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2025 IEOM World Congress on
Industrial Engineering and Operations Management
Emphasis on AI & Digital Supply Chains in Global Uncertainty
Windsor, Ontario, Canada, October 14-16, 2025
Venue: Ed Lumley Centre for Engineering Innovation, University of Windsor

Distinguished Leadership Award

Vladimir Franjo, P.Eng.
Regional Director – Ontario Cross Regional Team
Advanced Manufacturing Sector Team Director
Bioproducts Sector Team Director
National Research Council Canada – Industrial Research Assistance Program (NRC-IRAP)
Windsor, Ontario, Canada

Mr. Ryan Donally
President and CEO
Windsor-Essex Regional Chamber of Commerce
Windsor, Ontario, Canada

Distinguished Industry Leadership Award

David Bellaire
Plant Manager
Windsor Assembly Plant
Windsor, Ontario

Jake Currie
Plant Director
General Motors
Whitby, Ontario, Canada

Distinguished Industry Achievement Award

Lisa Lortie
Vice President, Light Duty Truck Program Planning
Stellantis, Auburn Hills, Michigan, USA

Benjamin Saltsman
Director, Advanced Manufacturing Innovation
Magna International Inc.

Distinguished Educator Award

Dr. Bill Van Heyst
Dean of Engineering
University of Windsor
Windsor, Ontario, Canada

Dr. Rupa Vasudevan
Chancellor
Bharatiya Engineering Science and Technology Innovation University (BEST IU)
Anantapur, Andhra Pradesh, India

Lifetime Achievement Award

Dr. Andrew Jardine
Emeritus Professor, Industrial Engineering
University of Toronto, Canada

Outstanding Educator Award

Dr. Bruce Minaker
MAME Department Head
University of Windsor
Windsor, Ontario, Canada

Distinguished Professor in Supply Chain Management

Dr Vedat Verter
Professor & Stephen J.R. Smith Chair of Management Analytics
Smith School of Business
Queen's University
Kingston, Ontario Canada K7L 3N6

Outstanding Researcher Award

Xuan (Jen) Zhao, Ph.D.
Professor, Operations and Decision Sciences
Lazaridis School of Business and Economics
Wilfrid Laurier University
Waterloo, Ontario, Canada

Outstanding Professor Award

Dr. Bruno Agard
Full Professor
Department of Mathematical and Industrial Engineering
Ecole Polytechnique
Montreal, Canada

Outstanding Professor Award in Healthcare Engineering

Dr. Pengyi Shi
Associate Professor
Mitch Daniels School of Business
Purdue University
West Lafayette, Indiana, USA

Outstanding Professor in Sustainable Transportation

Dr. Osman Alp Professor
Haskayne School of Business
University of Calgary
Calgary, Alberta, Canada

Outstanding Professor Award in Integrated Logistics

Dr. Leandro C. Coelho Professor
Chairholder, Canada Research Chair in Integrated Logistics
Department of Operations and Decision Systems
Faculty of Business
Université Laval Quebec, Canada

Distinguished Woman in Industry and Academia Award

Dr. Anjali Awasthi
Professor, CIISE, Concordia University
Past President, Canadian Operational Research Society
Montreal, Canada

Outstanding Global Supply Chain Management Panel Chair Award

Dr. Guoqing Zhang Professor
Department of Mechanical, Automotive and Materials Engineering
Faculty of Engineering
University of Windsor
Windsor, Canada

AI and Data Analytics Award

Andrea Yzeiri, MMA
Chief Data & Analytics Officer and Lead AI Engineer
Picsume
Windsor, Ontario, Canada

Global Quality Award

Jd Marhevko
ASQ Fellow, Shainin Medalist, CSSBB, CMQOE, CQE, WiM HoF
Vice President Quality
Division U, Electronics & ADAS
ZF North America Inc., Farmington Hills, Michigan

