



IEOM Society

"Achieving and Sustaining Operational Excellence"

www.ieomsociety.org

2023 IEOM Awards – 2nd Australian Conference on Industrial Engineering and Operations Management

Melbourne, Australia, November 14-16, 2023, Venue: Batman's Hill Hotel

Distinguished Leadership Award

David Aaron Karr
Federal President
Industrial Engineers Australia (IEA)
Australia

Distinguished Educator Award

Dr. Daniel Samson
Professor, Department of Management and Marketing
University of Melbourne, Australia

Outstanding Professor Award

Dr. Peter Galvin
Professor, School of Business and Law
Edith Cowan University
WA, Australia

Distinguished Professor Award

Raphael Grzebieta AM
Emeritus Professor
University of New South Wales
Sydney, Australia

Distinguished Professor in Supply Chain Management Award

Dr. Paul Childerhouse
Professor and Head
Department Logistics and Supply Chain Management
RMIT University
Melbourne, Australia

Outstanding Professor in Artificial Intelligence Award

Dr. Sardar M. N. Islam (Naz)
Professor
Victoria University
Melbourne, Australia

Distinguished Industry Achievement Award

Dr. Peter Robertson
Honorary Research Fellow
University of Wollongong (UOW), Australia

Outstanding Professor in Engineering Reliability Award

Dr. Lihai Zhang
Professor
University of Melbourne
Victoria, Australia

Outstanding Professor in Management System Award

Dr. Rahmat Nurcahyo
Professor
Universitas Indonesia (UI)
Jakarta, Indonesia

Outstanding Professor in Simulation Award

Dr. Indra Gunawan
Associate Professor
University of Adelaide
Australia

Outstanding Research in Intelligent Transportation Award

Dr. Md Abdus Samad Kamal
Associate Professor
Gunma University
Kiryu, Japan

Women in Industry and Academia Speaker Award

Dr. Catherine Lou
Senior Lecturer
Victoria University Business School
Victoria University, Australia

Industry Solutions Engineering Manufacturing Award

Dr. Jo Staines
Associate Professor
University of Melbourne
Australia

Outstanding Professor in Sustainable Production Award

Dr Felix Kin Peng Hui
Associate Professor
University of Melbourne
Victoria, Australia

Industry Solutions Reliability Engineering Award

Andrew Sarah
Senior Project Manager
Nomad Digital
Melbourne, Australia

Asset Management Award

Shane Scriven
Managing Director
SAS Asset Management
Melbourne, Victoria, Australia

Dr. Adriano de Freitas
Teaching Associate
Monash University
Melbourne, Victoria, Australia

Industrial Engineering Procurement Award

Dr. Winda Nur Cahyo
Associate Professor
Industrial Engineering
Universitas Islam Indonesia
Indonesia

Conference Leadership Award

Dr. Matthew Pepper
Associate Professor
School of Business
University of Wollongong, Australia

Dr. Mohsin Malik
Associate Professor
Swinburn University of Technology
Melbourne, Australia

Industry Solutions Automotive Industry Award

Dr. Banu Özkese
R&D Center Manager
Koluman Automotive
Turkiye

Lean Six Sigma Award

Dr. Guilherme Tortorella
Senior Lecturer
University of Melbourne, Australia

Industry Solutions Robust Design Award

Dr. Kevin Otto
Professor, Manufacturing and Industrial Engineering
Department of Mechanical Engineering
University of Melbourne, Australia

Distinguished Engineering Education Award

Dr. Lu Aye
Professor
University of Melbourne
Australia

Distinguished Professor in Engineering Management Award

Dr. Jan Harm Christiaan Pretorius
Professor
University of Johannesburg
South Africa

Industry Solutions Hydrogen Development Award

Mahshid Zaresharif, M.Eng.
Process Engineer, Hydrogen Solutions Development
Siemens Energy Australia

Supply Chain and Logistics Award

Muhammad Shahzeb
Sr. Lecturer
Faculty of Business Management
Villa College, Maldives

