

- **Dr. Kit Fai Pun**, Professor of Industrial Engineering, Faculty of Engineering, The University of the West Indies, St Augustine Campus, Trinidad & Tobago, West Indies
- **Dr.-Eng. Eldon Caldwell**, Director, Industrial Engineering Department, University of Costa Rica
- **Dr. Ali ElKamel**, University of Waterloo, Canada
- **Dr. Ing. Humberto R. Álvarez A.**, Universidad Tecnológica de Panamá, Panama
- **Dr. Eui Park**, North Carolina A&T State University, USA

## Global Engineering Education Awards

**Dr. Christoph Wunck**, Professor, Business Computing Systems, Industrial Engineering, College of Management, Information, Technology, Jade University, Wilhelmshaven, Germany

**Dr. Jose R. Deliz**, Associate Dean, School of Engineering, Professor and Director of Industrial and Management Engineering, Universidad Turabo, Puerto Rico

**Dr. Chan Chee-Ming**, Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia

**Dr. Alina Shamsudin**, Associate Professor, Deputy Dean (Teaching, Learning and Academic Training), Centre for Academic Development and Training, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia

## Best Industry Solutions Award

**Gil Lugo**, President, Green and Sustainable Solutions, Inc., Fort Lauderdale Florida, USA

## Ambassador Award

**Hulas King**, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software

## Appreciation Recognition Awards

**Valeria Mendoza Cortes**, Universidad Del Rosario, Bogota, Colombia

**Dr. Hansa Lysander Manohar**, Associate Professor, Department of Management Studies, Anna University, Chennai, India

## Outstanding Student Award

**Gomanth Duvvuru**, Lawrence Technological University, Michigan, USA

## Undergraduate Student Paper Competition Awards sponsored by Siemens

**1<sup>st</sup> Place:** *Increasing Customer Service Level in Distribution Operations*  
Ayde Yuriko Venegas, Universidad de Monterrey, San Pedro Garza García, N.L., Mexico

**2<sup>nd</sup> Place:** *Characterization of Alzheimer's disease: An Operations Research Approach*  
Yazeli Cruz, Yaritza Santiago, Valerie Gonzalez, Clara Isaza and Mauricio Cabrera, University of Puerto Rico – Mayaguez, Puerto Rico, United States

## Graduate Student Paper Competition Awards sponsored by Eaton

**1<sup>st</sup> Place:** *Threshold Function for the Optimal Stopping of Arithmetic Ornstein-Uhlenbeck Process*  
Alon Dourban and Liron Yedidsion, Technion - Israel Institute of Technology, Haifa, Israel

**2<sup>nd</sup> Place:** *Centralized Carrier Collaboration and Multi-Hub Location Optimization Using a Genetic Algorithm*  
Jose Espiritu and Eduardo Castillo, The University of Texas at El Paso, Texas, United States

**3<sup>rd</sup> Place:** *Biofuel Production: Potential Requirements Integration*  
Mostafa F. Fawzy, Industrial Engineering, Iowa State University  
Paul J. Compton, Industrial, Manufacturing, & Systems Engineering Department, University of Texas at Arlington

**3<sup>rd</sup> Place:** *A Bayesian Approach for Early Stage Reliability Prediction of Evolutionary Products*  
Mahtab Jahanbani Fard, Industrial & System Eng., Wayne State University  
Sattar Ameri, Computer Science, Wayne State University  
Ali Zeinal Hamadani, Dept. Industrial Engineering, Isfahan University of Technology, Iran

## Research Paper Competition Award

**1<sup>st</sup> Place:** *Multi-Objective Supply Chain Network Design under Demand Uncertainty Using Robust Goal Programming Approach*

Raghda Taha, AASTMT, Cairo, Egypt  
Yomna Sadek, Amin Elkharbotly and Nahid Afia, ASU, Cairo, Egypt  
Khaled Abdallah, AASTMT, Cairo, Egypt

**2<sup>nd</sup> Place:** *Design and fabrication of automated loading trolley for missile and canister*

Nazishuddin Quadri Syed College of Engineering Pune, Maharashtra, India  
Mohan Khond, College of Engineering Pune, Maharashtra, India

**3<sup>rd</sup> Place:** *Simulation Analysis for futuristic manufacturing: A green roadmap*

Amandeep Singh, Deepu Philip, Janakranjan Ramkumar and Suman Samanta, Indian Institute of Technology, Kanpur, India