Global Simulation Award

Dr. Steven Marshall
CFD Senior Expert
Valeo Thermal Systems
Auburn Hills, Michigan

Outstanding Teaching Award in Supply Chain Management

Sharfuddin Ahmed Khan, PhD, E.I.T, SMIISE
Associate Professor and Associate Program Chair, Industrial Systems Engineering
Faculty of Engineering and Applied Science
University of Regina
Regina, Saskatchewan, Canada

Outstanding Industry Best Practices Award

Anthony (Tony) Fuerth
Manager, Technical Support and Infrastructure (MTSI)
Technical Support and Computing Services
Faculty of Engineering University of Windsor
Windsor, Ontario, Canada

Lean Six Sigma Excellence Award

VP Operations Autoliv Canada
Autoliv North American Airbag Operations
Tilbury, Ontario, Canada

Operations Excellence Award

Shane Nantau
Plant Manager
Ground Effects Ltd.
Windsor, Ontario, Canada

Brian Irwin
Plant Manager
Windsor Mold Group - Emrick Plastics
Windsor, Ontario, Canada

Global Manufacturing Award

Dave Coll
Manufacturing Manager
ABC Technologies Windsor Tooling Technical Center
Windsor, Ontario, Canada

Distinguished Leadership Award

Dr. Walid Abdul-Kader Professor
Department of Mechanical, Automotive and Materials Engineering
Faculty of Engineering
University of Windsor
Windsor, Canada

Outstanding Member of IEOM University of Windsor Student Award

Mr. Abdul Aziz Ibrahim
PhD Student
University of Windsor

Outstanding Student Award

Maham Sohail
PhD Researcher in Industrial Engineering
Faculty of Engineering and Applied Sciences
University of Regina, Canada

Outstanding Student Volunteer Award

Bofei Li
Master's Student
MAME Department
University of Windsor

Volunteer Appreciation Award

Research Group in Supply Chain Optimization Lab (University of Windsor)

Yajie Jie
Guangmei Lyu
Wang Qi
Fatemeh Keshavarz Ghorbani

Undergraduate Students (University of Windsor)

Mihir Patel
Zion Odibeli
Donald Udeh
Tasnim Sikder
Yiwei Hao
Aymen Andrea
Sabeeka Haider
Gianluca Provenzano

Competition Winners

Undergraduate Student Paper Competition sponsored by Siemens

First Place

ID 142 Modeling the Impact of Inventory Management on Sales Performance in Peruvian Nano-Stores: Evidence from Structural Equation Modeling
Andrea Vega-Eyzaguirre and Tatiana Sotomayor-Miranda, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Perú
Juan Carlos Quiroz-Flores, Ph.D., Research Professor, Carrera de Ingeniería Industrial, Universidad de Lima, Perú

Second Place

ID 277 Measuring Leanness in Manufacturing Organizations through Artificial Intelligence: A Systematic Review
Hostetler, L. G., Maware, C. and Parsley D. M., Fujio Cho Department of Engineering Technology, University of Kentucky, Lexington, Kentucky

Undergraduate Research Competition sponsored by Daikin Applied

First Place

ID 178 Enhancing Warehouse Efficiency in Emerging Economies through Lean Warehousing and Systematic Layout Planning: A Construction Case Study
Samantha Rocío Cueva-Zárate, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Perú
Franco Moreano-Calderón-de-la-Barca, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Perú
Juan Carlos Quiroz-Flores, Research Professor, Carrera de Ingeniería Industrial, Universidad de Lima, Perú

Second Place

ID 183 A Lean-Based Production Model for Defect Reduction in Textile SMEs: A Case Study in Emerging Markets
Alejandra Milagros Herrera-Carhuanina, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Peru
Carmen Andrea Ortiz-Vaez, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Peru
Juan Carlos Quiroz-Flores, Research Professor, Carrera de Ingeniería Industrial, Universidad de Lima, Peru

