

5th South American International Conference on Industrial Engineering and Operations Management

Bogota, Colombia

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Venue: Doubletree by Hilton

ORGANIZER



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INTERNATIONAL**

May 7–9, 2024

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IEOM Society

"Achieving and Sustaining Operational Excellence"

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Industrial Engineering and Operations Management Society International

IEOM Society International, a 501(c)(3) non-profit organization, 21411 Civic Center Dr., Suite 205, Southfield, Michigan 48076, USA, Phone: 1-248-450-5660, Email: info@ieomsociety.org

Welcome to the 5th South American International Conference on Industrial Engineering and Operations Management, Bogota, Colombia

Dear Conference Attendees:

On behalf of the IEOM Society International, we would like to welcome you to the 5th South American International Conference on Industrial Engineering and Operations Management, Bogota, Colombia, May 7-9, 2024, hosted by Fundación Universitaria Internacional De La Rioja (UNIR), Bogotá, Colombia, Universidad Católica de Colombia and Institucion Universitaria Colegios de Colombia (UNICOC). The Venue is Doubletree by Hilton Bogoa. This unique international conference provides a forum for academics, researchers, and practitioners from many industries to exchange ideas and share recent developments in the fields of industrial engineering and operations management. This diverse international event provides an opportunity to collaborate and advance the theory and practice of major trends in industrial engineering and operations management. There were more than 600 papers/abstracts submitted from 33 countries. After a thorough peer-review process, more than 200 have been accepted for presentation and publication. The program includes many cutting-edge topics of industrial engineering and operations management.

This conference will address many of the issues concerning continuous improvement for quality and service. Our keynote speakers will address some of these issues:

- Flor Nancy Díaz Piraquive, Rectora, Fundación Universitaria Internacional de La Rioja (UNIR), Bogota, Colombia Lean Six Sigma Competition
- Dr. Juan Sebastian Sánchez, Professor of Industrial Engineering, Universidad Católica de Colombia and Universidad de Los Andes, Bogota, Colombia
- Dr. Javier Arturo Moreno Carvajal, Dean, School of Engineering, Institución Universitaria Colegios de Colombia – UNICOC, Bogota, D.C., Capital District, Colombia
- Dr. Luis Rabelo, Professor, Department of Industrial Engineering & Management Systems, University of Central Florida, Orlando, FL, USA
- Jesús María Velásquez-Bermúdez, Founder and Chief Scientific Officer, CSO, Hypothalamus Artificial Intelligence Inc. (HAI AI), Tabio, Cundinamarca, Colombia
- Dr. Miguel Ángel Gómez Martínez, Research Professor, Departamento de ingeniería, Universidad de Guanajuato, Guanajuato, Mexico
- Dr. Wilmer Garzón Alfonso, Full Professor in the Computer Department, Director of Data Science Master Program, Escuela Colombiana de Ingeniería, Bogotá, Colombia
- German Torres Hernández, MSc Ing. Industrial – MSc en Analytics & AI, Lean Six Sigma Black Belt – Certified RFID Supply Chain Manager, Auditor Líder ISO 9001, Gerente de Transformación Digital – Consultor Senior Digital Supply Chain
- Dr. Luis Gabriel Marín Collazos, Profesor Planta Temporal, Departamento de Electrónica, Facultad de Ingeniería, Bogotá, D.C Colombia
- Ximena Córdova Vallejo, PhD, Profesora, Colegio de Ciencias e Ingenierías, Universidad San Francisco de Quito, Quito, Ecuador
- Dr. Eddy Morris, Director de Educación Ejecutiva ESAN, Director de la Maestría en Dirección de TI-Director de la Maestría en Project Management, ESAN, Peru
- Dr. Julián Arellana, Dean, College of Engineering & Associate Prof., Dept. of Civil and Environmental Engineering, Universidad del Norte, Barranquilla, Colombia
- Arvey Alfonso Granada Calderon, Operations Manager, La Unión Coffee Farm, Pereira, Risaralda, Colombia Quality, Reliability and Maintenance
- Dr. Mauricio Becerra Fernandez, Director of the Industrial Engineering Program, Director of the Master in Smart and Sustainable Cities, Escuela de Ingeniería, Ciencia y Tecnología, Universidad del Rosario, Bogota, Colombia
- Dr. Nubia Milena Velasco Rodríguez, Director of Doctorate in Administration, Master of Research in Administration, Universidad de los Andes, Bogotá, Colombia
- Dr. Ing. Adriana Esguerra Arce, Docente, Directora del Centro de Estudios en Gestión de Tecnología e Innovación, Directora del Grupo de Investigación CIMSER, Decanatura de Ingeniería Industrial, Escuela Colombiana de Ingeniería Julio Garavito, Bogotá, D.C., Colombia
- Dr. Jorge Andrés Vivares Vergara, Research Professor, Universidad Nacional Abierta y a Distancia (UNAD), Bogotá, Colombia
- Dr. William J. Guerrero, Associate Professor, Head of the Research Group on Logistic Systems and Head of the IT and Process Optimization Department, Universidad de la Sabana, Bogota, D.C., Capital District, Colombia
- Mohammad Islam, Associate Director, Optum – United Healthcare Inc., New Jersey, United States of America
- Rafael Forero Vargas, Food Safety & Quality Manager Colombia, Rich's Product Corporation, Bogotá, Colombia

The conference has plenaries addressing Global Engineering Education, Global Industry Solutions, Global Supply Chain and Logistics, Global Business Management and Project Management, and Global Lean Six Sigma and Operations Excellence. Additionally, it includes four panel sessions covering Women in Industry and Academia, Industrial Engineering and Operations Management Education and Curriculum Improvement, Healthcare Improvement, and a Diversity & Inclusion Panel sponsored by Ford Motor Company. The conference further enriches the experience with four workshops focused on enhancing student learning and assessment, delving into Six Sigma methodologies, exploring Toyota KATA practices, and delving into project management strategies. These diverse sessions and workshops collectively contribute significant value to attendees, fostering knowledge exchange and professional development.

The IEOM Society extends its appreciation to the conference chairs, program chairs and technical chairs. The IEOM Society also expresses its sincere thanks to our sponsors, university partners, organizational collaborators, exhibitors, authors, reviewers, keynote speakers, panelists, track chairs, advisors, the local committee, and the numerous volunteers whose dedicated contributions of time and talent have played a pivotal role in ensuring the resounding success of this distinctive international conference.

Wishing you a wonderful and enriching experience at the conference!

				
<p>Dr. Johanna Trujillo Díaz Coordinator of Research Fundación Universitaria Internacional De La Rioja (UNIR) Bogotá, Colombia</p>	<p>Professor Jaime Díaz Ortiz Dean, Faculty of Engineering Universidad Católica de Colombia Bogota, Colombia</p>	<p>Dr. Javier Arturo Moreno Carvajal Dean, School of Engineering Institución Universitaria Colegios de Colombia – UNICOC Bogota, Colombia</p>	<p>Dr. Ahad Ali Conference Co-Chair Associate Professor and Director of IE Program, Lawrence Tech Univ., USA Executive Director, IEOM</p>	<p>Prof. Don Reimer Program Co-Chair Chief Operating Officer IEOM Society International Southfield, Michigan, USA</p>

Keynote Speakers

Tuesday, May 7, 2024

Conference Welcome Addresses and Opening: Tuesday, May 7, 2024, 10:00 – 10:30 am



Dra. Flor Nancy Díaz Piraquive
Rectora
Fundación Universitaria Internacional de La Rioja (UNIR)
Bogota, Colombia

Doctor in Computer Engineering, Information and Knowledge Society from the Pontifical University of Salamanca. Diploma of Advanced Studies (DEA) in Knowledge Management Research, Intellectual Capital and Corporate Social Responsibility. Specialist in Project Preparation and Development, as well as in Information Systems Project Management from the Universidad del Rosario. Diploma in Telecommunications Management, Management of Research Projects in Science, Technology and Innovation and in Bibliometrics. Economist from the Catholic University of Colombia.

Academically, she is the Rector of the International University Foundation of La Rioja UNIR, she has held management positions such as: Rector, Academic Vice-Rector, Research Vice-Rector, Academic Planning, Financial – Administrative Management and Quality Management among others. She has served as Visiting Professor at different national and international universities. She has been a main teacher at the universities of

Rosario, EAN, América, Francisco José de Caldas District, Nariño, Mariana, UPTC and Católica de Colombia among others. She has supported the ESTIC School of the Colombian National Police in teaching and research. She has received academic and business recognitions: Cun Laude, Sapiens Research-Direction of the Best Research Groups, Academic Excellence, Research Excellence and a Whole Life Project, among the most important.

Professionally, she has developed in public and private entities, nationally and internationally in the telecommunications, construction and infrastructure, ICT services, and industrial sectors. Her work as a management and organizational consultant stands out in different areas: Project Management, Knowledge Management, Business Models, Strategic Planning, Management Indicators, Quality, Service Audit and Change Management in companies that provide infrastructure services and that involve the use and appropriation of Information and Communications Technologies ICT.

As a Researcher she has worked in different lines, among which IT Project Management, Innovation Management, Knowledge Management, Comprehensive Management and Dynamics of Business Organizations stand out. She has been Director of the Strategy, Creativity and Innovation Research Groups – GIECI and Business Management and Innovation Management – GEGI. She has been a leader of research hotbeds in Knowledge Management for the Management of Organizations and Management of Organizational Changes.

Additionally, she has written books on formulation, evaluation, project management and knowledge management, as well as a good number of scientific publications in high-impact indexed journals related to business and organizational management. She leads, as principal researcher, projects in cooperation with other universities and companies in the Services, Construction and Infrastructure, Industrial and Health sectors, as a cooperation strategy for the strengthening and positioning of research. This has helped it to be categorized in Minciencias.

Opening Keynote: Tuesday, May 7, 2024, 10:30 – 11:00 am



Dr. Juan Sebastian Sánchez
Professor, Department of Industrial Engineering
Universidad Católica de Colombia and Universidad de Los Andes
Bogota, Colombia

Professor Sánchez-Gómez is a biomedical engineer, lawyer, magister in Education, magister in Public Policy, and a doctoral student in Industrial and Systems Engineering at Universidad de Los Andes. He has worked as a professor of civil and telematics engineering at the Universidad Distrital, professor of Industrial engineering at the Universidad El Bosque, professor of Environmental engineering at the Universidad de Cundinamarca and pedagogue of educational innovations at the Center for Innovation in Technology and Education (ConectaTE) at the Universidad de Los Andes. He has experience in research and project management in education and innovation with ICT, and he has certificates in the English, Portuguese and French languages. He has been a designer of courses and educational programs, leader of national (CNA) and international accreditation (ABET), pedagogue, and teacher trainer in secondary education. Actually, he is a professor of industrial engineering at the Universidad Sergio Arboleda and a professor of Systems engineering at the Universidad de Los Andes.

Keynote: Tuesday, May 7, 2024, 11:00 – 11:30 am



Dr. Javier Arturo Moreno Carvajal
Dean, School of Engineering
Institución Universitaria Colegios de Colombia – UNICOC
Bogota, D.C., Capital District, Colombia

The conference will be in the area of innovation applied to OSH with the conference “Determination of thermal stress in welders with Infrared Thermography”.

Industrial Engineer and Master in Industrial Engineering from Pontificia Universidad Javeriana (PUJ), HSEQ Internal Auditor, with studies in Ergonomics and Human Factors at Harvard University. He has worked on ergonomics

projects with the Center for Ergonomics Studies at PUJ and has been a professor of Occupational Health and Safety and Ergonomics at the Sabana, Santo Tomás and Catholic Universities. He has worked in quality and process control and in management positions in different companies and Higher Education Institutions. He is currently linked as Dean of the School of Engineering at the Institución Universitaria Colegios de Colombia – Unicoc and is the president of the COPASST of this Institution.

Keynote: Tuesday, May 7, 2024, 11:30 am – 12:00 pm

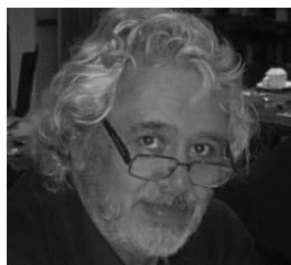


Dr. Luis Rabelo
Professor
Department of Industrial Engineering & Management Systems
University of Central Florida
Orlando, FL, USA

Dr. Luis Rabelo received the BS in Electro-Mechanical Engineer from the Technological University of Panama in 1983, an MS in Electrical Engineering from the Florida Institute of Technology in 1987 Master's and Doctorate in Engineering Management from the University of Missouri. He was a Postdoc at the University of Missouri in Nuclear Engineering. Dr. Rabelo received a dual MS in Systems and Management from the Massachusetts Institute of Technology. He has worked for the Advanced Technology Group (Goodrich) and Honeywell Laboratories. Dr. Rabelo was a NASA Fellow from 2002 to 2005, and a Project Manager at NASA from 2009 to 2011. He is currently Professor in the Industrial Engineering and Management Systems Department at UCF. He is also the Undergraduate Coordinator. He has written more than 300 articles and a book in Artificial Intelligence. He has been

the principal advisor for 39 Master's students and 29 PhDs. He received the award for the Best Scientific Article of the Year 2004 from the Society of Automotive Engineers, received the distinction "ONE NASA" in 2006. He was the recipient of the Fulbright Distinction in 2008. In November 2008, he received the honor of the Technological University of Panama (UTP) of being the 2008 Distinguished Alumni. In 2011, he was the Henaac Award Winner in Education. In 2013 and 2018, he received the Forest R. McFarland Award from the Society of Automotive Engineering (SAE). Lately, he received the SAE Russell S. Springer Award for his article on the modeling of space operations systems in 2017.