## Best Poster Award

*A case study on the use of practical problem-solving activities to quantitatively improve physics learning in engineering education*

Thais Santos, Universidade Paulista (UNIP)/ Universidade São Judas Tadeu (USJT), Brazil  
Lilian Pereira, Pedro Ferreira, Iara Lima, Tulio Vivaldini, Alexandre Frugoli and Pedro Frugoli, Universidade Paulista (UNIP), Brazil

## Best Track Papers Awards

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### Decision Analysis

*Improving Obstacle Detection of Automated Guided Vehicles via Analysis of Sonar and Infrared Sensors Output*

Ademola Abodunrin and Richard Pitts, Morgan State University, Baltimore, Maryland, USA

### Energy Track

*Developing a Polynomial-Fourier Series Model for Building's Electricity Consumption Forecasting*

Cho-Liang Tsai, Wei Tong Chen and Chin-Shiang Chang, Naitonal Yunlin University of Sci. & Tech, Taiwan

### Engineering Education Track

*Important Soft Skills for Engineers to Succeed in a Working Environment*

Dyah Hening and David Koonce, Ohio University, USA

### Engineering Management Track

*Performance Evaluation of the Proposed and Existing Waste Management System: Economic Analysis*

Swapan Das and Bidyut Kr. Bhattacharyya, Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, India

### Healthcare Operations and Services

*A System Dynamics Model of Flow of Patients from the ICU through the Step-Down Units*

Sankar Sengupta and Ozge Civit, Oakland University, Rochester Michigan, USA

### Human Factors and Ergonomics Track

*Human Factors Analysis for Railway Coach and Bogie Maintenance Using AHP*

Subhash Chandra Panja, Jadavpur University, India  
Sanghamitra Poddar and Malay Gangopadhyaya, Institute of Engineering & Management, India

### Industry Practices and Solutions

*General Satisfaction Index (GSI) Applied to Organizational Climate Researches: A New Approach Focused on Banking*

Carlos Ernani Fries and Guilherme Luz Tortorella, Federal University of Santa Catarina, Florianópolis, Brazil

### **Logistics Services /Supply Chain**

*Anticipatory Shipping: A Commercial Application of Pre-positioning*

Hao Fu, Department of Industrial Engineering & Operations Research, University of California, Berkeley

### **Lean and Six Sigma**

*Application of Six Sigma in Service Contracting Company*

Ateekh Ur Rehman, Industrial Engineering Department, King Saud University, Riyadh, KSA

*Gaps between Psychophysical Demands and Perceived Workload – A Framework for Lean Production System*

Guilherme Luz Tortorella and Carlos Ernani Fries, Federal University of Santa Catarina, Brazil

Marcelo Pereira da Silva, Fernando Gonçalves Amaral and Flávio Sanson Fogliatto, Federal University of Rio Grande do Sul, Brazil

### **Manufacturing and Design**

*Optimal Hull and Mold Storage in a Lean Boat Manufacturing*

Mostafa Ghafoorivarzaneh, Rupy Sawhney, and Tron Dareing, University of Tennessee-Knoxville, USA

### **Modeling and Simulation**

*Statistical Analysis of Sliding Resistance of Braided Glass Fiber Reinforced Composite Orthodontic Brackets and Archwires*

Sarder E. Sadique, Marshall University, West Virginia, USA

### **Operations Management**

*Evacuation of a Highly Congested Urban City: The Case of Beirut*

John El Khoury, Lebanese American University, Lebanon

Jean-Paul M. Arnaout, Gust Univ. for Science and Tech. (GUST), Kuwait

Caline El Khoury, Lebanese American University, Lebanon

### **Operations Research**

*A new part routing-based decisional algorithm for urgent fabrication through a cost-time model in a flexible manufacturing system*

Thien-My Dao, ETS/University of Quebec, Canada

### **Quality and Reliability**

*A Bayesian Approach for Early Stage Reliability Prediction of Evolutionary Products*

Mahtab Jahanbani Fard, Industrial & System Eng., Wayne State University, USA

Sattar Ameri, Computer Science, Wayne State University, USA

Ali Zeinal Hamadani, Dept. Industrial Engineering, Isfahan Univ. of Tech, Iran

### **Sustainability**

*Global Warming Potential and Cost Minimization for the Centralized Carrier Collaboration and Multi-Hub Location Problem*

Jose Espiritu, Heidi Taboada, Juan Fernandez, Eduardo Castillo, Claudia Valles, and Ileana Delgado, The University of Texas at El Paso, USA