Supply Chain and Logistics Competition - Online

First Place

ID 283 Enhancing Supply Chain Performance: The Interplay of Supply Chain Integration and Flexibility
Raymund P. Berdin, MBA, BSChE, Supply Chain Management, Ampleon Phils., Inc., LISP 1, Cabuyao, Laguna, Philippines

Second Place

ID 228 Adoption of Delivery Applications in Bolivia: An Extended UTAUT2 Perspective
Boris Christian Herbas Torrico, Research Professor, Tecnológico de Monterrey, Guadalajara, Mexico
Jarin Canaza Fernandez, Senior Researcher, Bolivian Industrial Research and Development Group, Cochabamba, Bolivia
Camila Silvente Villarroel, Research Assistant, Bolivian Industrial Research and Development Group, Cochabamba, Bolivia
Maria Eugenia Lamas, Research Assistant, Bolivian Industrial Research and Development Group, Cochabamba, Bolivia
Alejandra Pamela Suarez García, Research Assistant, Bolivian Industrial Research and Development Group, Cochabamba, Bolivia

Graduate Student Paper Competition - Online

First Place

ID 278 Enhancing ERP Systems with Blockchain for Engineering and Asset Management
Md Didarul Alam, Department of Electrical and Computer Engineering, Georgia Southern University, Statesboro, GA,30458, USA
Tasfia Tarannum, Department of Data Analysis and Supply Chain Management, Southern Arkansas University, Magnolia, AR, 71753, USA
Hayder Zghair, Department of Engineering and Physics, Southern Arkansas University, Magnolia, AR, 71753, USA

Second Place

ID 297 Situation-Aware Deep Learning for Urban Rideshare Safety: System design and development of YOLO-Powered Object Detection and Visual Analytics
Wei-Lun Huang, Roosan Liyons, and Roger J. Jiao, George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA, USA

Third place

ID 280 Lean Healthcare Model for SMEs: Improving Efficiency and Sustainability in Small and Medium-Sized Health Services
Robert Brando Manguinuri-Sanchez, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Perú
Johover Jeremy Acuña-Chávez, Bachelor in Industrial Engineering, Carrera de Ingeniería Industrial, Universidad de Lima, Perú
Juan Carlos Quiroz-Flores, Research Professor, Carrera de Ingeniería Industrial, Universidad de Lima, Perú

High School STEM Competition

First Place

ID 41 Low-Cost Separation of PET, PP, and PE Microplastics via Brine-Oil Density-Gradient Centrifugation
Nahum Kim and Seyoon Kim, Urban International High School, Toronto, ON, Canada
Seo Won Yi, Department of Computer Science, Department of Statistics, University of Toronto, Toronto, ON, Canada

Second Place

ID 36 Evaluating the Statistical Reliability of Wearable Cardiovascular Health Monitoring Devices Using Gage R&R
Zan Chou, High School Student, Huaxing High School, Taipei, Taiwan
Ni-Hsi Yeh, High School Student, Taipei City Fanghe Experimental High School, Taiwan
Pin-Jen Lai, High School Student, Kang Chiao International School Linkou Campus, Taipei, Taiwan

Doctoral Dissertation Competition sponsored by Airbus

First Place

ID 89 Bilevel Robust Optimization for Design and Pricing of Electric Vehicle Battery Reuse Network
Qi Wang, College of Mathematics & Information Science, Hebei University, Baoding, China
Department of Mechanical, Automotive and Materials Engineering, Faculty of Engineering, University of Windsor, Windsor, Canada
Yankui Liu, Professor, College of Mathematics & Information Science, Hebei University, Baoding, China
Guoqing Zhang, Professor, Department of Mechanical, Automotive and Materials Engineering, Faculty of Engineering, University of Windsor, Windsor, Canada