Keynote: Tuesday, May 7, 2024, 12:00 – 12:30 pm



Jesús María Velásquez-Bermúdez
Founder and Chief Scientific Officer, CSO
Hypothalamus Artificial Intelligence Inc. (HAI Ai)
Tabio, Cundinamarca, Colombia

His professional life begins in 1970 when worked as a Computer Programmer (17 years old). First Professional Optimization Model (20 years old). 1975: Engineering and Master's degree, (22 years old, in 1975). Thesis in Stochastic Optimization applied to Water Resources. Researcher and Professor at Simon Bolivar University, Venezuela (22 years old, 1975-1982). Researcher in Math Modeling. Postgraduate Professor in Uncertainty Dynamic Systems (Kalman Filter and Extensions), and Large-Scale Optimization. Graduate Studies in Water

Resources Planning and Engineering. Founder and Math Modeler Manager at PDC Ingeniería (25 years old). Algorithms based on Benders Multilevel Partitioning and Decomposition. Primal-Dual Simplex Bounded Algorithm with the base inverse in product form and multipricing. System Programmer of the MODCOMP CLASSIC Computer. 1984-1978: Implementation of SCADA Systems using MODCOMP CLASSIC Computers at ECOPETROL Products Terminal in Mancilla, Colombia, and ORINOCO Steel (SIDOR), Venezuela. 1985: Graduate Studies in Economics at Los Andes University, Colombia (32 years old). 1985-1990: Founder and General Manager of Muebles Scalia Ltda., Colombia. 1990-1991: Professor of Optimization in Los Andes University. 1991-2021: Founder and Chief Scientific at DecisionWare Ltda. (38 years old). Creation of OPTTEX, Optimization Expert System (38 years old in 1991), the Artificial Intelligence that make Artificial Intelligences. Management of multiple international projects for the development of mathematical modeling software, and consulting services, more than 100. Doctor in Engineering. Universidad Nacional de Colombia Campus Medellín (54 years old). Thesis in Large Scale Stochastic Optimization and Risk Management. 2000-2008: Founder and President of Colombian Society for Operations Research (SOCIO). Organization of SOCIO Congresses of (2001,2002 and 2003), participants (approx.): 130, 500, and 1000. Chair del XVIII CLAIO (2008), more than 1000 participants. His actual work begins in 2021: Founder and Chief Scientific Officer at HYPOTHALAMUS Artificial Intelligence (68 years old). R&D+ activities topics: i) Artificial Brains, it may be the big short-term disruption in AI, main topics: Artificial Hypothalamus, Mathematical Neural Nets, An Autonomous Mathematical Language for Robots based on Mathematical Programming and Artificial Hippocampus; and ii) Large-Scale Parallel Optimization Algorithms, Parallel Optimization algorithms, to accelerate the solution of large-scale mathematical problems, by partitioning and decomposing of complex systems, to build artificial cortex for the artificial brains.

Keynote: Tuesday, May 7, 2024, 12:30 – 1:00 pm



Dr. Miguel Ángel Gómez Martínez
Research Professor
Departamento de ingeniería
Universidad de Guanajuato
Guanajuato, Mexico

Title: Optimization of main back assembly times of an appliance plant

Dr. Miguel Ángel Gómez Mtz. Born in Salamanca Gto., He graduated as an Electrical Engineer from the Faculty of Mechanical, Electrical and Electronic Engineering (FIMEE) of the University of Gto in 1998. He obtained a Master's degree in Sciences from the Technological Institute of Morelia in the area of electrical systems. in 2001, and the degree of Doctor of Science in Electrical Engineering at the Universidad Michoacana de San Nicolás de Hidalgo in 2006. His areas of interest are: The stability and simulation of Highly Non-linear systems applying the theory of bifurcations and chaotic processes., Analysis and design of Renewable Electric Energy Sources, Optimization of industrial processes and Energy quality. He has also collaborated as a professor and researcher at the Morelia Technological Institute (ITM), at the Center for Professional Studies of Salamanca (CEPSA), at the Universidad Michoacana de San Nicolás de Hidalgo (UMSNH), at the

Superior Technological Institute of the South (ITSUR), at the Technological Institute of Higher Studies of Irapuato (ITESI), at the Lasalle Bajío University and is currently Professor-Researcher at the University of Guanajuato. He has been Coordinator of the educational program of the Bachelor of Electrical Engineering on several occasions, Planning Coordinator of the Irapuato-Salamanca Campus, member of the technical and academic committee of the EGEL (General Graduate Examination of Electrical Engineering), accredited evaluator of the CACEI and CONACyT and founding member of the IIITEC (International Institute of Innovation and Technology). In the industrial field, he has collaborated on various projects with companies such as the Federal Electricity Commission (CFE), IMEXA SA de CV, Altos Hornos de Monterrey, Monsanto and Whirlpool, he was Head of the department of contests and contracts of the company Reparaciones Industriales de Salamanca (RIDESA) S.A. De C.V. He also has several publications in journals and conferences both nationally and internationally, he is a member of the IEEE since 2002 and is a member of the SIN (National System of Researchers) level.

Lunch Break: 1:00 – 2:00 pm

Afternoon Keynotes – May 7, 2024

Keynote: Tuesday, May 7, 2024, 2:00 – 2:30 pm



Dr. Wilmer Garzón Alfonso
Full Professor in the Computer Department
Director of Data Science Master Program
Escuela Colombiana de Ingeniería
Bogotá, Colombia

Title: Distributed Collaboration for Biomedical Analyses, además adjunto descripción de mi perfil

Wilmer Garzón Alfonso is a full professor in the Computer Department at the Escuela Colombiana de Ingeniería, Bogotá, where he is the Director of Data Science master program. He is a PhD from at IMT Atlantique (Nantes – France) and Escuela Colombiana de Ingeniería. He holds a Master of Science in Computer Engineering at the University of Puerto Rico. He received a B.Sc. in computer science in 2006 and his B.Sc. in Mathematics in 2008 from Escuela Colombiana de Ingeniería. His areas of interest include data analytics, data mining, learning techniques, distributed systems applications, and formal methods.

Keynote: Tuesday, May 7, 2024, 2:30 – 3:00 pm



German Torres Hernández
MSc Ing. Industrial – MSc en Analytics & AI
Lean Six Sigma Black Belt – Certified RFID Supply Chain Manager
Auditor Líder ISO 9001
Gerente de Transformación Digital – Consultor Senior Digital Supply Chain

Presentation Title: Digital & Analytics Supply Chain

Germán has 20 years of experience in the design, planning, management, optimization, and digitalization of Supply Chains, Distribution Centers, Materials Management Systems, Supply Chain Analytics, Productive Systems & Lean Six Sigma. At Ingeteknia, he leads digital transformation processes focused on operations optimization. He has a Master's degree in Industrial Engineering (Pontificia Universidad Javeriana) and a Master's degree in Analytical Intelligence (University of Los Andes). Data Scientist, Demand Driven Planner, Black Belt Six Sigma (LG-TUM). Lean Manufacturing Training in Japan (JICA). QMS Lead Auditor ISO 9001:2015. Certified RFID supply chain manager (ISCEA). Industrial Engineer (District University). Experience in network design and transportation models for DHL Supply Chain. At PricewaterhouseCoopers, he led SCM consulting projects for 3 years, operational transformation for Fanalca (Honda), Enel Ramo, DNP, Makro, Innpulsa, among others. He has led logistics operations at LG Electronics and productivity/Lean Six Sigma areas at CCL and Grupo OP Gráficas. Teacher and researcher. Has provided training in LSS/teaching for Festo/ Sena, Unal/ SGS, Henkel, Carvajal, U. Autónoma, U. Católica, UPTC.

Keynote: Tuesday, May 7, 2024, 3:00 – 3:30 pm



Luis Gabriel Marín Collazos, Ph.D.
Temporary Staff Teacher
Electronics department
Faculty of Engineering
Bogotá, D.C. Colombia

Title: Microgrid Planning based on Artificial Intelligence Techniques

Luis Gabriel Marín Collazos: Doctor in Electrical Engineering from the University of Chile, with extensive research experience. His main research interest focuses on the development of control strategies for the operation and coordination of microgrids or energy communities and the development of methodologies for the modeling and prediction of renewable energy resources and electrical demand. His research interest is also focused on microgrid planning considering the effect of the uncertainty of renewable resources and demand as a strategy to reduce carbon emissions, and on the development of methodologies for the transition to resilient energy distribution systems. Based on microgrids. The above is because it is convinced that the integration of distributed energy resources into the national electrical system will generate multiple benefits for end users, network operators and the environment. Doctor Marín has worked as a professor/researcher at different universities in the country and as research coordinator of the engineering faculty. He was also included as a postdoctoral researcher at the Universidad de los Andes. Currently, he is a Professor in the Department of Electronics at the Pontificia Universidad Javeriana.

Keynote: Tuesday, May 7, 2024, 3:30 – 4:00 pm



Ximena Córdova Vallejo, PhD
Profesora
Colegio de Ciencias e Ingenierías
Universidad San Francisco de Quito
Quito, Ecuador

Dr. Ximena M. Córdova is a groundbreaking scholar in mathematics and industrial engineering. She made history as the first woman to graduate in Mathematics from the National Polytechnic School in Quito, Ecuador. Her academic journey led her to earn Master's degrees in Quality, Management, and Productivity, as well as Actuarial Science, from Iowa State University, and a Ph.D. in Industrial Engineering from Wichita State University in the USA. Currently, she serves as the President of the Higher Education Quality Assurance Council (CACES) of Ecuador. Dr. Córdova is also a Full Professor at the Universidad San Francisco de Quito, at the Industrial Engineering Department, specializing in optimization, ergonomics, and project management. From 2015 to 2020, she served as the Vice Chancellor (Provost) of the Universidad San Francisco de Quito, becoming the first woman to hold this position and bringing about significant improvements in teaching and administration. In 2015, she co-founded the "Women in Science and Engineering" (WISE) project to encourage more women to pursue STEM fields. Her impact extends internationally through collaborations, including research on CO2 measurements in vulnerable environments like the Galapagos Islands. Her research focuses on Green Supply Chains and Ergonomics, using modeling and optimization techniques. Currently, she's involved in developing new accreditation models for the Higher Education System of the Country. Dr. Córdova's contributions also include serving as the editor of the Industrial and Systems Engineering Review (ISER) and participation in various boards of directors for organizations such as Mujeres por Mujeres, the Transfer and Technology Center (CTT-USFQ), Tecniseguros, the Ecuadorian Society of Actuaries of Ecuador.

Wednesday, May 8, 2024

Keynote V: Wednesday, May 8, 2024, 10:00 – 10:30 am



Eddy Morris, Ph.D.
Director de Educación Ejecutiva ESAN
Director de la Maestría en Dirección de TI-Director de la Maestría en Project
Management
ESAN University
Lima, Peru

PhD. Máster Universitario en Gestión de TIC y Máster en Gestión de Tecnologías de Información de La Salle – Universitat Ramon LLull, Barcelona España. Programa Avanzado en Finanzas de ESAN. Bachiller en Ingeniería de Sistemas de la UNI. Director de Educación Ejecutiva de ESAN y de las Maestrías en Dirección de Tecnologías de Información y de Project Management de ESAN. Actualmente director de Educación Ejecutiva de ESAN y de las Maestrías en Dirección de Tecnologías de Información y de Project Management de ESAN. Consultor internacional de diversas empresas y organismos internacionales. Su experiencia en consultoría comprende empresas como Grupo Romero, Grupo Wong, IBM, Grupo San Fernando, Interbank, Backus, BCR, entre otras. Ph. D. por La Salle – Universitat Ramon LLull, Barcelona España. Máster Universitario en Gestión de TIC y Máster en Gestión de Tecnologías de Información por La Salle – Universitat Ramon LLull, Barcelona España. Experiencia: Ha asesorado a empresas e instituciones como Grupo Romero, Grupo Wong, IBM, Grupo San Fernando, Nabisco, Interbank, Backus, BHP BillitonTintaya, BCR, Cancillería, Petroperú, Telefónica, Coca Cola, SMP, Coldex, entre otras. Además, ha sido director del MBA de ESAN.

Keynote V: Wednesday, May 8, 2024, 10:30 – 11:00 am



Dr. Julián Arellana
Dean, College of Engineering
Associate Professor, Department of Civil and Environmental Engineering
Universidad del Norte
Barranquilla, Colombia

Education:
 Ph.D. Pontificia Universidad Católica de Chile (2012)
 M.Sc. Pontificia Universidad Católica de Chile (2012)

BSc. Civil Engineering, Universidad del Norte (2004)

Honors and Awards: Distinguished student, Universidad del Norte, Silver Medal for academic excellence, Universidad del Norte, Assistant and Instructor scholarships, Pontificia Universidad Católica de Chile, Francisco Jose de Caldas scholarship, Bicentennial Generation Winner of the Overseas Internship Competition for PhD Students, Pontificia Universidad Católica de Chile. Outstanding Teaching Assistant Award, School of Engineering, Pontificia Universidad Católica de Chile, Erasmus+ Mobility Fund, Universidad de Cantabria, Scientific merit medal, Universidad del Norte, ANPET Scientific Production Award 2020, Best paper in ANPET conference, Brasil, ANPET Scientific Production Award 2022, Best paper in ANPET conference, Brasil. Research topics of interest: Transport planning, transport modelling, transport economics, sustainable transport, econometrics, active transport, travel behaviour, discrete choice experiments. Academic Experience: Universidad del Norte (Since 2012) Member of the Directive Board, Ingeniería y Consultoría FARO SAS (Since 2015), Director of research and graduate studies, College of Engineering, Universidad del Norte (2017-2021), Civil engineering graduate programs coordinator, Universidad del Norte Visiting Scholar, Universidad de Cantabria (2019), Guest lecturer, Visiting Scholar, University of Leeds (2011). Author of Research papers.

