

# International Joint Conference on Industrial Engineering and Operations Management

June 28-30, 2023 – Lusófona University – Lisbon, Portugal

# Wednesday, June 28

13:00 – 14:00 **Registration** 14:00 – 14:30 **Open session** Place: Auditorium Agostinho da Silva

14:30 – 15:30 Bidanda Bopaya (University of Pittsburgh, USA)

Place: Auditorium Agostinho da Silva

15:30 - 16:00 Coffee break

16:00 – 17:00 **Session 1** Room D.0.1.: 37660, 37791, 37671, 37732 (Session Chair Pedro Carmona) Room D.1.10.: 37672, 37679, 37684 (Session Chair Miguel Vieira) Room D.1.11.: 37689, 37692, 37842, 37801 (Session Chair Diana Jorge)

# Thursday, June 29

09:00 – 10:00 **Session 2** Room D.0.1.: 37757, 37765, 37767, 37770 (Session Chair Pedro Marques) Room D.1.10.: 37774, 37775, 37781, 37782 (Session Chair Ricardo Mateus) Room D.1.11.: 37797, 37811, 37814, 37819 (Session Chair Pedro Carmona) Room D.1.12.: 37779, 37793, 37688, 37807 (Session Chair Francisco Pinto)

# 10:00 - 10:30 **Coffee break**

10:30 – 11:30 Josefa Mula Bru (UPV, Spain)

Place: Auditorium Agostinho da Silva

### 11:30 - 12:30 Session 3

Room D.0.1.: 37687, 37690, 37691, 37693 (Session Chair Pedro Marques) Room D.1.10.: 37707, 37728, 37729, 37736 (Session Chair Ricardo Mateus) Room D.1.11.: 37739, 37743, 37762, 37766 (Session Chair Pedro Carmona) Room D.1.12.: 37731, 37772, 37755, 37785 (Session Chair Francisco Pinto)

### 12:30 - 14:00 Light lunch

## 14:00 – 15:00 Fosso Wamba Samuel (TBS Education, France)

Place: Auditorium Agostinho da Silva

# 15:00 – 16:00 Special Session – Open Access Journals: Advantages and Risks

Round Table: João Reis, Francisco Gaudêncio, TBD Place: Auditorium Agostinho da Silva

# 16:00 - 16:30 Coffee break

#### 16:30 - 17:30 Session 4

Room D.0.1.: 37820, 37828, 37829, 37697 (Session Chair Francisco Pinto) Room D.1.10.: 37708, 37716, 37719, 37840 (Session Chair Miguel Vieira) Room D.1.11.: 37746, 37748, 37730, 37694 (Session Chair Diana Jorge)

19:30/22:00 – **Social Dinner**\* (Bar closes at midnight) Mensagem Restaurant. Address: Rua da Oliveira ao Carmo, 8, 1200-309, Lisbon From 7.30 pm to 10 pm. \*Only the dinner is included in the conference

# Friday, June 30

### 09:00 - 10:00 Session 5

Room D.0.1.: 37726, 37740, 37734 (Session Chair Luis Malheiro) Room D.1.10.: 37701, 37709, 37676 (Session Chair Adriane Cavalieri) Room D.1.11.: 37667, 37678, 37686 (Session Chair Francisco Gaudêncio) Room D.1.12.: 37710, 37825, 37823, 37703 (Session Chair Maria Silene Alexandre Leite)

### 10:00 - 11:00 Session 6

Room D.0.1.: 37830, 37837, 37839, 37666<sup>1</sup> (Session Chair Luis Malheiro) Room D.1.10.: 37798, 37802, 37810, 37816 (Session Chair Adriane Cavalieri) Room D.1.11.: 37834, 37836, 37718, 37827 (Session Chair Francisco Gaudêncio) Room D.1.12.: 37771, 37776, 37790, 37806 (Session Chair Raphael Vidal)