Master's Thesis Competition - Onsite

First Place

ID 177 Optimization of Pricing and Service Location Decisions for Do-It-Yourself Products
Bofei Li and Guoqing Zhang, Department of Mechanical, Automotive and Materials Engineering, Faculty of Engineering, University of Windsor, Windsor, Canada

Second Place

ID 233 Intelligent IoT Based Supply Chain for Fresh Produce: A Hybrid Reinforcement Learning and Optimization Approach
Chirag Seth, University of Waterloo, Canada

Supply Chain and Logistics Competition sponsored by aThingz - Onsite

First Place

ID 150 Modeling Breakpoint Risk–Return Trade-offs in Supplier Development Programs
Fatemeh Keshavarz-Ghorbani and Guoqing Zhang, Professor, Department of Mechanical, Automotive and Materials Engineering, Faculty of Engineering, University of Windsor, Windsor, Canada

Second Place

ID 28 A Systematic Literature Review on Physical Internet Transforming current logistics to Sustainable Logistics
Abu Saleh Md Nakib Uddin, Student, MASc in Industrial Systems Engineering, Faculty of Engineering and Applied Science, University of Regina, Regina, Saskatchewan, Canada
Sharfuddin Ahmed Khan, PhD, Associate Professor and Associate Program Chair, Faculty of Engineering and Applied Science, University of Regina, Regina, Saskatchewan, Canada
Muhammad Shujaat Mubarik, PhD, Associate Professor, Logistics & Supply Chain Management, Edinburgh Business School, Heriot-Watt University, Edinburgh, UK
Shireen Al-hourani, PhD, Associate Professor, University Canada West, Vancouver, British Columbia

Graduate Student Paper Competition sponsored by Eaton Corporation - Onsite

First Place

ID 31 Digital technologies in Cold Chain Pharmaceutical Supply Chain: A Systematic Literature Review

Raghavi Kemala, Master's Student, Industrial Systems Engineering, Faculty of Engineering and Applied Science, University of Regina, Regina, Canada
Sharfuddin Ahmed Khan, Associate Professor, Industrial Systems Engineering, Faculty of Engineering and Applied Science, University of Regina, Regina, Canada

Second Place

ID 284 Insights into Enhanced Oil Recovery for Carbon Capture Projects in Canada
Maham Sohail, Shabana Kamal, Sharfuddin Ahmed Khan, and Sama Hosseini Androod, Faculty of Engineering and Applied Sciences, University of Regina, Regina, Canada
Saqib Khan, Faculty of Business Administration, University of Regina, Regina, Canada
Noha Razek, Faculty of Economics, University of Regina, Regina, Canada

Best Track Papers

Track - Artificial Intelligence and Data Science

ID 97 Tracing AI and Supply Chain Emphasis Across the Global IEOM Landscape, A Meta-Analysis Under Global Uncertainty
Edgar Avalos-Gauna, Rice Center for Engineering and Leadership, George R. Brown School of Engineering and Computing, Rice University, Houston, Texas, USA

Track - Automation, Robotics and Autonomous Systems

ID 137 Challenges in Executing an Automobile Project
Meet Khandelwal, Priyansh Koshti, Krunal Dhamankar, Siddhraj Luhar, Ansh Mehta and M.B. Kiran, Department of Mechanical Engineering
School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India

Track - Business Management and Operations Management

ID 231 Enhancing Safety Fuse Manufacturing Productivity: An Analytical Approach Using Factory Physics and Simulation Techniques in Bolivia
Boris Christian Herbas Torrico, Research Professor, Tecnológico de Monterrey, Guadalajara, Mexico
Fernanda Hur Alvarez, Research Assistant, Bolivian Industrial Research and Development Group, Cochabamba, Bolivia

Track - Digital Manufacturing, Industry 4.0 and IoT

ID 19 Data-Driven Digital Twins in Manufacturing Systems: A Critical Investigation Review and Research Gaps and Future Direction
Tuyet Nguyen and Shiva Abdoli, School of Mechanical and Manufacturing Engineering, University of New South Wales, Sydney, Australia