Engineering Education Award

Dr. NilupaHerath
Lecturer, University of Melbourne
Victoria, Australia

Supply Chain and Logistics Award

Dr. Marjia Haque
University of New South Wales
Canberra, Australia

Construction Management Award

Dr. Paulo VazSerra
Senior Lecturer
University of Melbourne, Australia

Decision Analytics Award

Dr. Ripon K. Chakraborty
Lecturer, School of Engineering & Information Technology
UNSW Canberra, Australia

Sustainable Supply Chain Award

Dr. Sanjoy Paul
Associate Professor
UTS Business School
University of Technology Sydney, Australia

Lean Six Sigma Award

Dr. Roberto Chavez Clavijo
Senior Lecturer
Swinburne Business School
Swinburne University of Technology, Australia

Women in Industry and Academia Speaker Award

Dr. Hannelie Nel
Regional Quality, Risk and HSE Manager, Worley Middle East-UAE, Oman, North Africa and Iraq

Global Business Management Award

Dr. Tay Huay Ling
Associate Professor
Singapore University of Social Sciences
Singapore

Conference Leadership Award

Dr. Imran Ali
Senior Lecturer
Central Queensland University (CQU)
Melbourne, Australia

Conference Track Chair (Cyber Security) Award

Dr. Shamsul Huda
Senior Lecturer in Computer Science
Deakin University, Australia

Conference Technical Chair Award

Dr. Ferry Jie
Associate Professor
Edith Cowan University (ECU)
Australia

Reliability Engineering Award

Dr. Gopinath (Gopi) Chattopadhyay
Maintenance and Reliability Engineering
Chair of Asset Management Council Australia
Federation University Australia
Melbourne, Australia

Outstanding Student Award

Claudia Febi, University of Melbourne, Australia
President, IEOM Student Chapter at UNIMEL

Dyah Putri, University of Melbourne, Australia
Vice President, IEOM Student Chapter at UNIMEL

Andi Rachmatullah, University of Melbourne, Australia
VP and Treasurer, IEOM Student Chapter at UNIMEL

G.G. Udaya PriyasanthaRathnayake, University of Wollongong, Australia
President, IEOM Student Chapter at University of Wollongong

Competition Winners

Undergraduate Student Paper Competition sponsored by Siemens

First Place

ID 69 Improvement Proposal to Achieve Shrinkage Reduction in Home Dispatch Process in Retail Company
Alison Pimentel Piscocya, Katherine Hidalgo Reyna and Ezilda Cabrera Gil Grados, Facultad de Ingeniería, Universidad de Lima, Perú

Second Place

ID 233 Fertilizer Storage Cost Optimization on First Lean Warehouse of PT XYZ with Net Present Value and Equivalent Uniform Annual of Cost Method
Ervizal Buana Jatiputra, Undergraduate Student, Faculty of Engineering, Universitas Sebelas Maret (UNS), Surakarta, Indonesia
Wahyudi Sutopo, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret (UNS), Surakarta, Indonesia

Third Place

ID 289 Improving Pallet Control in Mass Consumption Companies: A Proposal for Layout Optimization
Leonardo Sebastian Carranza-Quijaite and Silvana Paola Chirinos-Ayala, Facultad de Ingeniería, Carrera de Ingeniería Industrial, Universidad de Lima, Perú
Juan Carlos Quiroz-Flores, Research Professor, Facultad de Ingeniería, Carrera de Ingeniería Industrial, Universidad de Lima, Perú

Undergraduate Research Competition sponsored by Daikin Applied

First Place

ID 111 A Comparative Study of Used Coffee Grounds Fertilizer, Chemical Fertilizer, and Organic Fertilizer on Yield And Growth of Ipomea Aquatica In Home Gardening With The Use Of One-Way Anova and Kruskal-Wallis Test
Norman Salvador University of Santo Tomas Philippines

Second Place

ID 224 Internet of Things (IoT) for Fire Prevention at Home

Miguel Angel Cordova Zevallos and Camila Alejandra Tuñoque De La Cruz, Universidad de Lima, Carrera de Ingeniería Industrial, Lima, Peru

José Antonio Taquía Gutiérrez, Universidad de Lima, Carrera de Ingeniería Industrial, Lima, Peru

