



IEOM Society

"Achieving and Sustaining Operational Excellence"

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2022 IEOM Awards – 5th European Rome Conference

IEOM Distinguished Leadership Award

Dr. Maria Antonella Ferri
Dean, Economics and Business Management
Full Professor of Management
Universitas Mercatoru
Roma, Italy

Prof. Dr. Tirta Nugraha Mursitama
Vice Rector of Research and Technology Transfer
Bina Nusantara University – BINUS University
Jakarta, Indonesia

Franco Megali
VP and CEO Italy, Israel and Greece
Siemens Industry Software S.r.l.
Global Sales & Customer Success
Via Werner von Siemens, 1
20128 Milano, Italy

IEOM Distinguished Educator Award

Prof. Virgílio Cruz Machado
Director / Dean
Nova School of Science and Technology | FCT NOVA
Universidade NOVA de Lisboa
Caparica, Portugal

Dr. Tomohiko Sakao
Professor of Sustainable Product/Service Systems
Linköping University
Sweden

Distinguished Industry Achievement Award

Joseph F Paris Jr.
Chairman, XONITEK Group of Companies
Founder, Operational Excellence Society
Founder, Readiness Institute
Author and Producer, State of Readiness
Podcast Producer and Co-Host: The Outliers Inn, Supercharged Supply Chain
Frankfurt, Hesse, Germany

Matteo Balboni
Sr. Engineering Manager | Quality Design | RCS
Medtronic
Mirandola, Italy

Distinguished Researcher Award

Dr. Federica Caffaro
Researcher in Work and Organisational Psychology
Department of Education
Roma Tre University
Rome, Italy

Distinguished Professor Award

Dr. Giulio di Gravio
Full Professor at the Department of Mechanical and Aerospace Engineering
Coordinator of the PhD course in Industrial and Management Engineering
Sapienza – University of Rome
Rome, Italy

Dr. Mario Fagnoli
Associate Professor
Universitas Mercatorum
Rome, Italy

Outstanding Professor Award

Raphael Grzebieta, PhD
Emeritus Professor (Road Safety), Transport and Road Safety (TARS) Research Centre
School of Aviation, University of New South Wales
Sydney, Australia

Prof. Andrea D'Ariano
Associate Professor
Department of Engineering
Roma Tre University
Rome, Italy

IEOM Woman in Industry and Academia Award

Dr.-Ing. Professor Susana Duarte
Assistant Professor of Industrial Engineering
School of Science and Technology of the Universidade Nova de Lisboa, Portugal
Lisboa, Portugal

IEOM Global Engineering Education Award

Prof. Kerstin Johansen
Senior Associate Professor
Project leader Resilient and Sustainable Production – Proactive greenfield and brownfield production development (RaSP)
Jönköping University
Sweden

Corina Pacher
Education Project Manager
Graz University of Technology
Austria

Teaching and Learning Award

Dr. Susanne Vernim
Member of the Management Board of the Institute for Machine Tools and Industrial Management (iwb)
Head of Department for Sustainable Production
Technical University of Munich (TUM)
Germany

Dr. Emmanuel Francalanza
Senior Lecturer
Head of Department of Industrial and Manufacturing Engineering
University of Malta
Malta

IEOM Industry 4.0 Teaching Award

Dr. Tommaso Rossi
Full Professor
Director of Lean Club & i-FAB
LIUC – Università Cattaneo

Castellanza, Varese
Italy

Industry Solutions Award

Valentina Bianchi
DSP Manager in Amazon Logistic

Teaching Excellence Award

Dr. Rossella Pozzi
Assistant Professor of Operations Management
School of Industrial Engineering
LIUC University
Castellanza, Varese, Italy

IEOM Distinguished Service Award

Dr. Mario Fagnoli
Associate Professor
Universitas Mercatorum
Rome, Italy

Prof. Mara LOMBARDI
Department of Chemical Engineering Materials Environment (DICMA)
Sapienza-University of Rome
Rome, Italy

Dr. Patrick DALLASEGA
Researcher – Assistant Professor
Industrial Engineering and Automation, Faculty of Science and Technology
Free University of Bozen-Bolzano
Bozen, Bolzano, Italy

Dr. Matteo Mario SAVINO
Professor, Industrial Operations and Industrial Management
University of Sannio
Benevento, Italy