Track - Engineering Education and Curriculum Improvement

ID 213 Assessing the Use of Generative AI in Academic Teaching and Research
Tarequl Islam, School of Engineering, Bowling Green State University, Bowling Green, OH, USA
Md Adilur Rahim, Louisiana State University Agricultural Center, Baton Rouge, LA, United States
Md Imran Hasan Tusar, School of Engineering, Bowling Green State University, Bowling Green, OH, USA

Track - Engineering Management and Project Management

ID 33 From Innovation to Impact: Embedding Sustainable Development Goals in University Research Projects - A Risk Management Perspective
Gertraud Wolf, Department of Civil Engineering and Environmental Science, University of the Bundeswehr Munich, Neubiberg, Germany
Christina Angela Gross and Christian Trapp, Department for Powertrain Technologies, University of the Bundeswehr Munich, Neubiberg, Germany
Christian Zimmermann and Philip Sander, Department of Civil Engineering and Environmental Science, University of the Bundeswehr Munich, Neubiberg, Germany

Track - Entrepreneurship and Innovation

ID 194 Design Thinking as an approach for product and service innovation: A study on its application in Brazilian companies

Petroski, J. F., Orrego, R. M. M., and Cymrot, R., Department of Production Engineering, Engineering School, Mackenzie Presbyterian University, São Paulo, Brazil

Track - Facility Planning and Layout

ID 154 Facilities Layout Planning in a TPS Environment using Deterministic and Digital Twin Tools
Gwendolyn Holowecky, Mark Dolsen and Angie Lafferty, TRQSS Inc., Tecumseh, Ontario, Canada

Track - Human Factors, Ergonomics and Healthcare System Management

ID 78 Improvements to Teaching Methodology for Adaptive Skiing Using Ergonomics and Engineering
Elizabeth O'Neill, Assistant Professor, Department of Engineering Technology, State University of New York Buffalo State University, USA
Keith McDade, Assistant Lecturer, Department of Engineering Technology, State University of New York Buffalo State University, USA
William Hanners, Senior Instructor for Jet Blue, Embry Riddle Aeronautical University, Daytona Beach, Florida

Track - Lean Six Sigma and Operations Excellence

ID 190 Micro-Motion Lean using MODAPTS: Enhancing Productivity in a Tier-1 Automotive Seatbelt Assembly Plant
Usama Tariq, Samuel Adu and Dr. Sardar Asif Ayyub Khan, Department of Mechanical, Automotive and Materials Engineering, University of Windsor, Windsor, Ontario N9B 3P4, Canada

Track - Manufacturing, Assembly and Design

ID 94 Integrated Advancement of Pitting and Milling Machineries for Sustainable Date Fruit Processing and Value-Addition
Nwankwojike Bethrand Nduka, Department of Mechanical Engineering, Michael Okpara University of Agriculture, Umudike, Nigeria
Nwogu Chukwunonso Nweze, Department of Mechatronics Engineering, Michael Okpara University of Agriculture, Umudike, Nigeria

Track - Quality, Reliability and Maintenance

ID 220 Second Life EV Battery Degradation: A Techno-Economic Analysis
Muhammad Nadeem Akram and Walid Abdul-Kader, Industrial Engineering Program, MAME Department, University of Windsor, Windsor, Ontario, Canada

Track - Simulation, Optimization and Productivity Improvement

ID 51 Simulation Modelling of a Vehicle Repair Center with Diagnostic, Inspection, and Washing Stages Using Arena Software
Mulengama Daniel Kazadi and Letsatsi Tau, Department of Industrial Engineering, Operations Management and Mechanical Engineering Vaal University of Technology, Vanderbijlpark, South Africa
Sambil Charles Mukwakungu, Department of Quality and Operations Management, University of Johannesburg, PO Box 524, Auckland Park, Johannesburg, South Africa