Third Place

ID 218 The Analysis of Product Quality Improvement at Garment 3 of PT. Sri Rejeki Isman Tbk Using Failure Mode and Effect Analysis (FMEA) and Fault Tree Analysis (FTA) Method to Reduce the Number of Product Defects

Alifiana Rahma Sari, Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia

Wahyudi Sutopo, Professor, Department of Industrial Engineering, Past Head of Department of Industrial Engineering, Head of Industrial Engineering and Techno-Economics Research Group, Vice Dean for Human Resources, Finance, and Logistics, Faculty of Engineering, Universitas Sebelas Maret (UNS), Surakarta, Indonesia

Graduate Student Paper Competition sponsored by Eaton Corporation

First Place

ID 90 Enhancing Lean Implementation in SMEs: Exploring Barriers and HRM Strategies

Diego Adrian Gerbolino-Pastor, Faculty of Engineering, University of Lima, Lima, Perú

Rafael Chavez-Ugaz, Research Professor, Faculty of Engineering, University of Lima

ID 128 Statistical Analysis of Welding Parameters Affecting the Tensile Strength of Mild Steel Plates

Ninad Joshi and Pawan Bhandari, Ph.D., Department of Automotive and Manufacturing Engineering Technology, Minnesota State University, USA

Second Place

ID 248 Optimal Driving Strategy at Signalized Intersections for Improving Traffic Flow and Congestion Mitigation

Kenta Nakakura, Magzhan Atykhan, Md Abdus Samad Kamal and Kou Yamada, Graduate School of Science and Technology, Gunma University, Gunma, Japan

Third Place

ID 129 Determining the Factors Responsible for Affecting Impact Strength of a Carbon Fibre 3-D Printed Specimen Using Design of Experiments

Shubham Parekh and Pawan Bhandari, Ph.D., Department of Automotive & Manufacturing Engineering Technology, Minnesota State University, Mankato, MN 56001, USA

Praneel Acharya, Ph.D., Department of Mechanical Engineering, Minnesota State University, Mankato, MN 56001, USA

ID 84 Medical Device Failures Analysis: Engineering Management Perspectives

Limpat Salamat, Engineering Management, Faculty of Engineering and IT, University of Melbourne, Melbourne, Australia

Human Factors and Ergonomics Competition sponsored by CINTAS

ID 95 Identification of Ergonomic Conditions of the attention service in the Booths of a service company

Yahaira Celym Magno Ramos, Faculty of Engineering, University of Lima, Lima, Peru

Fiorella del Carmen Soto Linares, Faculty of Engineering, University of Lima, Lima, Peru

Maria Teresa Noriega Aranibar, Faculty of Engineering, University of Lima, Lima, Peru

ID 75 Analysis of a Workload in Healthcare through a Simulation Experiment and Data Acquisition by Wearable Devices
Yuki Mekata, Department of Industrial Engineering and Management, Faculty of Engineering, Kanagawa University, Yokohama, Kanagawa, Japan

Aika Kishigami, School of Science for Open and Environmental Systems, Graduate School of Science and Technology, Keio University, Yokohama, Kanagawa, Japan

Jun Hamaguchi, Department of Clinical Engineering, Faculty of Human Care at Makuhari, Tohto University, Maihama, Chiba, Japan

Miwa Nakanishi, Department of Industrial and Systems Engineering, Faculty of Science and Technology, Keio University, Yokohama, Kanagawa, Japan

ID 240 Analysis of The Application of Ergonomics to Increase Productivity in Manufacturing Companies: A Systematic Review of The Literature

Raúl Alejandro Ortega-Marchisio, Facultad de Ingeniería, Universidad de Lima, Perú

Martin Fidel Collao-Díaz, Research Professor, Facultad de Ingeniería, Universidad de Lima, Perú

Final Year Project (FYP) / Senior Design Project Competition sponsored by Tooling Tech Group

First Place

ID 249 Optimizing Computed Tomography (CT) Systems for Enhanced Security Screening Applications in Transportation Hubs and High-Security Areas

Fatma Rashid and Fatma Khamis, Senior Students, School of Industrial Engineering, Higher Colleges of Technology (HCT), UAE

Nader Santarisi, Associate Professor - Industrial Engineering at the Higher Colleges of Technology, Dubai Women's Campus, UAE