Prof. Massimo GUARASCIO
Department of Chemical Engineering Materials Environment (DICMA)
Sapienza-University of Rome
Rome, Italy

Dr. Andrea FALEGNAMI
Department of Mechanical and Aerospace Engineering
Sapienza-University of Rome
Rome, Italy

Dr. Silvia COLABIANCHI
Department of Mechanical and Aerospace Engineering
Sapienza-University of Rome
Rome, Italy

IEOM Outstanding Student Leadership Award

Sapienza-University of Rome

Margherita BERNABEI
Francesco SIMONE
Francomaria DI RUSSO
Manohar POTRU
Arie ADRIAENSEN
Marta GALUPPI
Emin ALAKBARLI
Alessio MORICCA
Micaela SCIUNZI

Completion Winner Awards

Undergraduate Student Paper Competition sponsored by SIEMENS

First Place

ID 571 Level of IFRS Implementation in SMEs: Exploratory Case Studies of SMEs Palembang, Indonesia

Amany Larassyah Amir, Faculty of Economics and Business, Universitas Bina Darma, Palembang, Indonesia
Muji Gunarto, Faculty of Economics and Business, Universitas Bina Darma, Palembang, Indonesia
Amirudin Syarif, Faculty of Economics and Business, Universitas Bina Darma, Palembang, Indonesia
Dian Cahyawati, Department of Mathematics, Faculty of Math and Natural Science, Universitas Sriwijaya, Palembang, Indonesia

Second Place

ID 30 Picking Optimization in a Peruvian SMEs Based on Lean Warehousing Techniques

Daniela Barrantes, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú
Belen Galdos, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú
Marcos Fernando Ruiz-Ruiz, Associate Professor, Universidad de Lima, Lima, Perú
Wilfredo Yushimito, Associate Professor, Universidad Adolfo Ibáñez, Santiago, Chile

Third Place

ID 465 The Influence of XBRL, Independent Commissioner, Management Ownership, and Operation Complexity on Timeliness of Financial Reporting: Evidence from Indonesian Energy Sector

Dedik Nur Triyanto and Aurelia Widya Kusumaningtyas, Faculty of Economics and Business, Telkom University, Bandung, Indonesia

Graduate Paper Competition sponsored by Eaton

First Place

ID 163 Effectiveness Comparison of Differentiation Strategies in Sports Footwear Industries Companies: A Case Study

Amiral Rasyid, Rizal Palapa and Salwa Nahlya Tazkia, Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, 16424, Indonesia

Second Place

ID 239 A Proposed Factory Layout and Improved Process Time Using Lean Tools for FITCO Detergent Factory in Qatar

Maryam Mohdsaeed Abdulla, Petroleum Engineer, QatarEnergy, Engineering Management Masters Student, College of Engineering Qatar University, Doha, Qatar
Shaima Almuslimani, Health Facilities Licensing and Accreditation Engineer, Ministry of Public Health, Engineering Management Masters Student, College of Engineering, Qatar University, Doha, Qatar
Zahra Al-Ansari, Production Planning Engineer, Qatar Airways, Engineering Management Masters Student, College of Engineering, Qatar University, Doha, Qatar
Aisha Al-Nabet, Planning Engineer, ASTAD Project Management, Engineering Management Masters Student, College of Engineering, Qatar University, Doha, Qatar
Afaf H. Abunada, E-learning Coordinator, Ministry of Education and Higher Education, Doha, Qatar

Third Place

ID 308 Investigating Barriers and Challenges to Artificial Intelligence (AI) Implementation in Logistic Operations: A Systematic Review of Literature

Jasim Al Suwaidi, Hamad Rashid and Ridvan Aydin, Department of Industrial Engineering and Engineering Management, College of Engineering, University of Sharjah, P.O. Box 27272, Sharjah, United Arab Emirates

Human Factors and Ergonomics Competition

First Place

ID 535 Leadership coaching framework tool-based to support worker engagement and retention in Industry 4.0

Juliana Salvadorinho and Leonor Teixeira, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), Institute of Electronics and Informatics Engineering of Aveiro (IEETA), University of Aveiro, Aveiro, Portugal