### 11:00 - 11:30 Coffee break

### 11:30 – 12:30 Keynote Douglas Kent (ASCM, USA)

Place: Auditorium Agostinho da Silva

# 12:30 – 13:00 Awards & Closing Session

<sup>&</sup>lt;sup>1</sup> Presentation from 11am forward

Code	Title	Area	<b>First Author</b>	Institution	Country
37660	Blockchain application for the supply chain optimization	02.Circular Economy and Sustainable Operations and Supply Chain Management	Pedro Marques	Lusófona University	Portugal
37666	Industrial production and economic growth since the ë50s: analysing the Portuguese case using kaldorian and causality approaches	08.Information Systems in Operations	Ricardo Ferraz	Lusófona University	Portugal
37667	Procedural Switching Costs: Scaling using the Item Response Theory	02.Circular Economy and Sustainable Operations and Supply Chain Management	Eduardo Tramontin Castanha	Universidade Federal de Santa Catarina - UFSC	Brazil
37671	Suicide prediction in workers using Neural Networks and stress-related factors	09.Innovation, Product and Service Development	Daniel Alejandro Barajas Aranda	Universidad Autonoma de Aguascalientes	Mexico
37672	Method to improve Supplier Control aiming at Operational Excellence	03.Digital Transformation and Data Science	Jose Cristiano Pereira	UCP	Brazil
37676	Social-environmental effectiveness of IoT: structure and a proposal of an assessment tool	10.Last Mile Delivery Optimization	Adriane Monteiro Cavalieri Barbosa	Instituto Nacional de Tecnologia (MCTI)	Brazil
37678	Circular and Sustainable productive processes: An approach to the practices adopted in the Industrial Pole of Manaus- AM	10.Last Mile Delivery Optimization	Thiago Azevedo Conte de Melo	Universidade Federal do Amazonas	
37679	Diagnosis Model Proposal for Improvement Opportunity in Project Management: An approach from the perspective of lean waste	01.General Topics of Production and Industrial Engineering	Marcelo Silva Pereira	Eldorado Research Institute	Brazil
37684	Analysis of Dentists Allocation in Health Care Centers: A Case of Qatar	12.Logistics and Supply Chain Management	Reem Hassan A Alabdulmalik	College of Engineering, Qatar University	Qatar

37686	Using robust approach concept to solve the production planning problem in manufacturing systems	01.General Topics of Production and Industrial Engineering	Marcelo Carneiro GonÁalves	Pontifical Catholic University of Paraná	Brazil
37687	Predicting project sales prices using machine learning techniques: a case study in a project consultancy	04.Healthcare Management	Marcelo Carneiro GonÁalves	Pontifical Catholic University of Paraná	Brazil
37688	Digital technologies and Lean 4.0: Integration, Benefits and Areas of Research	01.General Topics of Production and Industrial Engineering	Giovanna Bueno Marcondes	Universidade Tecnológica Federal do Paraná	Brazil
37689	Continuous improvement related performance: a bibliometric study and content analysis	03.Digital Transformation and Data Science	Giovanni Cláudio Pinto Conde	Federal University of São Carlos, UFSCar	Brazil
37690	A decomposition scheme in production planning based on linear programming that incorporates the concept of a dynamic planning environment	01.General Topics of Production and Industrial Engineering	Izamara Cristina Palheta Dias	Pontifical Catholic University of Paran√°	Brazil
37691	5g Technology And The Economic Impact On Industry 4.0 (A Microeconomic Analysis)	05.Human development and digital training for operation management in emergencies	Francisco Andrade	Universidade Candido Mendes UCAM RJ BR	Brazil
37692	Financial multiobjective optimization of hybrid PV-wind generation with energy storage systems	08.Information Systems in Operations	Arthur Leandro Guerra Pires	Universidade Federal da Paraíba	
37693	Risk Management in the Context of Industry 5.0	09.Innovation, Product and Service Development	Vitor Hugo dos Santos Filho	Universidade Tecnológica Federal do Paraná - UTFPR/PG	Brazil
37694	Selective Openness in the Additive Manufacturing Industry: An Exploratory Modeling Analysis	06.Humanitarian Operations Management	Pedro Nascimento de Lima	RAND Corporation	