Lean Six Sigma Competition sponsored by Tooling Tech Group

First Place

ID 227 Envisioning P4.0 In Organisation X with Lean Six Sigma and The Shingo MODEL

Heng Li Ying, School of Business, Singapore University of Social Sciences, Singapore, Singapore

Tay Huay Ling, School of Business, Singapore University of Social Sciences, Singapore, Singapore1st

Second Place

ID 60 The Integration of Toyota Production System (TPS) and Lean Operations

Judith Nkuna, Department of Quality and Operations Management, Department of Engineering Management, University of Johannesburg South Africa

Andre Vermeulen, Post Graduate School Engineering Management, University of Johannesburg, Auckland Park, Johannesburg, Gauteng, South Africa

Jan-Harm C. Pretorius, Post Graduate School Engineering Management, University of Johannesburg, Auckland Park, Johannesburg, Gauteng, South Africa

ID 107 Application of new line balancing on effectiveness of Lean manufacturing in optimising production processes in an automotive exhaust manufacturing company

Saravanan Tanjong Tuan, Department of Manufacturing and Material Engineering, International Islamic University Malaysia, IIUM, Gombak, Selangor, Malaysia

Assoc Prof. Dr. Mohd Radzi Bin Haji Che Daud, Department of Manufacturing and Material Engineering, International Islamic University Malaysia, IIUM, 53100, Gombak, Selangor, Malaysia

Master Thesis Competition

First Place

ID 232 Current Advances in Heat Loss Modelling of Industrial Boilers

Khethukuthula Modiba and Daramy Vandi Von Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

Doctoral Dissertation Competition

First Place

ID 183 Energy Efficiency of an Innovative Solids Feeder for Dense Phase Pneumatic Conveying Systems

Adriano Gomes de Freitas, Industrial Academic Doctorate (DAI), Federal University of ABC (UFABC), Brazil

Ricardo Borges dos Santos, Zeppelin Systems GmbH, Graf-Zeppelin-Platz 1, 88045 Friedrichshafen, Germany

Luis Alberto Martinez Riascos, Energy Postgraduate Program, Federal University of ABC (UFABC), Brazil

Jose Eduardo Munive-Hernandez, Faculty of Engineering and Informatics, University of Bradford, West Yorkshire, United Kingdom

Shibo Kuang and Ruiping Zou, Laboratory for Simulation and Modelling of Particulate Systems (SIMPAS), Monash University, Australia

Aibing Yu, Laboratory for Simulation and Modelling of Particulate Systems (SIMPAS), Monash University, Australia

Second Place

ID 217 Principles of lean manufacturing techniques to bring continuous improvement in the plastic industry

Judith Nkuna, Department of Quality and Operations Management, Department of Engineering Management, University of Johannesburg South Africa

Andre Vermeulen, Post Graduate School Engineering Management, University of Johannesburg, Auckland Park, Johannesburg, Gauteng, South Africa

Jan-Harm C. Pretorius, Post Graduate School Engineering Management, University of Johannesburg, Auckland Park, Johannesburg, Gauteng, South Africa

Third Place

ID 143 Feasibility of lean manufacturing kaizen teams' approach to help the plastic manufacturing industry with continuous improvement

Judith Nkuna, Department of Quality and Operations Management, Department of Engineering Management, University of Johannesburg South Africa

Andre Vermeulen, Post Graduate School Engineering Management, University of Johannesburg, Auckland Park, Johannesburg, Gauteng, South Africa

Jan-Harm C. Pretorius, Post Graduate School Engineering Management, University of Johannesburg, Auckland Park, Johannesburg, Gauteng, South Africa

Graduate Poster Competition

First Place

ID 270 Navigating the Ethical Maze: Balancing Digital Resilience and Ethical Imperatives for Sustainable Business Practices in the Digital Age: A Multidimensional Framework

G.G. Udaya Priyasantha Rathnayake, University of Wollongong, Australia

Supply Chain and Logistics Competition

First Place

ID 230 Inventory Management Optimization Study Case: Reducing Costs Through Packaging Bag Supply Efficiency Using Root Cause Analysis Approach