Second Place

ID 461 Measurement of Occupational Stress Level in the Oil Sector in Kuwait

Ayat Alwazzan, Awatif Alwogyan, Fatma Alshourafa, Hessa Alobaid, Nahla Alhindi Wasayef Alazemi and Suat Kasap, College of Engineering and Technology, Industrial Engineering Department, American University of the Middle East, Eqaila, Kuwait

Third Place

ID 533 Effects of Computer Workstation Design on the Body Discomfort of Online Gamers

Angela Mae B. Urbiztondo, Nicole Louise Josue, Erin Dominique U. Salazar, Carl Louie N. Cruz, and Ma. Janice J. Gumasing, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila, Philippines 1002

Doctoral Dissertation Competition

First Place

ID 615 Optimal Design and Operation of a Renewable Energy-based Polygeneration System: A Deterministic Approach

Tuhin Kanti Poddar, Peter L. Douglas and Ali Elkamel, Department of Chemical Engineering, University of Waterloo, Ontario, Canada
Ali Almansoori, Professor of Chemical Engineering and Associate Provost for Education, Khalifa University of Science and Technology, Abu Dhabi, UAE

Second Place

ID 616 Comparison of the Application of Different Machine Learning Outlier Detection Methods on Actual Chemical Process Plant Data

Mohammed Alkatheri, Department of Chemical Engineering, University of Waterloo, Waterloo, Ontario, N2L 3G, Canada

Ali Almansoori, Professor of Chemical Engineering and Associate Provost for Education, Khalifa University of Science and Technology, Abu Dhabi, UAE

Peter L. Douglas, Professor of Department of Chemical Engineering, University of Waterloo, Waterloo, Ontario, N2L 3G, Canada

Ali Elkamel, Professor of Department of Chemical Engineering, University of Waterloo, Waterloo, Ontario, N2L 3G, Canada

Third Place

ID 282 Managing Projects Under Different Payment Schemes

Juan Zhao, School of Management and Economics, University of Electronic Science and Technology of China, Chengdu, China

Yinping Mu, School of Management and Economics, University of Electronic Science and Technology of China, Chengdu, China

Undergraduate Research Competition

First Place

ID 441 Design of an Integrated Risk Management System

Volkan Çakir, Assistant Professor of Practice, Faculty of Industrial and Mechanical Engineering, Lebanese American University, Lebanon

Sasha Nasser, Industrial Engineering Senior Student, Faculty of Industrial and Mechanical Engineering, Lebanese American University, Lebanon

Jana Hilal, Industrial Engineering Senior Student, Faculty of Industrial and Mechanical Engineering, Lebanese American University, Lebanon

Sym Bou Zeid, Industrial Engineering Senior Student, Faculty of Industrial and Mechanical Engineering, Lebanese American University, Lebanon

Grace Berdkan, Industrial Engineering Senior Student, Faculty of Industrial and Mechanical Engineering, Lebanese American University, Lebanon

Second Place

ID 32 Agility in Resilient Supply Chain Risk Management Design to Cope with Supply Shortage under Covid-19 Pandemic: Simulation-based Supplier Strategy

Sheren Aurelia Dyka Chandra, Department of Industrial and Systems Engineering, Faculty of Engineering, The Hong Kong Polytechnic University, Hung Hom, Hksar, China

C.K.M. LEE, Associate Professor, Department of Industrial and Systems Engineering, Faculty of Engineering, The Hong Kong Polytechnic University, Hung Hom, Hksar, China

Third Place

ID 269 Experimental Testing and Numerical Modelling Validation for Ranque-Hilsch Vortex Cooling Tube Design

1 Joseph Akpan, 2 Edwin Effiong, 1 Oludolapo Akanni, and 2 Victor Okorie

1 Department of Industrial Engineering, Durban University of Technology, Durban, SA

2 Department of Mechanical Engineering, University of Uyo, Uyo, Nigeria

Master Thesis Competition

First Place

ID 338 Fostering workforce engagement in Industry 4.0 through development plans: concept, model and prototype of a digital tool

Tiago Bastos, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal

Juliana Salvadorinho, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal

Leonor Teixeira, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), Institute of Electronics and Informatics Engineering of Aveiro (IEETA), University of Aveiro, Aveiro, Portugal

Second Place

ID 538 The Effect of Remuneration and Work Environment on Job Satisfaction and its Impact on Performance at Public Institution