Keynote VI: Wednesday, May 8, 2024, 11:00 – 11:30 am



Arvey Alfonso Granada Calderon
Operations Manager
La Unión Coffee Farm
Pereira, Risaralda, Colombia

Keynote VII: Wednesday, May 8, 2024, 11:30 am – 12:00 pm



Mauricio Becerra Fernandez, PhD
Director of the Industrial Engineering Program
Director of the Master in Smart and Sustainable Cities
Escuela de Ingeniería, Ciencia y Tecnología
Universidad del Rosario
Bogota, Colombia

Keynote VIII: Wednesday, May 8, 2024, 12:00 – 12:30 pm



Dr. Nubia Milena Velasco Rodríguez
Director of Doctorate in Administration
Master of Research in Administration
Universidad de los Andes
Bogotá, Colombia

Regenerative Supply Chains

Ph.D. Automatique et Informatique Appliquées – Université de Nantes – Nantes, France, M.Sc. Industrial Engineering – Universidad de los Andes – Bogotá, Colombia. B.Sc. Chemical Engineering – Universidad Nacional de Colombia- Bogotá, Colombia. She has been working at Universidad de Los Andes, in the School of Management, and her research field is Supply Chain Management since 2003. Her research work has focused on logistics and supply chain problems. All this uses Operational Research techniques to solve, more specifically, problems related to health systems and transportation logistics. She leads a group of students who are working with several hospitals and health center.

Keynote VIII: Wednesday, May 8, 2024, 12:30 – 1:00 pm



Dr. Ing. Adriana Esguerra Arce, Dr. Ing.
Docente
Directora del Centro de Estudios en Gestión de Tecnología e Innovación
Directora del Grupo de Investigación CIMSER
Decanatura de Ingeniería Industrial
Escuela Colombiana de Ingeniería Julio Garavito
Bogotá, D.C., Colombia

Presentation title: Challenges of sustainable manufacturing

Academic and professional profile: Materials engineer with a master's degree and doctorate in Engineering from the Universidad del Valle. Its work areas are manufacturing processes and the synthesis and characterization of materials, giving prevalence to the recovery of solid waste. She is an Associate Professor of the Center for Technology and Innovation Studies of the Colombian School of Engineering Julio Garavito, and director of the CIMSER Research Group.

Thursday, May 9, 2024

Keynote: Thursday, May 9, 2024, 10:00 – 10:30 am



Dr. Jorge Andrés Vivares Vergara
Research Professor
Universidad Nacional Abierta y a Distancia (UNAD)
Bogotá, Colombia

Presentation Title: 21st Century Industrial Engineering: Perspectives and Challenges for Emerging Countries

Jorge Andrés Vivares Vergara is an Industrial Engineer, MSc. and Ph.D. in Industry and Organizations from the National University of Colombia. He is currently a research professor at UNAD. He has professional experience in companies (8 years), coupled with academic experience in Colombian universities and other countries (7 years), covering areas such as human resource management, decision making, operations management, and strategy. His scientific production includes fourteen articles, three books, two book chapters and multiple conference papers, in journals and publishers such as Springer, International Journal of Operations & Production Management, Journal of Manufacturing Technology Management, Innovar Journal, Management Letters, among others. Dr Vivares has

also carried out action research projects with some companies.

Keynote: Thursday, May 9, 2024, 10:30 – 11:00 am

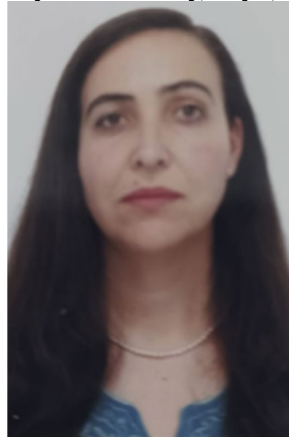


Dr. William J. Guerrero
Associate Professor
Head of the Research Group on Logistic Systems
Head of the IT and Process Optimization Department
Universidad de la Sabana, Bogota, Colombia

Presentation Title: Current Challenges in Humanitarian Logistics and Disaster Risk Management

Industrial Engineer with a doctorate in Optimization and reliability of Industrial Systems and more than 10 years of experience in research and consulting in digital transformation and Operations Management applied to the development of innovative solutions for hospital/humanitarian logistics. Leader of the logistics systems research group at the Faculty of Engineering of the University of La Sabana. His research interests are supply chain design and management and transportation optimization, data analysis, and experience in international research and innovation projects in developing economy contexts.

Keynote: Thursday, May 9, 2024, 11:00 – 11:30 am



Dr. Paloma Maria Teresa Martinez Sanchez
Engineering
Universidad Militar Nueva Granada
Bogota
Colombia

PhD. in Logistics and Supply Chain Management. Master of Science with emphasis on Quality Systems and productivity. Specialization in Strategic and Competitive Management. Agroindustrial Production Engineer. Her research work has focused on Lean Healthcare and sustainable supply chains. Ingeniera de Producción Agroindustrial Universidad de La Sabana. Especialización en Gerencia Estratégica y Competitiva Universidad de La Sabana.

Maestra en Ciencias con énfasis en Sistemas de Calidad y productividad del Instituto Tecnológico de Monterrey – México. Doctora en Logística y Cadena de Suministro de la Universidad Popular Autónoma del Estado de Puebla (UPAEP). Profesora Titular del programa de Ingeniería Industrial, Universidad El Bosque, Bogotá – Colombia

Keynote: Thursday, May 9, 2024, 11:30 am – 12:00 pm



Mohammad Islam
Associate Director
Optum – United Healthcare Inc.
New Jersey, United States of America

“Unraveling Machine Learning & Deep Learning: From Data to Intelligence”

Mohammad Islam serves as an Associate Director at the UnitedHealth Group USA. He specializes in application and web-based software development, as well as machine learning and deep learning models and their practical applications. Mohammad holds a U.S. patent for a wireless GPS mapping device and has contributed articles to esteemed publications such as ASCE and CSCE. With a keen strategic mindset and a robust IT and Engineering background, Mohammad brings extensive experience in team management, technical leadership, and coaching. He excels in connecting individuals and teams with the right tools and products to optimize effectiveness and efficiency for their mission. With nearly 20 years of experience in IT Program and Portfolio management, spanning

agile, SDLC, Kanban, and Scrumban methodologies, Mohammad believes that leveraging AI wisely can lead humanity to unprecedented heights. Before joining UnitedHealth in 2018, Mohammad held positions at Bank of America, Merrill Lynch, Walmart, and the United Nations.

Keynote: Thursday, May 9, 2024, 12:00 – 12:30 pm



Rafael Forero Vargas
Food Safety & Quality Manager Colombia
Rich's Product Corporation
Bogotá D.C, Colombia

Rafael is an industrial microbiologist from Pontificia Universidad Javeriana and holds a master's degree in business administration. With 14 years of experience in the food industry (powder beverages, coffee, dairy, tin shop, culinary, cheeses, UHT & pastries), primarily in quality and production areas. He has implemented and standardized strategic plans and effective methodologies to achieve goals in the organizations where he has worked. He utilizes tools such as TPM, Lean, and Six Sigma to optimize, maintain, and enhance management and culture in organizations. He has led the implementation of autonomous maintenance and TPM quality pillars in different factories (Panama and Colombia) and companies, as well as achieving recognized external certifications for the food industry through teamwork and a focus on results.

Keynote: Thursday, May 9, 2024, 12:30 – 1:00 pm

Workshops

Tuesday, May 7, 2024, 4:00 – 6:00 pm (Onsite Room 2)

Innovation and Entrepreneurship Workshop

Workshop Facilitator: Professor Don Reimer, Lawrence Tech, MI, USA

Each team will develop an idea to solve an engineering problem that may have commercial potential. They will develop a business plan using the business model canvas. *Teams will compete for prizes with best ideas and best commercial potentials. Students need to bring their laptops.*

Innovation and Entrepreneurship Workshop – A hands-on interactive learning experience

This workshop has been designed to encourage participants in a hands-on interactive learning experience on the development of the entrepreneurial mindset

Topics:

- Idea Generation
- Opportunity Recognition
- Ventura Creation
- Value Creation
- Understanding and working with the Business Model Canvas as a validation tool
- Identifying “Customer Segments” and the “Customer Archetype”
- Introduction to the Business Planning Process
- Presentation and Recognition (Prizes)
- Join us for an exciting and interactive learning experience on how to make your dream a reality.



Professor Donald M. Reimer
Chief Operating Officer
IEOM Society International
Southfield, Michigan, USA

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering in College of Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kern Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs' Organization. Mr. Reimer serves as a Kern Fellow of The Kern Family Foundation, Co-Direct of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs' Organization Faculty Advisory Council and is a member of the American Society of Engineering Education. He has operated his own consulting company – The Small Business Strategy Group for 23 years. He published numerous articles on small business, entrepreneurship and strategic thinking. He has received several awards and recognition by local, state and federal agencies for his work in entrepreneurship and minority business development. Mr. Reimer served as member of the Minority Economic Development Committee of New Detroit. Mr. Reimer is member of the Small Business Advisory Council of the Detroit Regional Chamber of Commerce. Mr. Reimer is a member of Advisory Board of the Milwaukee Junction Small Business Assistance Center. He is also a member of the Applied Innovation Alliance. Mr. Reimer serves as a KEEN Fellow for The Kern Family Foundation and is a member of United States Association of Small Business and Entrepreneurship.

Six Sigma Certification Workshop

Wednesday, May 8, 2024, 8:00 – 10:00 am (Onsite Room 2)

Speaker: Dr. Ahad Ali, Lawrence Technological University, Southfield, Michigan, USA

Six Sigma Certification Topics

- Six Sigma Fundamentals

Define

- Project Charter
- Process Maps, SIPOC, Matrix Diagrams, Critical to Quality (CTQ) Metrics, and DPMO
- Pareto Chart
- SIPOC

Measure

- Process analysis
- Probability, Statistics and Distribution
- Data collection and analysis
- Gage Repeatability and Reproducibility (R&R)
- Process capability

- X-Bar Charts, Run Charts, Moving Average Charts, EWMA Charts, Attribute Charts, Takt Time, Standardization, Spaghetti Diagrams, and Setup Reductions

Analyze

- Value Stream Map
- Hypothesis Testing
- Goodness of fit test
- Regression Analysis
- Cause & Effect Diagrams
- Scatter Diagrams
- ANOVA
- Confidence Interval

Improve

- Lean Tools to reduce NVA: 5S, Kaizen, Seven Zeros, TPS Principles, FMEA, and Simulation
- Design of Experiments (DOE)
- Statistical Process Control (SPC)
- Analysis of Variance (ANOVA)
- Solutions Validation

Control

- Control Plan
- SPC
- Tracking
- DFSS

**Dr. Ahad Ali**

Associate Professor

Director of Bachelor of Science in Industrial Engineering

Director, Master of Science in Industrial Engineering

Director of Smart Manufacturing and Lean Systems Research Group

A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering

Lawrence Technological University, Southfield, Michigan, USA

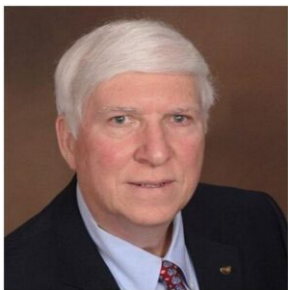
Executive Director, IEOM Society International

Dr. Ahad Ali is an Associate Professor and Director of Bachelor of Science in Industrial Engineering and Master of Science in Industrial Engineering in the A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering at the Lawrence Technological University, Michigan. Dr. Ali is the Director of Smart Manufacturing and Lean Systems Research Group. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and Ph.D. in Industrial Engineering from University of Wisconsin-Milwaukee. Dr. Ali is the Executive Director of IEOM Society and Conference Chair of the Sixth International Conference on Industrial Engineering and operations Management, Kuala Lumpur 2016. He advised six doctorate students in Doctor of Engineering in Manufacturing Systems. Dr. Ali has published journal and conference papers. He was past President of IIE Lean Division. Dr Ali has done research projects with Chrysler, Ford, DTE Energy, Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. His research interests include quality, reliability, six sigma, manufacturing, simulation, optimization, scheduling, maintenance, e-manufacturing, lean, CAE and GD&T and. He is a member of ASEE, IEEE, IEOM, INFORMS, and SME.

Wednesday, May 8, 2024, 4:00 – 7:00 pm (Onsite Room 2)

TOYOTA KATA Workshop

The Secret Sauce for Toyota Production System

**DAVE HARRY, a.k.a. "The Process Whisperer®"**

Retired U.S. Naval Aviator

CEO of Process Whisperer® Consultants LLC, Greeneville, Tennessee, USA

ASQ certified Six Sigma Black Belt and A PMI certified PMP®

Kata in the Classroom (KiC) workshops are based on Mike Rother's "Toyota Kata" methodology and that Scientific Thinking is a life skill. It's the basis for creativity and successfully pursuing seemingly unattainable goals. KiC demonstrates a teachable skill that anyone can learn — by combining a simple scientific striving pattern with practice routines called *Kata* – to help you learn meta-cognitive strategies. Many view Toyota Kata as the "secret sauce" of the Toyota Production System (TPS). Mike Rother wrote "Toyota Kata" to explain the secrets of TPS improvement sustaining methodology. How do we prepare for the future when we don't know what the future will bring? We can't predict how to get from A to B... we're stumped and overwhelmed, there are time constraints and economic pressure. Dave Harry will share the "secret sauce" with IEOM and Lima Area University students through an intense hands-on "Kata in the Classroom" workshop. Be prepared to move fast!