37697	Environmental and financial optimization: Hybrid generation (wind-PV) with battery energy storage	10.Last Mile Delivery Optimization	Arthur Leandro Guerra Pires	Universidade Federal da Paraiba	
37701	Project management in hospital environments: a 5-year systematic literature review	12.Logistics and Supply Chain Management	Erik Teixeira Lopes	University of Minho	Brazil
37703	Preparing Human Factors for Digital Transformation: A Framework for Innovations in Industrial Engineering Education	11. Production Engineering Education	Carolina Maia dos Santos	CEFET/RJ	Brazil
37707	Strategic Thinking and Mental Models: Comparison Between Brazilian and Spanish Students - Implications for the Teaching- Learning Process	11.Lean and Agile Operations	Flávio Bressan	BREMAT Institute for Strategic Thinking & Leadership	Brazil
37708	Data Driven to Improve Root Cause Analysis: A Bibliometric Analysis	03.Digital Transformation and Data Science	Juan Pablo Carrión Salazar	Universidad Católica del Norte	
37709	BIM critical factors-based framework towards digitalization of construction in the public sector	13.Operations in the Public Sector	Carlos Alejandro Diaz Schery	Pontifical Catholic University of Rio de Janeiro	Brazil
37710	Factors that influence the mitigation of supply chain operational risks in the retail sector	12.Logistics and Supply Chain Management	Maria Silene Alexandre Leite	ABEPRO	Brazil
37716	Pathways to achieve resilience in rare earth magnets supply chain	02.Circular Economy and Sustainable Operations and Supply Chain Management	Jéssica Prats Raspini	Federal University of Santa Catarina	Brazil
37718	Analysis of the ANEEL Consumer Satisfaction Index through the application of Item Response Theory	01.General Topics of Production and Industrial Engineering	Anny Key de Souza Mendonça	Federal University of Santa Catarina - UFSC	Brazil
37719	Economic analysis of the wind energy generation: overview and current perspectives	02.Circular Economy and Sustainable Operations and Supply Chain Management	Luiz Célio Souza Rocha	Federal Institute of Education, Science and Technology of the	Brazil

				(IFNMG)	
37726	An environmental analytical model to assess the decarbonization potential of Municipal Solid Waste-based hydrogen production routes	02.Circular Economy and Sustainable Operations and Supply Chain Management	Francesco Facchini	Polytechnic University of Bari	Brazil
37728	Strategic guidelines for sustainable procurement of infrastructure capital projects in the oil and gas industry	02.Circular Economy and Sustainable Operations and Supply Chain Management	Luciana Salvatore	Pontifical Catholic University of Rio de Janeiro	
37729	The application of an improvement opportunity model in the reduction of the response time of users from the User Trial program	11.Lean and Agile Operations	Matheus Venturini de Toledo	Eldorado Research Institute	
37731	Application of the Sugeno-Takagi-Kang fuzzy logic for demand forecasting in the supply chain, a Fuzzy temporary series forecast model (FTS) proposal	12.Logistics and Supply Chain Management	Francisco Trejo	Universidad Anahuac Mexico	Mexico
37732	Bullwhip effect in the supply chain: an exploratory study in a Brazilian company	12.Logistics and Supply Chain Management	Isabela Maganha	Universidade Federal de Itajubá	Brazil
37734	Mapping the interlinkages between Humanitarian Operations and Sustainable Development Goals through literature review	06.Humanitarian Operations Management	Maria Angélica Gomes da Silva	Pontifical Catholic University of Rio de Janeiro	Brazil
37736	Circular Economy Investments: A Portfolio Selection Framework	02.Circular Economy and Sustainable Operations and Supply Chain Management	Guilherme Candia Donat	Universidade Federal do Rio Grande do Sul	Brazil
37739	Simulation Model of Natural Gas Demand for Contracting Decision in High Thermal Dispatch Scenarios	12.Logistics and Supply Chain Management	Rebeca da Silva Oliveira Farias	Pontifical Catholic University of Rio de Janeiro	Brazil

Northern Minas Gerais

37740	Human Performance of Manual Sorting: a Stochastic Analytical Model	01.General Topics of Production and Industrial Engineering	Andrea Lucchese	Polytechnic University of Bari	Italy
37743	Measurement of performance in SMEs: Bibliometric analysis (2015 - 2021)	01.General Topics of Production and Industrial Engineering	Juan José Analuisa	Escuela Politécnica Nacional	
37746	Quality evaluation of the public policy São Paulo State Network of Technological Incubators (RPITEc)	13.Operations in the Public Sector	Gabriela Dias Viana	Blue3 Investimentos	Brazil
37748	Quality measurement of the public policy São Paulo State Technological Parks System (SPTEc)	13.Operations in the Public Sector	Paulo Renato Pakes	Universidade Federal de São Carlos	Brazil
37755	Can the value chain of mining tires be circular?: The case of Chilean Mines	02.Circular Economy and Sustainable Operations and Supply Chain Management	Isabel Margarita Ordenes Sarabia	Universidad Católica del Norte	Chile
37757	Machine Learning Applied to Industrial Assembly Lines: a Bibliometric Study	07.Industry 4.0 and Cyber physical systems	Diego Cesar Florencio de Queiroz	University of Brasilia	Brazil
37762	Artificial Intelligence Applications for Defect Detections in Industrial Processes: a Bibliometric Analysis	07.Industry 4.0 and Cyber physical systems	Diogo Gomes de Sousa Bezerra	University of Brasilia	Brazil
37765	Project Management Office and Teaching and Learning Center: A Comparative Literature Review	21.Teaching and Learning in Industrial Engineering and Operations Management	Eric Alberto Quinaglia	Universidade de São Paulo - USP	Brazil
37766	Improving the management and allocation of maintenance and cleaning of a university campus infrastructure using a discrete event simulation model	14.Operations Research	César A. Corrales	Pontificia Universidad Católica del Perú	Peru