Restu Amalia, Forester & Masters Students of Management, Postgraduate Program's, Universitas Bina Darma, Palembang, Indonesia

Muji Gunarto, Management Department of Economics and Business Faculty, Universitas Bina Darma, Palembang, Indonesia

Third Place

ID 7 Peak Torque Evaluation of IPM 150kW for EVs

1Bui Minh Dinh, 2Nguyen Chi Dung

1Hanoi University of Science and Technology (HUST)

2Hanoi Viettel High Technology (VHT)

Senior Design Competition

First Place

ID 460 Mental Workload Measurement of ICU Nurses by Using NASA-TLX Method

Abrar Alshemali, Eiman Alikhan, Fatemah Alenezi, Saja Abdulsalam, Wuroud Alhajri, and Suat Kasap, College of Engineering and Technology, Industrial Engineering Department, American University of the Middle East, Eqaila, Kuwait

Second Place

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ID 70 Designing a Storage Facility Using the Value Engineering Method for the Semi-Finished Leather Shoe Product: A Case Study on Small Leather Shoes Industry in Indonesia

Amanda Syifa Ariqoh, Calvin William Santosa, Aditya Mahendra and Amelia Kurnia Mahardina, Undergraduate Program in Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia

High School STEM Competition

First Place

ID 452 Analysis of Restaurant Ratings and Prices in Beijing and Los Angeles

Zhixing Lu (Amy), Stanford Online High School, Redwood City, CA 94063, USA

Second Place

ID 278 Consumer Research of Choice Design Model and Extended Warranty Purchase

Mason Chen, Stanford OHS, Academy Hall Floor 2 8853 415 Broadway, Redwood City, CA 94063, USA

Third Place

ID 78 War of the Wilds: Predicting Future Invaders and Invasions

Nicholas Lu, Student, The Haverford School, Pennsylvania, United States

Lean Six Sigma Competition

First Place

ID 626 Increasing the Efficiency of Help Desk Responses: A Six Sigma Approach

Kayla J. Buczkowski, Applications Service Engineer at A&D Technology and Masters of Engineering Management and Masters of Industrial Engineering Candidate of the College of Engineering, Lawrence Technological University, Southfield, MI 48075, USA

Robert Lutes, Design Engineer at Magnetic Products, Incorporated, Masters of Engineering Management Candidate, Lawrence Technological University, Southfield, MI 48075, USA

Second Place

ID 173 How can management and process methodologies help to define a roadmap for digitization? A proposal based on a practical case

Juliana Basulo Ribeiro, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal

Juliana Salvadorinho, Institute of Electronics and Informatics Engineering of Aveiro (IEETA), Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal

Marlene Amorim, Research Unit on Governance, Competitiveness and Public Policies (GOVCOPP) and Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal

Leonor Teixeira, Institute of Electronics and Informatics Engineering of Aveiro (IEETA), Governance, Competitiveness and Public Policies (GOVCOPP), Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro Portugal

Third Place

ID 288 Exploring Barriers and Facilitators to Lean Implementation in Healthcare Organizations

Camila Corrêa, Doctoral Student, University of Sao Paulo, Sao Paulo, Brazil

Izabelle Martinez, Masters Student, University of Sao Paulo, Sao Paulo, Brazil

Gabriel Rampini, Doctoral Student, University of Sao Paulo, Sao Paulo, Brazil

Fernando Bessaneti, Professor of Industrial Operations and Industrial Management, University of Sao Paulo, Sao Paulo, Brazil

Simulation Competition

First Place

ID 189 Fleet Sizing of Heterogenous Fleet of Trucks in a Material Handling System Using Anylogic Simulation Modelling

Mohamed Amjath, PhD Student, Division of Engineering Management and Decision Sciences, College of Science and Engineering, Hamad Bin Khalifa University, Doha, Qatar

Laoucine Kerbache, Professor, Division of Engineering Management and Decision Sciences, College of Science and Engineering, Hamad Bin Khalifa University, Doha, Qatar and HEC Paris

Adel Elomri, Assistant Professor, Division of Engineering Management and Decision Sciences, College of Science and Engineering, Hamad Bin Khalifa University, Doha, Qatar

James MacGregor Smith, Professor, Department of Mechanical and Industrial Engineering, University of Massachusetts, Amherst, MA, USA