Bonang Respati Satmoko, Undergraduate Program in Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia, Surakarta, Indonesia

Wahyudi Sutopo, Industrial Engineering and Techno-Economics Research Group, Professor, Department of Industrial Engineering, Universitas Sebelas, Maret, Surakarta, Indonesia, Surakarta, Indonesia

Second Place

ID 31 Pharmaceutical Manufacturing Industry Performance in Supply Chain Management through Efficiency on Supply Chain Process

Muhammad Shahzeb Khan, Senior Lecturer, Faculty of Business Management, Villa College, Maldives

Muhammad Faisal, Mohammad Ali Jinnah University, Karachi, Pakistan

Dr. Ahsan Jaleel, Faculty of Business Management

Third Place

ID 63 A Leagile Supply Chain Model for the Effective Mitigation of Sudden Risks

Towfique Rahman, UTS Business School, University of Technology Sydney, Sydney, Australia

Sanjoy Kumar Paul, UTS Business School, University of Technology Sydney, Sydney, Australia

ID 58 National Policies Evaluation of Sustainable Supply Chain of Automobile Industry Using MCDM Models

MohammadHossein Shaverdi, Master's Student in Public Policy, Department of Economics, Allameh Tabatabaei University, Tehran, Iran

Meysam Shaverdi, PhD Candidate in Supply Chain and Logistics, School of Accounting, Information Systems and Supply Chain, RMIT University, Melbourne, Australia

High School STEM Competition

First Place

ID 135 Research on a Movable Microcontroller-based Four-Legged Walking Robot System

Yeonju Lee and Shin Dong Ho, Student and Professor, My Paul School, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea

Jeongwon Kim, Student, Department of Economics, College of Economics, Nihon University, 3-2 Kanda-Misakicho, 1-chome, Chiyoda-ku, Tokyo, Japan

Second Place

ID 134 Research on Motion Tracking using Facial Features

Se In Jung and Shin Dong Ho, Graduate and Professor, My Paul School, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea
Jeongwon Kim, Student, Department of Economics, College of Economics, Nihon University, 3-2 Kanda-Misakicho, 1-chome, Chiyoda-ku, Tokyo, Japan

Third Place

ID 136 Research on Face Recognition System using Wavelet Analysis
Benny Choi and Shin Dong Ho, Student and Professor, My Paul School, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea
Jeongwon Kim, Student, Department of Economics, College of Economics, Nihon University, 3-2 Kanda-Misakicho, 1-chome, Chiyoda-ku, Tokyo, Japan

Best Track Paper Awards

Business Management Best Track Paper Award

ID 44 Relationship between textual characteristics of MD&A Sections in English Annual Securities Reports of Japanese Companies and Future ROE
Ran Murakami, Takaaki Kawabe, Ayuko Komura and Hirohisa Hirai, Department of Industrial Engineering and Management, Kanagawa University, Kanagawa, Japan

Construction Management Best Track Paper Award

ID 70 A Study of Investment Catalysts: Unraveling Determinants of Fixed Assets in the Construction Industry
S. L. Tulasi Devi, Associate Professor, School of Management, National Institute of Technology, Warangal (NITW), India
Shivam Azad, Research Scholar, School of Management, National Institute of Technology, Warangal (NITW), India
Abhishake Dutta, Post Graduate Engineer Trainee, L&T Construction, Mumbai, India

Decision Sciences Best Track Paper Award

ID 114 Generating Policy Alternatives for Decision Making: A Process Model, Behavioural Issues, and an Experiment
Raimo P. Hämmäläinen, Professor, Systems Analysis Laboratory, Aalto University, Finland
Tuomas J. Lahtinen, Doctor of Technology, Systems Analysis Laboratory, Aalto University, Finland
Kai Virtanen, Professor, Systems Analysis Laboratory, Aalto University, Finland

Digital Transformation Best Track Paper Award

ID 109 Digital Twin Framework of Manufacturing System Integrated with Renewables Based on Event-triggered Hybrid Scheduling
Zhean Shao, The University of Melbourne, Australia