37767	Main musculoskeletal disorders in virtual modality students	01.General Topics of Production and Industrial Engineering	César A. Corrales	Pontificia Universidad Católica del Perú	Peru
37770	PMS-SMEs network: a framework to measure the performance of SMEs in a collaborative context	01.General Topics of Production and Industrial Engineering	Ximena Rojas-Lema	Escuela PolitÈcnica Nacional	Ecuador
37771	Use of Transportation Problem in a water company	14.Operations Research	Pamela Adelino Ramos	UFPB	Brazil
37772	Investigation of operational parameters that affect the use of drones in goods? stock count process: Evidence from experimental results	12.Logistics and Supply Chain Management	Nikolaos Christoforos Thomaidis	University of the Aegean	Greece
37774	Asset prioritization for predictive maintenance in the context of Industry 4.0: A group multicriteria approach	15.Operations Strategy Planning, Scheduling and Control	Jaqueline Alves do Nascimento	Pontifical Catholic University of Rio de Janeiro	
37775	Barriers, enablers and base Industry 4.0 technologies of digital transformation in supply chains: an inter-country comparison	07.Industry 4.0 and Cyber physical systems	Lia Denize Piovesan	Pontifical Catholic University of Rio de Janeiro	Brazil
37776	Lean Green Tendency: A Systematic Literature Review	11.Lean and Agile Operations	Cláudia Margarida Ramos de Sousa e Silva	Águeda School of Technology and Management (ESTGA- UA)	Portugal
37779	Analysis of Gender and Programming Experience as Mediators between Attitudes toward Programming and Computational Thinking among Engineering Students	21.Teaching and Learning in Industrial Engineering and Operations Management	Isotilia Costa Melo	Universidad Católica del Norte (UCN)	Chile
37781	Implications of COVID-19 on the use of public transport in São Paulo, Brazil	23.Transport System Engineering	Cecília Aparecida Pereira	Federal University of Itajubá	Brazil

37782	Big Data Analytics to identify failures in production machines and propose a preventive maintenance plan	01.General Topics of Production and Industrial Engineering	Valdir H. Cardoso	FEI University	Brazil
37785	Weights definition procedure for Sustainability Indicators in the Swine Supply Chain	02.Circular Economy and Sustainable Operations and Supply Chain Management	Paulo Sérgio Lima Pereira Afonso	Universidade do Minho	Portugal
37790	The implementation of Lean Healthcare six sigma in a Public Hospital	04.Healthcare Management	Cynara Mendonca Moreira Tinoco	Goiás Federal University	Brazil
37791	Systematic literature review on reverse logistics of waste electrical and electronic equipment: recommendations and opportunities for future research	02.Circular Economy and Sustainable Operations and Supply Chain Management	Flávia Gontijo Cunha	Federal University of Itajub	Brazil
37793	Investigating and measuring small and medium enterprises (SMEs) performance in the context of digital transformation (DT): An approach encompassing the triple bottom line (TBL) of sustainability	03.Digital Transformation and Data Science	Isotilia Costa Melo	Universidad Católica del Norte (UCN)	Chile
37797	Efficiency Analysis of Classes from an Engineering Course in South America	21.Teaching and Learning in Industrial Engineering and Operations Management	Paulo Nocera Alves Júnior	Universidad Católica del Norte (UCN)	Brazil
37798	Operations strategies in the recruitment process pre-exposure prophylaxis to HIV	04.Healthcare Management	Carlos Jefferson de Melo Santos	PrEPara Salvador - UFBA	Brazil
37801	Testing the ?Wheel of Slavery? theoretical framework in Brazilian supply chains	20.Supply Chain Risk Models and Resilience	Rodrigo Martins Baptista	Universidade Presbiteriana Mackenzie	Brazil