Prizes: Each round table will be used for a team. Local university can form teams to complete. Dave is very kind to provide some prizes with gift cards.

ABOUT THE PRESENTER – DAVE HARRY, a.k.a. “The Process Whisperer®”

Dave is a retired U.S. Naval aviator and currently CEO of Process Whisperer® Consultants LLC. He teaches LSS classes for TMG Inc of Newport News, VA. Prior to TMG, Dave was a Six Sigma and Productivity Consultant for the University of TN Center for Industrial Services. Dave is a “Kata Geek” and also an ASQ certified Six Sigma Black Belt. He is active in ASQ Sections and the ASQ Lean Enterprise Division Communications. In addition to ASQ, he also holds Black Belt Certification through Rolls-Royce and Northrop Grumman. He is a seasoned ASQ International Team Excellence Awards (ITEA) Judge. Dave is also currently on the Lean Division Board with the Institute of Industrial and Systems Engineers (IISE). Dave is on the Conference Advisory Committee for ASQs 2019 L&SS Conference in Phoenix as well as the Conference Committee for the IISE Engineering 2018 Lean Six Sigma Conference in Atlanta. A PMI certified PMP®, Dave also holds Lean Bronze Certification (LBC) through the SME/ASQ/AME/Shingo Institute Alliance and he holds three Master’s Degrees in management related fields. In addition to ASQ, PMI and IISE, Dave is also a member of the Society of Manufacturing Engineers (SME), the Association of Manufacturing Excellence (AME) and the American Production and Inventory Control Society (APICS). Dave lives in Greeneville TN.

Thursday, May 9, 2024, 4:00 – 6:00 pm (Onsite Room 2)

Project Management Workshop

Leading with Emotional Intelligence: A Seminar for Industrial Engineers



Dr. Tony Prensa, PhD, MBA, PMP, CB-PMO, CCP, ITIL, 6σ

Chief Executive Officer & Founder

TP Global Business Consulting, LLC

Orlando, Florida, USA

Dr. Prensa is a highly accomplished executive and leader of project management office (PMO), project/portfolio management, information systems and technologies, combines a Doctorate in Organizational Leadership with a major in Information Systems and Technologies, Certified PMO Professional, Authorized PMO Instructor, Certified Project Management (PMP), and ITILIV certification with extensive experience managing and overseeing large information systems projects/programs, strategic planning, and seamless IT implementations. Adept at reengineering business processes, change management and IT infrastructure with business visions to drive profitability, efficiency, and growth within the organization. Proficient at ensuring all processes comply with regulatory requirements and IT governance practices. Excellent communicator with strong influencing and problem-solving skills. Strong leadership skills and demonstrated ability to lead team members and external business contacts including stakeholders such as consultants, partners and vendors. Demonstrated track record of delivery of multiple technical and business projects on time and within budget. Experience in full-lifecycle project management methodologies and tools. Dr. Prensa has been involved with the Project Management Institute for more than twenty-five years. He served a vice president of PMI Puerto Rico Chapter from 1998-2000. He also volunteered in many activities to promote project management and participated of writing PMP exam questions workshop in Dallas, Texas in 2002. Dr. Prensa has helped hundreds of project management professionals to get prepared for the PMP exam. Dr. Prensa has taught project management for several universities in the country, including Virginia Technical University, Grand Canyon University, Colorado Technical University, University of Phoenix and currently teaching for Walden University. With more than 25 years of teaching experience in various formats, face-to-face and virtual. Dr. Prensa has developed techniques to connect with learners and students in the most efficient way. Dr. Prensa has extraordinary people skills, he always puts people first.

[Edit](#)

Conference Committee

Conference Chairs

Dr. Johanna Trujillo Díaz
Coordinator of Research
Fundación Universitaria Internacional De La Rioja (UNIR)
Bogotá, Colombia

Professor Jaime Díaz Ortiz
Dean
Faculty of Engineering
Universidad Católica de Colombia
Bogota, Colombia

Dr. Javier Arturo Moreno Carvajal
Dean
School of Engineering
Institución Universitaria Colegios de Colombia – UNICOC
Bogota, D.C., Capital District, Colombia

Dr. Ahad Ali
Associate Professor
Director of Industrial Engineering Program
Lawrence Technological University
Southfield, Michigan, USA

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Juan S. Sánchez-Gómez, Professor, Industrial Engineering Program, Universidad Católica de Colombia, Bogota

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Julián Arellana, Dean, College of Engineering, Associate Professor, Department of Civil and Environmental Engineering, Universidad del Norte, Barranquilla, Colombia
Sandro Paz, Professor and Director, Department of Industrial Engineering Program, Pontificia Universidad Católica del Peru, San Miguel, Lima, Peru
Ximena Córdova Vallejo, Profesora, Colegio de Ciencias e Ingenierías, Politécnico Universidad San Francisco de Quito, Ecuador

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Professor Don Reimer, Director of Membership and Chapter Development, IEOM Society
Vitor Mendes Caldana, Federal Institute of Sao Paulo (IFSP) – Sorocaba Campus, Sao Paulo, Brazil and Operations Director of IEOM South America
Dr. Rodrigo Luiz Gigante, Coordinator of Production Engineering, FACENS University, Sorocaba, Sao Paulo, Brazil
Jorge Kurita, Research Faculty, Department of Industrial Engineering, Asuncion National University, Paraguay
Program Committee
Prof. Stefano Scialla, Department of Engineering, Università Campus Bio-medico di Roma, Italy
Omar Mora, Business Development Manager @ Blackberry&Cross | CSSBB, CPIM, CQE, Costa Rica

Reviewers

Kazi Nusrat	Islam	Khulna University
Md. Aqib	Islam Chowdhury	IEOM Society
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Elena	Espinoza	Universidad Continental
Tahera	Parvin	Khulna University
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Mario	Chauca	Universidad Ricardo Palma
Enyinnaya	Onuma	Auburn University
Md. Mizanur	Rahman	Aalto University, Finland

IEOM Global Lean Six Sigma and Operations Excellence

Plenary Speakers

8:00 – 9:45 am, TUESDAY, Onsite Room 1

Session Chair: Ivanhoe Rozo-Rojas, Professor and Director, Industrial Engineering, Universidad Católica de Colombia, Bogota, Colombia

8:00 – 8:20 am

Alberto Poveda Caputo
Lean Six Sigma Black Belt and Process & Continuous Improvement Specialist
Operational Excellence Master
General Motors
Bogotá, Colombia

8:20 – 8:40 am

Paola Cruz Díaz
Directora Ejecutiva
Lean Six Sigma Institute LATAM
Bogota, Colombia

8:40 – 9:00 am

Lina María Gómez Cortés
Professor, Universidad de La Sabana
Co fundadora y COO, Tech, Social, Agro and Arts
Bogotá, Colombia

9:00 – 9:20 am

9:20 – 9:40 am



Ivanhoe Rozo-Rojas
Professor
Director, Industrial Engineering
Universidad Católica de Colombia
Bogota, Colombia

Ivanhoe Rozo-Rojas is a professor at the Universidad Católica de Colombia in the Faculty of Engineering at Bogota (Colombia). He leads the Industrial Engineering program and belongs to the Research Group of Production. Mr. Rozo-Rojas holds a Bachelor of Industrial Engineering from Universidad Santo Tomás (Bucaramanga, Colombia), a master's in quality and management systems from Universidad Santo Tomás (Bucaramanga, Colombia), and he currently studies the PhD in Engineering at Universidad Nacional de Colombia (Bogota, Colombia). He got the Black Belt Lean Six Sigma certification by The Council for Six Sigma Certification. His teaching courses are related to Lean Six Sigma, Quality Control, and Management Systems in bachelor, specialization, and master's degrees. He has developed various projects in healthcare organizations applying operational excellence approaches with collaboration of other academic and business. He served as consultant of organizations for getting certifications and improving its processes. He served as Co-chair of the International Conference on Industrial Engineering and Operations Management Bogota 2024.

IEOM Global Engineering Education

Plenary Speaker

2:00 – 3:45 pm, TUESDAY, Onsite Room 2



Dr. Mario Chauca
Professor at Engineering Faculty
Ricardo Palma University
Surco, Lima, Perú

Strategies for increasing student performance based on lighting conditions in learning spaces

This proposal is based on the research project of Ricardo Palma University on the influence of the lighting conditions in learning spaces over the student performance. The objective is to show special considerations for design of the classroom including use of daylight to promote the good health of students in learning spaces and save the budget in electric energy. The method includes the analysis of lighting conditions considering daylight and artificial light using LED lighting systems and findings found in related studies. The results show a proposal

of strategies for increasing the students performance considering LED light systems, lighting conditions and embedded solutions. This research is a good opportunity for development motivation for research capabilities in the students and obtaining a special lighting solution for increasing the students performance.

Speaker I

Dr. Juan Sebastian Sánchez
Professor of Industrial Engineering
Universidad Catolica de Colombia
Universidad de Los Andes

Speaker II

Speaker III

Speaker IV

Dr. Oscar A. Vasquez-Bernal
Associate Professor
School of Basic Sciences, Technology and Engineering
Universidad Nacional Abierta y a Distancia
Bogotá Colombia

Speaker V



Ahad Ali, Ph.D.
Associate Professor
Director, Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director, Graduate Certificate in Lean Six Sigma
Director, Smart Manufacturing and Lean Systems Research Group
Coordinator, Siemens Electro-Matic Industrial Engineering Lab
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University
Southfield, Michigan, MI 48075, USA
Founder and Executive Director of IEOM Society International

Ahad Ali is an Associate Professor and Director of Industrial Engineering Programs (BSIE & MSIE), Director of Graduate Certificate in Lean Six Sigma and Director of Smart Manufacturing and Lean Systems Research Group, A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering at the Lawrence Technological University, Southfield, Michigan, USA. He established Siemens Electro-Matic Industrial Engineering Lab at LTU in 2019. Dr. Ali was the primary author of the ABET self-study report of the BSIE Program at LTU in 2022. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology (KUET), Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and Ph.D. in Industrial Engineering from University of Wisconsin-Milwaukee, USA. Dr. Ali was Assistant Professor in Industrial Engineering at the University of Puerto Rico - Mayaguez, Visiting Assistant Professor in Mechanical, Industrial and Manufacturing Engineering at the University of Toledo and Lecturer in Mechanical Engineering at the Bangladesh Institute of Technology, Khulna. He received an Outstanding Professor Award of the Industrial Engineering Department, University of Puerto Rico - Mayaguez, (2006-2007). He has published 60 journal and 150 conference papers. Dr. Ali has conducted research projects with Chrysler, Ford, DTE Energy, New Center Stamping, Whelan Co., Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. His research interests include manufacturing systems modeling, simulation and optimization, intelligent scheduling and planning, artificial intelligence, predictive maintenance, e-manufacturing, and lean manufacturing. He supervised 11 doctoral students. Dr. Ali has involved with many international conference committees. He is the Founder of IEOM Society International and serving as an Executive Director. Dr. Ali serves as a Conference Co-Chair of the International Conference on Industrial Engineering and Operations Management and organized events in Dhaka, Kuala Lumpur, Istanbul, Bali, Dubai, Orlando, Detroit, Rabat, UK, Bogota, Paris, Washington, DC, Pretoria, Bangkok, Pilsen, Toronto, Costa Rica, Sao Paulo, India, Riyadh, Manila and Sydney. He is a member of IEOM, INFORMS, SME and IEEE.



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Powering Business Worldwide

IEOM Global Industry Solutions Plenary Speakers

8:00 – 9:45 am, WEDNESDAY, Onsite Room 1

Session Chair:

8:00 am – 8:20 am (Wednesday, May 8)

Iván Andrés Ramírez Pinzón
Associate Professor
Postdoctoral Researcher
Advisor
Bogota, Colombia

Presentation Title: Telecommunications Infrastructure and Information Regime

8:20 am – 8:40 am (Wednesday, May 8)

8:40 am – 9:00 am (Wednesday, May 8)

9:00 am – 9:20 am (Wednesday, May 8)

9:20 am – 9:40 am (Wednesday, May 8)



Aracelli Centeno Sanchez
Business Process Manager
Cleaning and Beauty Products
Peru

Bio

Informatics Engineering of University of Ricardo Palma, with specializations in Business Process Management, Risk Management, Project Management and Data Analytics, with master's in business administration at University of Illinois Urbana Champaign. In 15 years of experience in information analytics, business process, process improvement project. Business Practice Consulting, data analysis, and insight identification and analysis. I have worked in industries such as technology, bank, government, transportation and pharmaceutical. I have been participated in process improvement teams, business, improvement project assessment, I know the business core and I have given recommendations to implement in the short and medium time.