Track - Supply Chain and Logistics

ID 239 Digital Transformation in SMEs in Heavy Freight Transport Sector
Claudia Milagros Alanoca Alvarado and Shiva Abdoli, School of Mechanical & Manufacturing Engineering, University of New South Wales, Sydney, Australia

Track - Sustainability, Green Systems and Energy

ID 26 Mapping Environmental Risks of Carbon Capture, Utilization, and Storage (CCUS): A Pre-LCA Approach
Maham Sohail, Shabana Kamal, Sharfuddin Ahmed Khan, and Sama Hosseini Androod, Faculty of Engineering and Applied Sciences, University of Regina, Regina, Canada
Saqib Khan, Faculty of Business Administration, University of Regina, Regina, Canada
Noha Razek, Faculty of Economics, University of Regina, Regina, Canada

Track - Case Studies and Best Practices

ID 144 Global Supply Chains at a Crossroads: Trade Liberalization, Inequality, and Policy Interventions
Sofiia Vaida, Department of Human Resource Management and Administration, Institute of Economics and Management, Lviv Polytechnic National University, Lviv, Ukraine
Industrial Systems Engineering, Faculty of Engineering and Applied Science, University of Regina, Regina, Canada
Sharfuddin Ahmed Khan, Associate Professor, Industrial Systems Engineering, Faculty of Engineering and Applied Science, University of Regina, Regina, Canada
Maham Sohail, Industrial Systems Engineering, Faculty of Engineering and Applied Sciences, University of Regina, Regina, Canada

Best Track Papers

Track ID	Track name	Best Track Paper ID	Paper Title
1	Artificial Intelligence and Data Science	97	Tracing AI and Supply Chain Emphasis Across the Global IEOM Landscape, A Meta-Analysis Under Global Uncertainty
2	Automation, Robotics and Autonomous Systems	137	Challenges in Executing an Automobile Project
3	Business Management and Operations Management	231	Enhancing Safety Fuse Manufacturing Productivity: An Analytical Approach Using Factory Physics and Simulation Techniques in Bolivia
4	Digital Manufacturing, Industry 4.0 and IoT	19	Data-Driven Digital Twins in Manufacturing Systems: A Critical Investigation Review and Research Gaps and Future Direction
5	Engineering Education and Curriculum Improvement	213	Assessing the Use of Generative AI in Academic Teaching and Research
6	Engineering Management and Project Management	33	From Innovation to Impact: Embedding Sustainable Development Goals in University Research Projects - A Risk Management Perspective
7	Entrepreneurship and Innovation	194	Design Thinking as an Approach for Product and Service Innovation: A Study on its Application In Brazilian Companies
8	Facility Planning and Layout	154	Facilities Layout Planning in a TPS Environment using Deterministic and Digital Twin Tools
9	Human Factors, Ergonomics and Healthcare System Management	78	Improvements to Teaching Methodology for Adaptive Skiing Using Ergonomics and Engineering
10	Lean Six Sigma and Operations Excellence	190	Micro-Motion Lean using MODAPTS: Enhancing Productivity in a Tier-1 Automotive Seatbelt Assembly Plant
11	Manufacturing, Assembly and Design	94	Integrated Advancement of Pitting and Milling Machineries for Sustainable Date Fruit Processing and Value-Addition
12	Quality, Reliability and Maintenance	220	Second Life EV Battery Degradation: A Techno-Economic Analysis
13	Simulation, Optimization and Productivity Improvement	51	Simulation Modelling of a Vehicle Repair Center with Diagnostic, Inspection, and Washing Stages Using Arena Software
14	Supply Chain and Logistics	239	Digital Transformation in SMEs in Heavy Freight Transport Sector
15	Sustainability, Green Systems and Energy	26	Mapping Environmental Risks of Carbon Capture, Utilization, and Storage (CCUS): A Pre-LCA Approach
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