Energy Best Track Paper Award

ID 221 Designing sustainable energy efficient buildings through passive strategies
Mehdi Gholami Rostam, PhD student, School of Engineering and Information Technology, University of New South Wales (UNSW), Australia
Dr. Alireza Abbasi, Senior Lecturer, School of Engineering and Information Technology, University of New South Wales (UNSW), Australia

Engineering Management Best Track Paper Award

ID 78 Digital Platform Business Model within the Model of SGE - System Generation Engineering: Definition and Classification in Cyber-Physical Systems
Albert Albers, Professor, Institute of Product Engineering (IPEK), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany
Carsten Hahn, Patrick Brecht and Ümüs Cetinkaya, Karlsruhe University of Applied Sciences, Institute of Applied Research (IAF), Karlsruhe, Germany
Felix Pfaff, Michael Schlegel and Maximilian Fischer, Institute of Product Engineering (IPEK), Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

ID 76 Improving Knowledge Transfers at Witzenmann GmbH through the Application of the InKTI – Interdepartmental Knowledge Transfer Improvement Method
Monika Klippert and Albert Albers, IPEK – Institute of Product Engineering, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

Dean Siebert and Hendrik Rust, Faculty of Management Science and Engineering, University of Applied Sciences (HKA), Karlsruhe, Germany
René Rösler, Research & Development, Witzenmann GmbH, Pforzheim, Germany

Entrepreneurship and Innovation Best Track Paper Award

ID 77 Analysis of the Integration of Monitoring Approaches Using Strategic Foresight in the Product Engineering Process
Carsten Thümmel, Miriam Kleinschrot, Stefan Eric Schwarz, Andreas Siebe and Albert Albers, Institute of Product Engineering (IPEK), Karlsruhe, Institute of Technology (KIT), 76131 Karlsruhe, Germany

ID 72 Demand Forecasting for Catering Bento by Machine Learning Using Automatic Estimation of Product Popularity
Koki Kitabayashi, Department of Industrial Engineering and Management, Graduate School of Engineering, Kanagawa University, Kanagawa, Japan
Hideki Katagiri, Department of Industrial Engineering and Management, Faculty of Engineering, Kanagawa University, Kanagawa, Japan

Healthcare Systems Best Track Paper Award

ID 127 Revitalizing Healthcare Finances: Empowering Teams for SMART Transformation Amidst Challenges
Gokhan Anil, M.D., Mayo Clinic Health System, Southwest Minnesota Region, Minnesota
Pawan Bhandari, Ph.D., Minnesota State University, Mankato, Minnesota
Joshua Nicolai, J.D., M.B.A, Mayo Clinic, Rochester, Minnesota

Industry 4.0 Best Track Paper Award

ID 126 Realizing Electrical Digital Twin (EDT) via Intelligent Substation (IS)
Ir. Ts. Noor Mohd Fadzli B Othman, Engineering Department, PETRONAS Group Technical Solutions (GTS), Kuala Lumpur, Malaysia
Ir. Ts. M Nazim B Hamid, Engineering Department, PETRONAS Group Technical Solutions (GTS), Kuala Lumpur, Malaysia
Ir. Salmey B A Halim, Engineering Department, PETRONAS Group Technical Solutions (GTS), Kuala Lumpur, Malaysia
Noor Ekhsan B M Isnain, Engineering Department, PETRONAS Group Technical Solutions (GTS), Kuala Lumpur, Malaysia

Inventory Management Best Track Paper Award

ID 105 Streamlining Inventory Management and Warehousing - An Action Research Case Study of Multiple Mass Rapid Transit (MRT) Upgrading Projects in Singapore
Chee Wai Meng and Tan Jing Han, School of Business, Logistics and Supply Chain Management Programme, Singapore University of Social Sciences, Singapore

Lean Six Sigma Best Track Paper Award

ID 55 Reducing Molding Sand Variation at a Job Shop Casting Facility
Kuldeep Agarwal and Ashley Folden-Ecker, Department of Automotive and Manufacturing Engineering Technology, Minnesota State University Mankato, Mankato, MN 56001, USA