IEOM Global Innovation and Entrepreneurship

Plenary Speakers

2:00 – 3:45 pm, WEDNESDAY, Onsite Room 1
Session Chair: Professor Camilo Alarcon Nieto

2:00 pm – 2:20 pm (Wednesday, May 8)



Professor Camilo Alarcon Nieto
Assistant Professor
Fundacion UNIR Colombia
PhD Candidate in Management
Researcher leader in entrepreneurship and technology adoption

Camilo Alarcón Nieto is an academic and professional world with a strong foundation in Industrial Engineering and Economics. He is an assistant professor in the Department of Economics and Management at Fundación UNIR Colombia. He also serves as the lead researcher on entrepreneurial intention among university students and technology adoption in the health sector for low-income populations. He is nearing the completion of his Ph.D. in Administration at Universidad de los Andes, following his achievement of a Master's degree in Applied Economics from Universidad EAFIT. His extensive career as both a consultant and an academic is marked by a significant focus on data analytics, enabling him to optimize business and economic strategies effectively. This expertise has been applied successfully in various international projects and academic settings, showcasing his adeptness at managing and adapting complex knowledge to diverse scenarios. In his consultancy role, particularly as a Junior Consultant at Ayala Consulting, Camilo played a critical part in the data analysis for Malawi's Cash Transfer Lean Season project. His work there demonstrated his exceptional ability to apply economic theories in challenging international environments. Furthermore, as a university professor at Universidad Los Libertadores and UNIR, Camilo teaches fundamentals of economics, macroeconomics, and general economic history. His teaching method effectively integrates monetary theory with practical applications.

2:20 pm – 2:40 pm (Wednesday, May 8)



Professor William E. Mosquera Laverde
Director of Organizations and Strategic Group 4.0 category A1. Colombia
Director of the Course Design of Organizational Processes, USA
Business Administration Program
Faculty of Administrative and Accounting Economic Sciences
Cooperative University of Colombia
Bogotá. Colombia

William E. Mosquera is a Chemical Engineer from the National University of Colombia in 1993; He is a specialist in distance education from UNAD in 2000, also a Master in Environmental Management from the Universidad de la Andes in 2014, currently a PhD student in engineering: industry and organizations at the National University of Colombia, leader of the Organizations and Organizations research group. O.E. strategy 4.0 categorized A1 in Colombia for 6 years; For more than 15 years he has taught environmental management courses and organizational process design in the business administration program at the Universidad Cooperativa de Colombia. He has been the manager of the company JULMAT Comercializadores since 2000 in the infrastructure sector in technical and architectural finishes.

2:40 pm – 3:00 pm (Wednesday, May 8)

3:00 pm – 3:20 pm (Wednesday, May 8)

3:20 pm – 3:40 pm (Wednesday, May 8)



Professor Donald M. Reimer
Chief Operating Officer
IEOM Society International
Southfield, Michigan, USA

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering in College of Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kern Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs' Organization. Mr. Reimer serves as a Kern Fellow of The Kern Family Foundation, Co-Direct of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs' Organization Faculty Advisory Council and is a member of the American Society of Engineering Education. He has operated his own consulting company – The Small Business Strategy Group for 23 years. He published numerous articles on small business, entrepreneurship and strategic thinking. He has received several awards and recognition by local, state and federal agencies for his work in entrepreneurship and minority business development. Mr. Reimer served as member of the Minority Economic Development Committee of New Detroit. Mr. Reimer is member of the Small Business Advisory Council of the Detroit Regional Chamber of Commerce. Mr. Reimer is a member of Advisory Board of the Milwaukee Junction Small Business Assistance Center. He is also a member of the Applied Innovation Alliance. Mr. Reimer serves as a KEEN Fellow for The Kern Family Foundation and is a member of United States Association of Small Business and Entrepreneurship.

IEOM Supply Chain and Logistics

Plenary Speakers

4:00 – 5:45 pm, THURSDAY, Onsite Room 1

Session Chair: Professor Andrés Felipe Santos H.

4:00 – 4:20 pm (Thursday, May 9)



Professor Andrés Felipe Santos H.
Profesor asociado de planta de la decanatura de Ingeniería Industrial
Centro de Estudios en gestión y optimización de operaciones
Investigador del grupo CIMSER
Escuela Colombiana de Ingeniería
Bogotá, Colombia

Industrial engineer from Escuela Colombiana de Ingeniería Julio Garavito, with experience in production systems, planning, and logistics management in the steel sector. Master's in Business Management from Colegio Mayor de Nuestra Señora del Rosario. Director of the logistics management diploma for the Colombian armed forces, coordinator of the technological mission from Brazil with the Tolima governorship. Associate professor at Escuela Colombiana de Ingeniería teaching courses such as Work Study, Production Planning, Plant Design, Supply Chain Management, and Factory Physics. Guest lecturer at HAN University Netherlands. Invited speaker at the Industrial and Systems Engineering Research Conference with the paper "On Modeling of Logistic Overnight in Airlines" Canada, 2014; at the Hamburg International Conference of Logistics 2017 with

the paper "Production Flow valuation through VSM modeling: An industry case study" Germany, 2017; at the Hamburg International Conference of Logistics 2018 with the paper "Design of an added plan with social responsibility" Germany, 2018; at the Hamburg International Conference of Logistics 2019 with the paper "Design of a self-regulating planning model" Germany, 2019; and at the Hamburg International Conference of Logistics 2022 with the presentation "Digital transformation of planning in the pharmaceutical sector." Author of the chapter "Emerging Inventory Planning" in the text "Operations Management – Recent Advances and New Perspectives" 2024.

4:20 – 4:40 pm (Thursday, May 9)

Luis Tarazona
University of Los Andes
Bogota, Colombia

4:40 – 5:00 pm (Thursday, May 9)

5:00 – 5:20 pm (Thursday, May 9)

5:20 – 5:40 pm (Thursday, May 9)



Mohammad Anwar Rahman, Ph.D.
Associate Professor
Manufacturing and Construction Management
Central Connecticut State University
New Britain, CT, USA

Dr. Mohammad Anwar Rahman is a faculty at the Central Connecticut State University in Manufacturing and Construction Management. He has published papers in referred journals and presented results in conferences. His research focuses on logistics, supply chain management, stochastic process and designing quality procedure. Dr. Rahman conducted several research projects with Mississippi Dept. of Education (MDE) and US Dept. of Transportation (USDOT). He has various certifications including Lean Six Sigma Green Belt

(Purdue University), Lean Principles (Purdue University), Demonstrated Master Logistician (The International Society of Logistics), Malcolm Baldrige Quality Award Examiner (Louisiana Quality Foundation), and Certified Transportation & Logistics (American Society of Transport & Logistics). Dr. Rahman is affiliated with ISERC, DSI, AST&L and IEOM.

Panel Sessions

Global Engineering Education Panel

Tuesday, May 7, 2024, 2:00 – 3:45 pm – Room 2 (Onsite)

Panel Chair



Dr. Mario Chauca
Advisor reviewer vice-rectorate of research and
Researcher Professor at Ricardo Palma University
Santiago de Surco, LI 15039, PERU
Researcher of the RENACYT-CONCYTEC
Executive Committee Member IFEES (2019-2021)
Past Director Kenshu Kiokay del Peru-AOTS
Past Steering Committee Member IEEE MWSCAS

Mario Chauca is Executive Committee Member IFEES (2019-2021), was a Director of the AOTS-Kenshu Kiokay-Peru (2010-2014), member of the technical committees since 2010, invited by the University of Washington IEEE, in 2010 joined the Steering Committee of the IEEE-MWSCAS, and has participated in more than 30 committees in the European Union, Asia, Africa, America and Australia. All event proceedings are indexed in Scopus, journals and others database. Chauca was participant as speaker and Chair Session at WEE2019-Chennai (India), IEM2019-Toronto (Canada), WEEF2018-Albuquerque (USA), ICIMA2018-Penang (Malaysia), WEEF2017-Kuala Lumpur (Malaysia), CONeGOV2016-Florianopolis (Brazil), ISIT2014,17-Guanajuato (Mexico), MWSCAS2010-Washington (USA), JAIIO2009-Mar del Plata (Argentina), CONIELECOMP2007,9,10-Puebla (Mexico), SIE2004-Santa Clara (Cuba). He obtained a scholarship from the AOTS Tokyo (Japan), from the NIPA and Ministry of Science, ICT and Planning of the Future of Korea Seoul (Korea). He is a Consultant in Information and Communication Technologies, he was consultant in the project of United Nations-Inter-American Development Bank-Congress of the Republic of Peru and the Ministry of the Interior of Peru. He is a researcher by RENACYT-CONCYTEC in the Peruvian Government, adviser first award paper CONEIMERA2018, adviser of the First General Award Project for more than 5000 projects in the contest from the Romero Group, adviser for first projects in congress INTERCON, CONEIMERA, and was nominated for the Graña y Montero Prize for Research in Peruvian Engineering. Nominated Peruvian Research Southern Prize 2019 and nominated research award 2018 MEXICO. As author and advisor of papers he has more than 50 letters of acceptance, served organizer of international academic events, editor of proceedings, and advisor to the IEEE chapters at the National University of Callao and the Ricardo Palma University. He teaches at the postgraduate and undergraduate level, with 30 years of experience. He graduated as an Electronic Engineer from Ricardo Palma University in Lima Peru, obtained his Master's Degree in Business Administration with a mention in "Business Management" and his Doctorate in Education from San Luis Gonzaga National University.

Panel Speaker I



Dr. Juan Sebastian Sánchez

Professor Sánchez-Gómez is a biomedical engineer, lawyer, magister in Education, magister in Public Policy, and a doctoral student in Industrial and Systems Engineering at Universidad de Los Andes. He has worked as a professor of civil and telematics engineering at the Universidad Distrital, professor of Industrial engineering at the Universidad El Bosque, professor of Environmental engineering at the Universidad de Cundinamarca and pedagogue of educational innovations at the Center for Innovation in Technology and Education (ConectaTE) at the Universidad de Los Andes. He has experience in research and project management in education and innovation with ICT, and he has certificates in the English, Portuguese and French languages. He has been a designer of courses and educational programs, leader of national (CNA) and international accreditation (ABET), pedagogue, and teacher trainer in secondary education. Actually, he is a professor of industrial engineering at the Universidad

Sergio Arboleda and a professor of Systems engineering at the Universidad de Los Andes.

Panel Speaker II

Panel Speaker III

Panel Speaker IV

Women in Industry and Academia (WIIA) Panel + Diversity and Inclusion Panel Sponsored by Ford Motor Company

Tuesday, May 7, 2024, 2:00 – 3:45 pm – Room 2 (Onsite)

Panel Chair

Valeria Mendoza Cortés
MSc. Logística y Transporte – Administradora Logística
Certified Internacional Forwarder
Sourcing Specialist
Baker Hughes
Bogota, Colombia

Logistics Administrator, bilingual with 90% English language skills (B2 Certificate). Recent experience in service logistics for the Oil, Gas & Energy sector. Specific competencies in materials planning for the Completion process. Creation and management of requisitions and purchase orders. Monitoring of imports and exports. Analysis and physical inventory counting. Generation of reports on open orders, requisitions, physical inventory and exports. Release of materials from physical inventory and intercompany articulation. Management of SAP – Purchasing and Materials Management Module.

Knowledge in hospital logistics, reverse logistics, green logistics, entrepreneurship and marketing. Experience formulation and coordination of research projects. Skills in the preparation of scientific documents, presentations, reports, technical and administrative documents. Management of office tools (Word, Excel, Power Point). Logistics Administrator, bilingual with 90% English language skills (B2 Certificate). Recent experience in service logistics for the Oil, Gas & Energy sector. Specific competencies in materials planning for the Completion process. Creation and management of requisitions and purchase orders. Monitoring of imports and exports. Analysis and physical inventory counting. Generation of reports on open orders, requisitions, physical inventory and exports. Release of materials from physical inventory and intercompany articulation. Management of SAP – Purchasing and Materials Management Module. Knowledge in hospital logistics, reverse logistics, green logistics, entrepreneurship and marketing. Experience formulation and coordination of research projects. Skills in the preparation of scientific documents, presentations, reports, technical and administrative documents. Management of office tools (Word, Excel, Power Point).

Panel Speaker I

Eliana K. Acuna Cárdenas
Fundación Santa Fe
Bogotá, Colombia

Panel Speaker II

Panel Speaker III

Panel Speaker IV

AI in Engineering Panel

Wednesday, May 8, 2024, 2:00 – 3:45 pm – Room 2 (Onsite)

Panel Chair



Dr. Juan Sebastian Sánchez

Professor Sánchez-Gómez is a biomedical engineer, lawyer, magister in Education, magister in Public Policy, and a doctoral student in Industrial and Systems Engineering at Universidad de Los Andes. He has worked as a professor of civil and telematics engineering at the Universidad Distrital, professor of Industrial engineering at the Universidad El Bosque, professor of Environmental engineering at the Universidad de Cundinamarca and pedagogue of educational innovations at the Center for Innovation in Technology and Education (ConectaTE) at the Universidad de Los Andes. He has experience in research and project management in education and innovation with ICT, and he has certificates in the English, Portuguese and French languages. He has been a designer of courses and educational programs, leader of national (CNA) and international accreditation (ABET), pedagogue, and teacher trainer in secondary education. Actually, he is a professor of industrial engineering at the Universidad

Sergio Arboleda and a professor of Systems engineering at the Universidad de Los Andes.