Second Place

ID 64 Collision avoidance and trajectory tracking for multiple autonomous mobile robots in robot operating system

Cheung Ho Hin, Department of Industrial and Systems Engineering, Faculty of Engineering, The Hong Kong Polytechnic University, Hung Hom, Hksar, China

C.K.M. LEE, Associate Professor, Department of Industrial and Systems Engineering, Faculty of Engineering, The Hong Kong Polytechnic University, Hung Hom, Hksar, China

Supply Chain and Logistics Competition

ID 299 Identification of Importance Criteria for Evaluating Suppliers' Performance during the Trial Production Stage: Case Study in Automotive Manufacturer

Kamphon Pingsusaen, Detcharat Sumrit and Assadej Vanichchinchai, The Cluster of Logistics and Rail Engineering, Faculty of Engineering, Mahidol University, Nakhon Pathom, Thailand

Covid Data Analytics Competition

ID 112 A Study to Analyze the Impacts of COVID-19 on The Textile Industry: Evidence from Bursa, Turkey

Melike Bulur and Eren Özceylan, Industrial Engineering Department, Gaziantep University, Turkey

Cihan Çetinkaya, Management Information Systems Department, Adana Alparslan Turkes Science and Technology University, Turkey

Onsite Competitions

UNDERGRADUATE STUDENT PAPER COMPETITION

ID 270 ABC Analysis and an Application in the Carpet Industry

Bensu Müldür, MSc Student, Industrial Engineering, Gaziantep University, Gaziantep, Turkey

Devran Aydoğlan, Undergraduate Student, Industrial Engineering, Gaziantep University, Gaziantep, Turkey

Alptekin Durmuşoğlu, Associate Professor, Industrial Engineering, Gaziantep University, Gaziantep, Turkey

SUPPLY CHAIN AND LOGISTICS COMPETITION

ID 90 A Case-Analysis on the Impacts of ERP Integration on Supply Chain Performance

Raid Al-Aomar, Professor of Industrial Engineering, School of Applied Technical Sciences, German Jordanian University, Amman-Jordan

Yousef Al-Shurafa and Osama Qadri and Rand Abdallah, Graduate students, Department of Industrial Engineering, German Jordanian

University, Amman-Jordan

DOCTORAL DISSERTATION COMPETITION

ID 73 Drones in Manufacturing: Opportunities and Challenges

Omid Maghazaei, Chair of Production and Operations Management (POM), Department of Management, Technology, and Economics (D-MTEC), ETH Zurich, Switzerland

GRADUATE STUDENT PAPER COMPETITION

First Place

ID 271 3D Reconstruction and 3D Printing of Sections of the Aortic Arch

Gian Maria Santi, Giulia Alessandri and Leonardo Frizziero, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, 40136, Italy

Antonio Loforte, Gianluca Folesani, Luca Botta and Davide Pacini, Department of Cardiac Surgery, S. Orsola University Hospital, IRCCS Bologna, Alma Mater Studiorum University of Bologna, Bologna, 40138, Italy

2nd Place

ID 469 Application of IDeS (Industrial Design Structure) to Sustainable Sharing Mobility: Case Study of an Inclusive Autonomous Vehicle

Giulio Galiè, PhD Student, DIN – Department of Industrial Engineering, Alma Mater Studiorum – Università di Bologna, Italy

Martina Aldrovandi, Student, DIN – Department of Industrial Engineering, Alma Mater Studiorum – Università di Bologna, Italy

Silvia Franco, Student, DIN – Department of Industrial Engineering, Alma Mater Studiorum – Università di Bologna, Italy

Elisa Rana, Student, DIN – Department of Industrial Engineering, Alma Mater Studiorum – Università di Bologna, Italy

3rd Place

ID 207 Pharma in the context of Industry 4.0 - Challenges and opportunities based on a literature review

Roland Wölfle, PhD Student, Doctoral School, University of Aveiro, Portugal

Head of Automation and Robotics, pester pac automation GmbH

Irina Adriana Saur Amaral, PhD, Coordinating Professor, Superior Institute of Accounting and Business, University of Aveiro, Portugal

Leonor Teixeira, PhD, Associate Professor, Department of Economics, Management and Industrial Engineering and Tourism (DEGEIT) /

Institute of Electronics and Informatics Engineering of Aveiro (IEETA), University of Aveiro, Portugal