Logistics Best Track Paper Award

ID 220 Driving Forces Shaping the Future of Urban Logistics: Insights from a Foresight Exercise in Singapore
Ei Myat Kay Khine, Centre for Applied Research, Singapore University of Social Sciences, Singapore
Seyed Mehdi Zahraei, School of Business, Singapore University of Social Sciences, Singapore
Sougotam Ghosh, School of Business, Singapore University of Social Sciences, Singapore

Maintenance and Reliability Best Track Paper Award

ID 93 Electric Drive Health Assessment
Pantaleon Su Lai Tiing, Suriatee Saikhol Rosli, Muhammad Fiqri Abdul Rahman and Mohd Faiz Abdul Hamid, Electrical Engineering Department, Group Technical Solutions of PETRONAS, Kuala Lumpur, Malaysia

Manufacturing Best Track Paper Award

ID 40 Studying and Troubleshooting Lubricity Test on Pressure Guidewire Proximal and Distal Coatings
Kuldeep Agarwal and Usama A. Khan, Department of Automotive and Manufacturing Engineering Technology, Minnesota State University Mankato, Mankato, MN 56001, USA

Project Management Best Track Paper Award

ID 83 Adoption of Agile Project Management: A Case Study in a Technology Service Company

Aquiles Nogueira, Master Student in the Department of School of Management, Federal University of Paraná, UFPR, School of Management PR, Curitiba, Brazil
Guilherme Francisco Frederico, Professor in the Department of School of Management, Federal University of Paraná, UFPR, School of Management, PR, Curitiba, Brazil

Production Engineering Best Track Paper Award

ID 231 Line Balancing and Investment Cost Analysis of Sewing Departement at PT XYZ using Ranked Position Weight Method
Bagus Susila, Undergraduate Program in Industrial Engineering Department, Faculty of Engineering Universitas Sebelas Maret Surakarta, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia
Wahyudi Sutopo, University Centre of Excellence for Electrical Energy Storage Technology, Department, Faculty of Engineering, Research Group, Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering, Universitas Sebelas Maret, Surakarta, Indonesia

Operations Management Best Track Paper Award

ID 103 Analysis of Equipment Failure in a Production Line of a Coal Fly Ash Plant
Asser Letsatsi Tau, Emmanuel Innocents Edoun, Charles Mbohwa and Anup Pradhan, Faculty of Engineering and the Built Environment, School of Mechanical Engineering and Industrial Engineering, Department of Quality and Operations Management, University of Johannesburg, 55 Beit St, Doornfontein, Johannesburg, 2028, South Africa

Service Engineering Best Track Paper Award

228 Simulation of Clinical Laboratory Process Improvement based on ISO 15189 Standard
Alexia Valery Bazán Rodríguez and Gabriela Noelí Tapia Alfaro, Universidad de Lima, Carrera de Ingeniería Industrial, Lima, Perú
José Antonio Taquía Gutiérrez, Universidad de Lima, Carrera de Ingeniería Industrial, Lima, Perú

Supply Chain Management Best Track Paper Award

ID 85 An Offline Digital Twin for Resilience and Supplier Reliability in Perishable Food Supply Chains
Pranav Sutar, Department of Production Engineering, National Institute of Technology Tiruchirappalli, Tiruchirappalli, Tamil Nadu 620015, India
Jessica Olivares-Aguila and Alejandro Vital-Soto, Department of Management Science, Shannon School of Business, Cape Breton University, Sydney, NS B1M 1A2, Canada

Sustainability and Green Systems Best Track Paper Award

ID 133 Designing an Integrated Supply Chain for Biodiesel Production in the UAE
Afra Najeed Safar, Fatima Ghubar Alshamsi, Mouza Ojail Alketbi, Nada Abdulkhakeem Bushlaibi and Safeya Saeed AlMaazmi, Industrial Engineering Technology Department, Higher Colleges of Technology, UAE
Yousef Abu Nahleh, Assistant Professors, Industrial Engineering Technology Department, Higher Colleges of Technology, UAE

Sustainability in Supply Chain Best Track Paper Award

ID 98 Usage Awareness of Remanufactured Products: A Case Study from the Kingdom of Saudi Arabia
Murtadha Aldoukhi, Assistant Professor, Industrial Engineering Department, Al Yamamah University, Riyadh, Kingdom of Saudi Arabia