Panel Speaker I

Panel Speaker II

Panel Speaker III

Panel Speaker IV

PMI Colombia Panel

Thursday, May 9, 2024, 2:00 – 3:45 pm – Room 2 (Onsite)

Panel Chair

President of PMI Colombia

Panel Speaker I

Panel Speaker II

Panel Speaker III

Parallel Sessions

All Times are in Bogota Time

Tuesday, May 7, 2024

	Room 1 Onsite	Room 2 Onsite	Room 3 Onsite	Room 4 Online
8:00	Plenary: Global Lean Six Sigma and Operations Excellence	Supply Chain and Logisitcs Competition Lean Six Sigma Competition	Doctoral and Masters Thesis Competitions	Online Competitions Undergraduate Student Paper Competition sponsored by Siemens
10:00	Welcome Address: Dra. Flor Nancy Díaz Piraquive, Rectora, Fundación Universitaria Internacional de La Rioja (UNIR), Bogota, Colombia			
10:30	Opening Keynote: Dr. Juan Sebastian Sánchez, Professor of Indsutrial Engineering, Universidad Católica de Colombia and Universidad de Los Andes, Bogota, Colombia			
11:00	Keynote: Dr. Javier Arturo Moreno Carvajal, Dean, School of Engineering, Institución Universitaria Colegios de Colombia – UNICOC, Bogota, D.C., Capital District, Colombia			Online Competitions
11:30	Keynote: Dr. Luis Rabelo, Professor, Department of Industrial Engineering & Management Systems, University of Central Florida, Orlando, FL, USA			Lean Six Sigma Competition Senior Design Competition Simulation Competition SCM Competition MS Thesis Competition PhD Dissertation Competition
12:00	Keynote: Jesús María Velásquez-Bermúdez, Founder and Chief Scientific Officer, CSO, Hypothalamus Artificial Intelligence Inc. (HAI Ai), Tabio, Cundinamarca, Colombia			
12:30	Keynote: Dr. Miguel Ángel Gómez Martínez, Research Professor, Departamento de ingeniería, Universidad de Guanajuato, Guanajuato, Mexico			
1:00	Lunch Break – Buffet Lunch at Ballroom			
2:00	Keynote: Dr. Wilmer Garzón Alfonso, Full Professor in the Computer Department, Director of Data Science Master Program, Escuela Colombiana de Ingeniería, Bogotá, Colombia			Artificial Intelligence and Data Science
2:30	Keynote: German Torres Hernández, MSc Ing. Industrial – MSc en Analytics & AI, Lean Six Sigma Black Belt – Certified RFID Supply Chain Manager, Auditor Líder ISO 9001, Gerente de Transformación Digital – Consultor Senior Digital Supply Chain			
3:00	Keynote: Dr. Luis Gabriel Marín Collazos, Profesor Planta Temporal, Departamento de Electrónica, Facultad de Ingeniería, Bogotá, D.C Colombia			
3:30	Keynote: Ximena Córdova Vallejo, PhD, Profesora, Colegio de Ciencias e Ingenierías, Universidad San Francisco de Quito, Quito, Ecuador			
2:00	Keynotes	Global Engineering Education Panel	Undergraduate Student Paper Competition	
4:00	Innovation and Entrepreneurship Workshop	Women in Industry and Academia (WIIA) Panel + Diversity and Inclusion Panel Sponsored by Ford Motor Company	Undergraduate Student Paper Competition	Online Competitions Graduate Paper Competition High School Competition HF & Ergonomics Competition

Wednesday, May 8, 2024

	Room 1 Onsite	Room 2 Onsite	Room 3 Onsite	Room 4 Online
8:00	Plenary: Global Industry Solutions	Six Sigma Certification Workshop	Operations Excellence	Undergraduate Research Competition sponsored by Daikin Applied (Online)
10:00	Keynote: Dr. Eddy Morris, Director de Educación Ejecutiva ESAN, Director de la Maestria en Dirección de TI-Director de la Maestria en Project Management, ESAN, Peru			Quality, Reliability and Maintenance
10:30	Keynote: Dr. Julián Arellano, Dean, College of Engineering and Associate Professor, Department of Civil and Environmental Engineering, Universidad del Norte, Barranquilla, Colombia			
11:00	Keynote: Arvey Alfonso Granada Calderon, Operations Manager, La Unión Coffee Farm, Pereira, Risaralda, Colombia			
11:30	Keynote: Dr. Mauricio Becerra Fernandez, Director of the Industrial Engineering Program, Director of the Master in Smart and Sustainable Cities, Escuela de Ingeniería, Ciencia y Tecnología, Universidad del Rosario, Bogota, Colombia			
12:00	Keynote: Dr. Nubia Milena Velasco Rodríguez, Director of Doctorate in Administration, Master of Research in Administration, Universidad de los Andes, Bogotá, Colombia			
12:30	Keynote: Dr. Ing. Adriana Esguerra Arce, Docente, Directora del Centro de Estudios en Gestión de Tecnología e Innovación, Directora del Grupo de Investigación CIMSER, Decanatura de Ingeniería Industrial, Escuela Colombiana de Ingeniería Julio Garavito, Bogotá, D.C., Colombia			
1:00	Lunch Break – Buffet Lunch at Ballroom			
2:00	Plenary: Innovation & Entrepreneurship	Panel on AI in Engineering	Manufacturing, Assembly and Design	Simulation, Optimization and Productivity Improvement
4:00	Manufacturing	Toyota Kata Workshop	Innovation	Design, Manufacturing and Safety

Thursday, May 9, 2024

	Room 1 Onsite	Room 2 Onsite	Room 3 Onsite	Room 4 Online
8:00	Plenary	Business Management	Productivity	Competitions Grad, HF and High School
10:00	Keynote: Dr. Jorge Andrés Vivares Vergara, Research Professor, Universidad Nacional Abierta y a Distancia (UNAD), Bogotá, Colombia			Manufacturing, Assembly, Design, Supply Chain and Sustainability
10:30	Keynote: Dr. William J. Guerrero, Associate Professor, Head of the Research Group on Logistic Systems and Head of the IT and Process Optimization Department, Universidad de la Sabana, Bogota, D.C., Capital District, Colombia			
11:00	Keynote: Dr. Paloma María Teresa Martínez Sanchez, Engineering, Universidad El Bosque, Bogota, Colombia			
11:30	Keynote: Mohammad Islam, Associate Director, Optum – United Healthcare Inc., New Jersey, United States of America			
12:00	Keynote: Rafael Forero Vargas, Food Safety & Quality Manager Colombia, Rich's Product Corporation, Bogotá, Colombia			
12:30	Keynote:			
1:00	Lunch Break – Buffet Lunch at Ballroom			
2:00	Plenary	PMI Panel	Engineering Management	Business Management
4:00	Plenary: Global SCM	PMO Workshop	SCM and AI	Optimization

7:00 – 10:00 pm, May 9, 2024 – Awards Ceremony and Gala Dinner Buffet

May 7, 2024 (Tuesday)

May 7, 2024 (Tuesday) - Session: 8:00 – 9:45 am

8:00 – 9:45 am, TUESDAY

Onsite Room 1

Session Chair: Ivanhoe Rozo-Rojas, Professor and Director, Industrial Engineering, Universidad Católica de Colombia, Bogota, Colombia

Global Lean Six Sigma and Operations Excellence

8:00 – 8:20 am

Alberto Poveda Caputo
Lean Six Sigma Black Belt and Process & Continuous Improvement Specialist
Operational Excellence Master
General Motors
Bogotá, Colombia

8:20 – 8:40 am

Paola Cruz Díaz
Directora Ejecutiva
Lean Six Sigma Institute LATAM
Bogota, Colombia

8:40 – 9:00 am

Lina María Gómez Cortés
Professor, Universidad de La Sabana
Co fundadora y COO, Tech, Social, Agro and Arts
Bogotá, Colombia

9:00 – 9:20 am

9:20 – 9:40 am

Ivanhoe Rozo-Rojas
Professor
Director, Industrial Engineering
Universidad Católica de Colombia
Bogota, Colombia

8:00 – 9:45 am, TUESDAY

Onsite Room 2

Session Chair:

Supply Chain and Logistics Competition

ID 197 Cadena de Fabricación y de Suministro Sostenible y Resiliente

Mario Fernando Ardila, Agroindustrial, Colombia

ID 204 Optimization Analysis of Cold Chain Intermodal Transport Scheme for Agricultural Products Based on Carbon Emissions

Ahmed Mehrem, Duisburg Essen University, Germany

ID 16 Reducing Carbon Emissions in Supply Chains

Melvin Drent, School of Industrial Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

ID 77 Improvement Proposal Based on Machine Learning, Big Data and DDMRP to Improve Forecasting Compliance in a Consumer Goods Company

Mariscal Cruzado Diana Micaela and Gonzáles Jáuregui Bruni Piero, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Peru
José Antonio Taquía Gutiérrez, Instituto de Investigación Científica, Universidad de Lima, Lima, Peru

Lean Six Sigma Competition

ID 116 Street Lighting Quality using Lean Six Sigma

Alejandro Gallegos Chocce, Professor, Industrial Engineering Department, University of Engineering and Technology – UTEC, Lima, Perú
Blanca Harumi Palacios B. and Angela Milagros Tenorio B., Department of Industrial Engineering, University of Engineering and Technology – UTEC, Lima, Perú

8:00 – 9:45 am, TUESDAY

Onsite Room 3

Session Chair:

Doctoral Dissertation Competition sponsored by Airbus (Onsite)

ID 70 Midiendo la capacidad de innovación en fincas productoras de café especial en Colombia
Eyder James Ramirez Zuñiga, Hugo Castro Fernando Castro Silva and Ehidý Karime García Cruz, Universidad EAN, Universidad Pedagógica y Tecnológica de Colombia, Universidad Nacional de Colombia, Colombia

ID 203 Smart Sustainable Supply Chain Management: How Smart Supply Chain Enables the Sustainable development of Supply Chains
Laura Visintainer Lerman, Industrial Engineering Department, Engineering School, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Masters Thesis Competition (Onsite)

ID 30 Performance Innovation Measurement at the Territorial Level: It's Determinants in Developed Countries
Erika Julieth Serrano Rodríguez and Luis Eduardo Becerra Ardila, School of Industrial and Business Studies, Physicomechanical Engineering Faculty, Industrial University of Santander, Bucaramanga, Colombia

ID 149 Strategic Aeronautical Procurement: Case Study of Supplier Selection in the Colombian Air Force
Bayron Steve Ruiz Niño, Captain, Mechanical Engineer, Aeronautical Logistics Directorate, Colombian Air Force, Bogotá D.C., Colombia
William Javier Guerrero Rueda, Professor, IT and Process Optimization Department, Engineering School, Universidad de la Sabana Bogotá D.C., Colombia

8:00 – 11:00 am, TUESDAY

Online Room 4

Session Chair:

Undergraduate Student Paper Competition sponsored by Siemens (Online)

ID 7 Coco Wipes: A Comparative Analysis During Post-Pandemic on the Environmental Efficiency of Wet Wipes Made from Coconut Fiber and the Current Wet Wipes
Dantes, Mac Friedrich R., Garcia, Antonio Mari C., Gonzalez, Carlo C., Paguio, Alliyah Jade B., Marinell M. Santos
Department of Industrial Engineering, College of Engineering and Architecture Technological Institute of the Philippines – Quezon City Cubao, Quezon City, Philippines
Engr. Ma. Teodora E. Gutierrez, Department of Industrial Engineering, College of Engineering and Architecture, Technological Institute of the Philippines – Quezon City, Cubao, Quezon City, Philippines

ID 78 Importance of responsiveness in the quality of service in an HVAC maintenance company in metropolitan Lima applying the SERVQUAL model
Anthony Allen Jaimes Villa and Juan Diego Oscco Moreno, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Peru
José Antonio Taquía Gutiérrez, Instituto de Investigación Científica, Universidad de Lima, Lima, Peru
Juan Manuel Machuca De Pina, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Peru

ID 118 Analysis of the Determining Factors Toward the Adoption of Near-Field Communication (NFC) Tag-Based Fare Collection System in the Marikina Heights UV Express Terminal
Jayvee V. Acosta, Alexandra Ysabel M. Briones, Aira Joy M. dela Rosa, Josiah Vince D. Evangelista and Nestor R. Ong, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Manila, Philippines

ID 23 Contest helped them acquire non-academic skills
Nataly de los Angeles Perez Santana, Coordinación De Proyectos Y Concursos Estudiantiles, Universidad Iberoamericana Ciudad De México

ID 27 Waste reduction through the use of Single Minute Exchange of Die in the cutting area in Small and Medium-sized Enterprises of the textile sector
Alejandra Alvarado Saenz and Carlos Urbina Jibaja, Students, Industrial Engineering, University of Lima, Lima, Peru
Miguel Shinno Huamani, Professor, Industrial Engineering Department, Engineering School, University of Lima

ID 45 Forecasting Models Used in the Tourism Sector: A Systematic Review of Literature
Guillermo Huapaya and Aiko Makino, Facultad de Ingeniería, Universidad de Lima, Lima, Peru
Juan Manuel Machuca De Pina, Professor, Facultad de Ingeniería, Universidad de Lima, Lima, Peru

ID 66 Enhancing Manufacturing Brick Production Performance in Bolivia: Leveraging Factory Physics and Simulation for Increased Efficiency
Mariana Sánchez-Larrea, Bolivian Catholic University "San Pablo", Cochabamba, Bolivia
Boris Christian Herbas-Torrico, Tecnológico de Monterrey, Guadalajara, México

ID 213 Operations Management in Servuccion Systems Case Study of the Gastronomic Sector in Cartagena (Colombia): A Systematic Review
María Inés Díaz Santrich
CIPTec Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnológico Comfenalco
Cartagena de Indias, Colombia

Ivan Andres Rebolledo Polo

CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Hernando Garzón Saenz
CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

José Manuel Solana Garzón
CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias - Colombia

ID 214 Operations Management in Servuccion Systems in Logistcs Service Companies in Cartagena (Colombia): A Systematic Review

Keily Andrea Caez Rojas
CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Ronaldo Nieto Trespalacios
CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Hernando Garzón Saenz
CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

José Manuel Solana Garzón
CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias – Colombia

ID 215 Operation Management in Servuccion Systems of the Hotel Sector of Cartagena de Indias (Colombia): A Systematic Review