37802	Critical factors for the implementation of integrated management systems: an analysis using AHP	22.Total Quality Management	Isabela Maganha	Universidade Federal de Itajubá	Brazil
37806	A proposal for the integration of the circular economy as an objective of product portfolio management	02.Circular Economy and Sustainable Operations and Supply Chain Management	Daniel Jugend	São Paulo State University - UNESP	Brazil
37807	Edtechs in the context of the industry in digital transformation: main research directions	05.Human development and digital training for operation management in emergencies	Jocasta Oliveira Maciel	Universidade Tecnológica Federal do Paraná	Brazil
37810	Proposal for productivity indicators through the Manufacturing Execution Systems	08.Information Systems in Operations	Carlos Jefferson de Melo Santos	PrEPara Salvador - UFBA	Brazil
37811	Evaluation of the implementation of recycling, reuse, remanufacturing, and reduction in the reverse chain of Brazilian WEEE: a survey study in electronics companies	02.Circular Economy and Sustainable Operations and Supply Chain Management	Geraldo Cardoso de Oliveira Neto	FEI University, São Paulo, Brazil	
37814	Design of a controller by pole placement applied to a production and inventory system	01.General Topics of Production and Industrial Engineering	Veronica Olvera Rodriguez	Universidad Nacional Autonoma de Mexico	Mexico
37816	Industry 4.0: impact on productivity, ergonomic aspects and workers' mental health, a literature review	01.General Topics of Production and Industrial Engineering	Juliana Bezerra Gomes de Pinho Pessoa	University of Minho	Brazil
37819	Analysis of performance indicators in orders pickup: physical volume vs human factor	17.Retail Operations	Cynara Mendonca Moreira Tinoco	Gois Federal University	Brazil

37820	Skills for transmitting concepts related to entrepreneurship: measurement using the item response theory	21.Teaching and Learning in Industrial Engineering and Operations Management	Thayanne alves ferreira	Universidade Estadual do Maranhão	Brazil
37823	An analysis of the guidelines for training managers to improve their Industry 4.0 knowledge considering four theories of administration	07.Industry 4.0 and Cyber physical systems	Gustavo Tietz Cazeri	UNICAMP - State University of Campinas	Brazil
37825	Risk management and decision making in supply chains	12. Logistics and Supply Chain Management	Maria Silene Alexandre Leite	ABEPRO	Brazil
37827	On Resilience and Mental Models: a Proposed Theoretical Analysis	05.Human development and digital training for operation management in emergencies	Flávio Bressan	BREMAT Institute for Strategic Thinking & Leadership	Brazil
37828	Business Process Management and Digital Information and Communication Technologies in Public Sector	13.Operations in the Public Sector	Vitor da Silva Palacios	UNESP	Brazil
37829	Economic risk prevention model for Micro and Small Enterprises	09.Innovation, Product and Service Development	Jesus Raymundo Rivera Aguilera	Pontifícia Universidade Católica do Rio de Janeiro	Brazil
37830	Analysis of a logistics process between a food service distributor and a fast-food chain	12.Logistics and Supply Chain Management	Silmara Alexandra da Silva Vicente	Universidade Presbiteriana Mackenzie	Brazil
37834	Multicriteria decision for electrified vehicles selection using analytical hierarchy process method	14. Operations Research	Angelo Marcio Oliveira Sant'Anna	UFBA	Brazil
37836	Process monitoring applied to performance indicators of manufacturing process	22. Total Quality Management	Angelo Marcio Oliveira Sant'Anna	UFBA	Brazil

37837	Design of a corporate training academy - The case study of a pharmaceutical company	05.Human development and digital training for operation management in emergencies	Albuquerque	Lusófona University	Portugal
37839	Research on Potential Usage of Residual Biomass in Marine Ports	02.Circular Economy and Sustainable Operations and Supply Chain Management	Margarita Matias Robaina	University of Aveiro	Portugal
37840	An approach to the design of resilient biomass supply chain using discrete event simulation	02.Circular Economy and Sustainable Operations and Supply Chain Management	Miguel Vieira	Lusófona University	Portugal
37842	Investigation of a Competitive Transport Market Considering Demand Uncertainty and Risk Attitude of Shipping Companies	12.Logistics and Supply Chain Management	Hossein Zolfagharinia	Toronto Metropolitan university	Canada