Juan Jose Galindo Martinez
CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Julio Rafael Ortega Romero
CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Hernando Garzón Saenz
CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

José Manuel Solana Garzón
CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias - Colombia

ID 216 Operation Management in Servuccion Systems in the Educational Sector of Cartagena de Indias (Colombia): A Systematic Review

Chelcy Liney Salas Llerena
CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Leonardo Adrián García Julio
CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Hernando Garzón Saenz
 CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
 Fundacion Universitaria Tecnológico Comfenalco
 Cartagena de Indias, Colombia

José Manuel Solana Garzón
 CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production
 Fundacion Universitaria Tecnológico Comfenalco
 Cartagena de Indias - Colombia

ID 218 Improvement of packing process in a production and marketing company producer of modular furniture based in Lean Manufacturing and Simulation

Angélica Beatriz Otero Pechené, Farli Daniela Sánchez Serna, Laura Camila Obregón Pérez and Maritza Correa Valencia
 Facultad de Ingeniería
 Universidad Autonoma de Occidente
 Cali, Colombia

May 7, 2024 (Tuesday) - Session: 10:00 am – 1:00 pm

10:00 am – 1:00 pm, TUESDAY

Onsite Room 1

Keynote Moderator: Dr. Johanna Trujillo Díaz and Prof. Don Reimer

10:00 am

Welcome Address: Dra. Flor Nancy Díaz Piraquive, Rectora, Fundación Universitaria Internacional de La Rioja (UNIR), Bogota, Colombia

10:30 am

Opening Keynote: Dr. Juan Sebastian Sánchez, Professor of Industrial Engineering, Universidad Católica de Colombia and Universidad de Los Andes, Bogota, Colombia

11:00 am

Keynote: Dr. Javier Arturo Moreno Carvajal, Dean, School of Engineering, Institución Universitaria Colegios de Colombia – UNICOC, Bogota, D.C., Capital District, Colombia

11:30 am

Keynote: Dr. Luis Rabelo, Professor, Department of Industrial Engineering & Management Systems, University of Central Florida, Orlando, FL, USA

12:00 pm

Keynote: Jesús María Velásquez-Bermúdez, Founder and Chief Scientific Officer, CSO, Hypothalamus Artificial Intelligence Inc. (HAI Ai), Tabio, Cundinamarca, Colombia

12:30 pm

Keynote: Dr. Miguel Ángel Gómez Martínez, Research Professor, Departamento de ingeniería, Universidad de Guanajuato, Guanajuato, Mexico

1:00 Lunch Break – Buffet Lunch

11:00 am – 2:00 pm, TUESDAY

Onlines Competitions

Online Room 4

Session Chair:

Lean Six Sigma Competition sponsored by Tooling Tech Group

ID 210 Implementation of Lean Manufacturing Methodology to Increase Productivity in A Bakery Company
 Jimmy André Cárdenas Peña and Jhoel Oswaldo Veliz Veliz, Universidad de Lima, Industrial Engineering, Lima, Peru

ID 226 Lean Six Sigma Logistics Model Aimed at Increasing Productivity Levels in ALMACAFE Processes
 Sandra Patricia Zapata Calambas
 Industrial Engineer, MBA
 Cali, Colombia

Claudia Cecilia Peña Montoya
Faculty of Engineering and Basic Sciences
Autonomous University of the West
Cali, Colombia

Senior Design Project Competition sponsored by Tooling Tech Group

ID 34 BreezeGuard DualFan Hanger
Sepideh Abolghasem, California State University, Northridge, United States

Simulation Competition

ID 111 Stiffness Analysis of Hemp Stem Reinforced Concrete Composite Laminates
Som R. Soni, AdTech Systems Research Inc., 1342 North Fairfield Road, Beavercreek, Ohio 45432, USA
Craig Schluttenhofer and Subramania I. Sritharan, Agricultural Research and Development Program (ARDP), Central State University
1400 Brush Row Road, Wilberforce, OH 45384, USA

Supply Chain and Logistics Competition

ID 69 Supply Chain Digital Twins: A Comprehensive Review and Case Studies
Jacob Odisho, Mahek Karamchandani, Emma Swadley and Mohamed Awwad, Industrial and Manufacturing Engineering Department
California Polytechnic State University, San Luis Obispo, CA 93407, USA
Maximilian Püttner, Department of Engineering and Management, University of Applied Sciences Munich, Lothstraße 34, 80335 Munich, Germany

ID 85 Enhancing Supply Chain Sustainability in Modern Manufacturing
Silvia Carpitella, Sepideh Abolghasem and Krithik Reddy Kunta, Department of Manufacturing Systems Engineering and Management,
California State University, Northridge, United States

Masters Thesis Competition

ID 194 AI-based Drought Forecasting for Parametric Insurance
Malcolm Tanyaradzwa Mathende, Belinda Ndlovu and Sibusisiwe Dube, National University of Science and Technology, Bulawayo, Zimbabwe
P.O Box AC939, Ascot, Bulawayo, Zimbabwe

ID 195 Optimizing Antiretroviral Therapy (ART) Adherence Through Predictive Analytics Using Machine Learning Techniques
Nyasha Winnet Chiramba, Belinda Ndlovu and Sibusisiwe Dube, Department of Data Analytics and Informatics, Faculty of Applied Sciences
National University of Science and Technology, Bulawayo, Zimbabwe, P.O Box AC939, Ascot, Bulawayo, Zimbabwe

Doctoral Dissertation Competition sponsored by Airbus

ID 223 How can Self-Development Improve the Relationship between Human Error and Service Effectiveness in the Public Sector?
Achmad Mirza
Student in the Management Doctoral Program,
Faculty of Economics, Universitas Sriwijaya
Palembang, INDONESIA

Isnurhadi and Muhammad Ichsan Hadjri
Professor at the Faculty of Economics
Universitas Sriwijaya, Palembang, INDONESIA

May 7, 2024 (Tuesday) - Session: 2:00 – 3:45 pm

2:00 – 3:45 pm, TUESDAY

Onsite Room 1

Keynote Moderator: Dr. Javier Arturo Moreno Carvajal, Dean, School of Engineering, Institución Universitaria Colegios de Colombia – UNICOC,
Bogota, D.C., Capital District, Colombia

2:00 pm

Keynote: Dr. Wilmer Garzón Alfonso, Full Professor in the Computer Department, Director of Data
Science Master Program, Escuela Colombiana de Ingeniería, Bogotá, Colombia

2:30 pm

Keynote: German Torres Hernández, MSc Ing. Industrial – MSc en Analytics & AI, Lean Six Sigma Black
Belt – Certified RFID Supply Chain Manager, Auditor Líder ISO 9001, Gerente de Transformación Digital –
Consultor Senior Digital Supply Chain

3:00 pm

Keynote: Dr. Luis Gabriel Marín Collazos, Profesor Planta Temporal, Departamento de Electrónica, Facultad de Ingeniería, Bogotá, D.C Colombia

3:30 pm

Keynote: Ximena Córdova Vallejo, PhD, Profesora, Colegio de Ciencias e Ingenierías, Universidad San Francisco de Quito, Quito, Ecuador

2:00 – 3:45 pm, TUESDAY**Global Engineering Education****Onsite Room 2**

Session Chair:

Dr. Mario Chauca
Advisor reviewer vice-rectorate of research and
Researcher Professor at Ricardo Palma University
Santiago de Surco, LI 15039, PERU
Researcher of the RENACYT-CONCYTEC
Executive Committee Member IFEEES (2019-2021)
Past Director Kenshu Kiokay del Peru-AOTS
Past Steering Committee Member IEEE MWSCAS

Speaker I

Dr. Juan Sebastian Sánchez
Professor of Industrial Engineering
Universidad Catolica de Colombia
Universidad de Los Andes

Speaker II

Speaker III

Panel Speaker IV

Dr. Oscar A. Vasquez-Bernal
Associate Professor
School of Basic Sciences, Technology and Engineering
Universidad Nacional Abierta y a Distancia
Bogotá Colombia

Panel Speaker V

Dr. Ahad Ali
AhadAliAssociate Professor
Director of Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director of Smart Manufacturing and Lean Systems Research Group
Director, Graduate Certificate in Lean Six Sigma
Coordiantor, Siemens Electro-Matic Industrial Engineering Lab
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University
Southfield, Michigan, USA

2:00 – 5:00 pm, TUESDAY**Onsite Room 3**

Session Chair:

Undergraduate Student Paper Competition sponsored by Siemens (Onsite)**ID 10 Design of a Mobile Application 4.0 for the Prevention of Occupational Risks in Workers with Intellectual Disabilities in Logistics Operations in Refrigerated Warehouses**

Jorge Enrique Portella Cleves, SENA. Suomaya Research Group, Bogotá, Colombia
Juan Carlos Escobar Rodriguez, SENA. Suomaya Research Group, Bogota, Colombia
David Stevenson Guzmán Marín, SENA. Suomaya Research Group, Bogota, Colombia
Ilmer Cuello Garcia, SENA. Suomaya Research Group, Bogotá, Colombia

ID 41 Optimizing Canine Nutrition: A Linear Programming Approach for Military Dogs' Diet

Oliver J. Saadia Harvy, Student, Industrial Engineering, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana

Mexico City, Mexico

Arturo Obregón Hochstrasser, Student, Finance, Department of Business Studies, Universidad Iberoamericana, Mexico City, Mexico

Oroselvia Sánchez, Professor, Industrial Engineering, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana Mexico City, Mexico

ID 42 Simulation-Optimization of a Coffee Shop in Business District: A case study of Starbucks in Mexico City

Dylan Buzali, Santiago Muñiz, Santiago Elizondo and Oroselvia Sánchez. Students, Industrial Engineering Department, Engineering School Universidad Iberoamericana, Mexico City, Mexico City, Mexico

Oroselvia Sánchez, Professor, Industrial Engineering Department, Engineering School, Universidad Iberoamericana, Mexico City, Mexico City, Mexico

ID 47 Most effective pitches against Ronald Acuña Jr.

Luis Ornelas and Guillermo San Román, Industrial Engineering Study Program, Universidad Iberoamericana, Mexico City, Mexico

Isidro Soria, Professor, Industrial Engineering, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana Mexico City, Mexico

ID 61 Optimizing Streamer Success: Streaming Schedule Through Operations Research

Jeronimo Warnholtz and Sebastián Ruiz, Undergraduate Student, Industrial Engineering, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana, Mexico City, CDMX 01376, MX

Isidro Soria, Professor, Industrial Engineering, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana Mexico City, Mexico

ID 73 Implementación de herramientas Lean Manufacturing para la mitigación y aumento de la productividad en las MiPymes de la ciudad de Popayán

Nora Fernanda Arciniegas Sánchez, Professor, Industrial Engineering Program, Fundación Universitaria de Popayán, Popayán – Cauca, Colombia

Jean Michael Sampayo Reyes, Student, Industrial Engineering Program, Fundación Universitaria de Popayán, Popayán – Cauca, Colombia

ID 114 Indicators in the Supply Chain Linkages in Food Distribution Companies: A literature review

María Camila Vanegas Escobar y Juan Sebastián Sánchez-Gómez, Engineering School, Universidad Católica, Bogotá, Colombia

ID 213 Operations Management in Servuccion Systems Case Study of the Gastronomic Sector in Cartagena (Colombia): A Systematic Review

María Inés Díaz Santrich

CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Ivan Andres Rebolledo Polo

CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Hernando Garzón Saenz

CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

José Manuel Solana Garzón

CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias - Colombia

ID 214 Operations Management in Servuccion Systems in Logistics Service Companies in Cartagena (Colombia): A Systematic Review

Keily Andrea Caez Rojas

CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Ronaldo Nieto Trespalacios

CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

Hernando Garzón Saenz

CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias, Colombia

José Manuel Solana Garzón

CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production

Fundacion Universitaria Tecnologico Comfenalco
Cartagena de Indias - Colombia

ID 215 Operation Management in Servuccion Systems of the Hotel Sector of Cartagena de Indias (Colombia): A Systematic Review

Juan Jose Galindo Martinez, CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
Julio Rafael Ortega Romero, CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
Hernando Garzón Saenz, CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
José Manuel Solana Garzón, CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias – Colombia

ID 216 Operation Management in Servuccion Systems in the Educational Sector of Cartagena de Indias (Colombia): A Systematic Review

Chelcy Liney Salas Llerena, CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
Leonardo Adrián García Julio, CIPTEC Research Group – TIPS Research Incubator. Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
Hernando Garzón Saenz, CIPTEC Research Group - Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias, Colombia
José Manuel Solana Garzón, CIPTEC Research Group- Faculty of Engineering - Industrial Engineering Program - Technology in Industrial Production, Fundacion Universitaria Tecnologico Comfenalco, Cartagena de Indias - Colombia

ID 218 Improvement of packing process in a production and marketing company producer of modular furniture based in Lean Manufacturing and Simulation

Angélica Beatriz Otero Pechené, Farli Daniela Sánchez Serna, Laura Camila Obregón Pérez and Maritza Correa Valencia, Facultad de Ingenieria Universidad Autonoma de Occidente, Cali, Colombia

2:00 – 3:45 pm, TUESDAY

Online Room 4

Session Chair:

Artificial Intelligence and Data Science

ID 14 Visualizing Bike-Sharing Data in Urban Environments

Ahmed Yasin Alkarboly, Forerunner Advanced Systems & Solutions, Dallas, TX 75081, USA

ID 19 COVID-19 Epidemiological Analysis, Recovery Strategy, and Future Forecasts in Saudi Arabia: Analysis of Sustainability Study by Artificial Intelligence

Tasnim M Adi, Doha A Al-Alatiq, Rasha A Al-Shamrani, Almaha B AlKhabti, Wejdan H Alkhatami and Mona H Alfweah, Undergraduate Student in Industrial Engineering, Department, College of Engineering, University of Bisha, Bisha 61922, Saudi Arabia
Khaled Ali Abuhasel, Full Professor in Industrial Engineering, Department, College of Engineering, University of Bisha, Bisha 61922, Saudi Arabia

ID 62 Scaling-up Manufacturing Processes for Competitiveness Using Intelligent Reference Models

Julio Macedo, Institut Strategies Industrielles, Montreal (QC), H3H1R6, Canada

ID 63 Time Series Electricity Consumption Forecast in the Philippines using Multivariate PROPHET

Joaquin Carlos Castro, James Russel Cinense and Joshua Christian Cortez, College of Computer Studies, Angeles University Foundation MacArthur Highway, Angeles City, Pampanga, Philippines
Dr. James Esquivel, Professor of Computer Science, College of Computer Studies Program Chair, Angeles University Foundation MacArthur Highway, Angeles City, Pampanga, Philippines

ID 205 La Inteligencia Artificial como Fenómeno Social: Un Acercamiento Desde la Noción de Sintopia

Víctor Manuel Reyes Espino and Víctor Hugo Jiménez Arredondo, Departamento de Arte y Empresa, División de Ingenierías Campus Irapuato-Salamanca, Universidad de Guanajuato, México

ID 217 Neural Network Model for Improving Vulnerable Road User Safety

Carlos Antonio Marino, CENTRUM Católica Graduate Business School, Lima, Peru
Pontificia Universidad Católica del Perú, Lima, Peru

ID 26 State-of-the-art discussion and evaluation on Artificial Intelligence applied to quality assurance using Assembly Assistance Systems

Isabel Caroline Gomes Giannecchini, Technology College (FT) - University of Brasília, Brasília, DF 70910-900, Brazil
Sanderson César Macêdo Barbalho, Industrial Engineering Department, Technology College (FT) - University of Brasília, Brasília, DF 70910-900, Brazil

May 7, 2024 (Tuesday) - Session: 4:00 – 5:45 pm

4:00 – 5:45 pm, TUESDAY

Onsite Room 1

Innovation and Entrepreneurship Workshop

Workshop Facilitator: Professor Don Reimer, Lawrence Tech, MI, USA

Each team will develop an idea to solve an engineering problem that may have commercial potential. They will develop a business plan using the business model canvas. Teams will compete for prizes with best ideas and best commercial potentials. Students need to bring their laptops. Innovation and Entrepreneurship Workshop – A hands-on interactive learning experience

Professor Donald M. Reimer
President, The Small Business Strategy Group, Detroit, Michigan, USA
Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA
Chief Operating Officer, IEOM Society

4:00 – 5:45 pm, TUESDAY**Onsite Room 2**

Session Chair:

Women in Industry and Academia (WIIA) Panel + Diversity and Inclusion Panel Sponsored by Ford Motor Company

Panel Chair

Valeria Mendoza Cortés
MSc. Logística y Transporte – Administradora Logística
Certified Internacional Forwarder
Sourcing Specialist
Baker Hughes
Bogota, Colombia

Panel Speaker I

Eliana K. Acuna Cárdenas
Fundación Santa Fe
Bogotá, Colombia

Panel Speaker II

Panel Speaker III

Panel Speaker IV

4:00 – 5:45 pm, TUESDAY**Onsite Room 3**

Session Chair:

Undergraduate Student Paper Competition Continue

4:00 – 5:45 pm, TUESDAY**Online Room 4**

Session Chair:

Competitions**Graduate Student Paper Competition sponsored by Eaton Corporation****ID 37 Factors Considered by Holiday Makers in Selecting a Guesthouse in the Post-Covid-19 Pandemic Era**

Bheki B.S Makhanya,
Postgraduate School of Engineering Management
Faculty of Engineering and the Build Environment
University of Johannesburg, PO Box 524, Auckland Park 2006, South Africa

ID 24 Can LLMs Have a Fever? Investigating The Effects of Temperature on LLM Security

Chan Xing Yu, James, Chan Si Yu, David and Chow Ban Hoe
River Valley High School
Singapore 649961

Poh Hui-Li Phyllis
Member of Technical Staff, DSO National Laboratories
Singapore 118230

ID 68 Upgrading legacy systems for Industry 4.0 with Node-RED and OPC-UA

Daniel Ribeiro de Sousa & Eduardo Paciência Godoy
Scientific Initiation Program PIBIC Junior CNPQ/Reitoria UNESP
São Paulo State University (UNESP) – Sorocaba Campus
Sorocaba, Sao Paulo, Brazil

Vitor Mendes Caldana
Professor, Industry Department

Federal Institute of Sao Paulo (IFSP) – Sorocaba Campus
Sorocaba, Sao Paulo, Brazil

Human Factors and Ergonomics Competition sponsored by CINTAS

ID 5 Naylea Maybet Perez Medina

Faculty of Engineering and Architecture
University of Lima
Lima, 1501, Perú

Gabriela Zuñiga Valdivia
Faculty of Engineering and Architecture
University of Lima
Lima, 1501, Perú

ID 119 Meditation Leads to Integrity and Acceptance

Som R. Soni and Gita D. Soni
AdTech Systems Research Inc
1342 North Fairfield Road,
Beavercreek, Ohio 45432 USA

ID 129 Lab-Tested: How Laboratory Design Affects The Performance of UST Chemical Engineering Students

Renzo Miguel M. Lanip, Therese Adrienne M. Macawile,
Czarina Danielle B. Mendoza, and Damirson A. Co, PIE (co-author)
Department of Industrial Engineering
University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

May 8, 2024 (Wednesday)

May 8, 2024 (Wednesday) - Session: 8:00 – 9:45 am

8:00 – 9:45 am, WEDNESDAY

Plenary – Indsutry 4.0

Onsite Room 1

Session Chair:

8:00 am – 8:20 am (Wednesday, May 8)

Iván Andrés Ramírez Pinzón
Associate Professor
Postdoctoral Researcher
Advisor
Bogota, Colombia

Presentation Title: Telecommunications Infrastructure and Information Regime

8:20 am – 8:40 am (Wednesday, May 8)

8:40 am – 9:00 am (Wednesday, May 8)

9:00 am – 9:20 am (Wednesday, May 8)

9:20 am – 9:40 am (Wednesday, May 8)

Aracelli Centeno Sanchez
Business Process Manager
Cleaning and Beauty Products
Peru

8:00 – 9:45 am, WEDNESDAY

Onsite Room 2

Six Sigma Certification Workshop

Dr. Ahad Ali
Associate Professor
Director of Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director of Smart Manufacturing and Lean Systems Research Group
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University, Southfield, Michigan, USA

Executive Director, IEOM Society International

8:00 – 9:45 am, WEDNESDAY**Operations Excellence****Onsite Room 3**

Session Chair: Ali Ardalan, Information Technology and Decision Sciences Department, Old Dominion University, Norfolk, VA 23529, USA

ID 91 Gamification as a Competitive Advantage within Organizations, Case Study in Mexico

V́ctor Hugo Jiméneez Arredondo, Rocío Alfonsina Lizárraga Morales, Luis Enrique Rosas Collazo and Yareli Vianey Bravo Cuevas, Art and Management Department, University of Guanajuato, Guanajuato, Mexico

ID 93 Social Networks and Digital Platforms in the 20th Century as a Business Model in Mexico

Juan Manuel Rodríguez García, Miguel Ángel Gómez Martínez and Josué Julián Moreno López, Art and Management Department, University of Guanajuato, Guanajuato, Mexico

ID 84 A Bibliometric Review on Augmented Intelligence Systems Enabled by Industry 4.0 Technologies

Mariannys Rodríguez-Gasca and Flávia Motta Corvelho, Department of Mechanical Engineering, University of Brasilia, Brasilia-DF, 70910-900, Brazil

Sanderson César Macêdo Barbalho, Department of Industrial Engineering University of Brasilia, Brasilia-DF, 70910-900, Brazil

ID 94 A Methodology for The Redesign Supply Chains in The Context of Global Peacekeeping OperationsJaqueline Ferronato, Universitat Oberta de Catalunya, Barcelona, Spain
Jairo R. Montoya-Torres, Universidad de La Sabana, Chia, Cundinamarca, Colombia**ID 87 Global Information Systems Education in Support of Global Supply Chain Management**

Roya Ardalan and Ali Ardalan, Information Technology and Decision Sciences Department, Strome College of Business, Old Dominion University Norfolk, VA 23529, USA

8:00 – 11:00 am, WEDNESDAY**Online Room 4**

Session Chair:

Undergraduate Research Competition sponsored by Daikin Applied (Online)**ID 75 Developing A Strategy Map: Improving Customer Experience by Adopting the Servqual Model Of Online Banking Services For Generation X**

Emmanuel C. Magadia, Nemuel M. Moreto, Immanuel A. Salipsip and Drenn Rafael C. Santos, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Gabriel C. Bucu, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
Department of Industrial and Systems Engineering, De La Salle University, Taft Avenue, Manila, 1002, Philippines**ID 82 Leveraging Human-Robot Collaborative Systems in Quality 4.0: The Case of Fasteners in Door Assembly**

Mariana Carmona Prantl Padilla and Pablo Segura, Chemical, Industrial and Food Engineering Department, Division of Science, Art and Technology, Universidad Iberoamericana, Ciudad de México, México City, México

ID 120 Determining Environmental Factors Affecting Academic Performance of 4th Year Industrial Engineering Students: An Experimental Student

Lloyd D. Atienza, Scheneil Mae A. Belmonte, Carl Joaquin Campos and Jose Jhudiel M. Canlas, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Engr. Jesselyn B. Alcain, MS, Faculty, Industrial Engineering Department, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

ID 125 Evaluation of the Environmental Impact of Medical Waste in Health Centers in Peru

Alexia Ximena Trujillo-Moscoco and Camila Paredes-Schmidt, Bachelor in Industrial Engineering, Facultad de Ingeniería, Universidad de Lima, Perú

Juan Carlos Quiroz-Flores, Research Professor, Facultad de Ingeniería, Universidad de Lima, Perú

ID 130 Enhancing the Composting Process of Organic Waste through Machine Learning Techniques: A Comprehensive Bibliometric Analysis

Carmen Andía-Ramirez and Paola Navarro-Huanca, Bachelor's degree in Industrial Engineering, Facultad de Ingeniería, Universidad de Lima Lima, Perú

Juan Carlos Quiroz Flores, Research Professor, Facultad de Ingeniería, Universidad de Lima, Lima, Perú

ID 134 A Comparative Analysis of Online Banking and Mobile Wallet Services by Customers in the National Capital Region

Nichelle Nadine E. Dioneda, Joshua Peter D. Duco, Andre Luigi D. Elagio and Alexandra P. Sy, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Carlos P. Lugay, Ph. D, PIE, ASEAN Engr., Professor, Industrial Engineering Department, University of Santo Tomas, Manila, Philippines

ID 135 A Comparative Analysis of Online Banking and Mobile Wallet Services by Customers in the National Capital Region

Nichelle Nadine E. Dioneda, Joshua Peter D. Duco, Andre Luigi D. Elagio and Alexandra P. Sy, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Carlos P. Lugay, Ph. D, PIE, ASEAN Engr., Professor, Industrial Engineering Department, University of Santo Tomas, Manila, Philippines

ID 196 Enhancing Productivity and Sustainability in the Peruvian Textile Industry: A Lean Green Approach for Small and Medium Enterprises

Sebastian Delgado-Angeles, Bachelor in Industrial Engineering, Facultad de Ingeniería, Universidad de Lima, Perú

Alessandra Da-Silva-Huayta, Bachelor in Industrial Engineering, Facultad de Ingeniería, Universidad de Lima, Perú
 Juan Carlos Quiroz-Flores, Research Professor, Facultad de Ingeniería, Universidad de Lima, Perú

ID 200 Optimizing Productivity in the Animal Feed Industry: A Lean Approach for Enhanced Efficiency and Quality Assurance

Jenny Elizabeth Jaico-Carranza, Bachelor in Industrial Engineering, Facultad de Ingeniería, Universidad de Lima, Perú
 Eduardo Manuel Olivos-Valdivia, Bachelor in Industrial Engineering, Facultad de Ingeniería, Universidad de Lima, Perú
 Martin Fidel Collao-Diaz, Research Professor, Facultad de Ingeniería, Universidad de Lima, Perú

ID 43 Alternatives of Sustainable Energy Sources for The Automotive Sector

Abid Al Hossain, IUBAT, Bangladesh

May 8, 2024 (Wednesday) - Session: 10:00 am – 1:00 pm

10:00 am – 1:00 pm, WEDNESDAY

Onsite Room 1

Keynote Moderator: Dr. Juan Sebastian Sánchez, Professor of Industrial Engineering, Universidad Católica de Colombia and Universidad de Los Andes, Bogota, Colombia

10:00 am

Keynote: Dr. Eddy Morris, Director de Educación Ejecutiva ESAN, Director de la Maestria en Dirección de TI-Director de la Maestria en Project Management, ESAN, Peru

10:30 am

Keynote: Dr. Julián Arellana, Dean, College of Engineering and Associate Professor, Department of Civil and Environmental Engineering, Universidad del Norte, Barranquilla, Colombia

11:00 am

Keynote: Arvey Alfonso Granada Calderon, Operations Manager, La Unión Coffee Farm, Pereira, Risaralda, Colombia

11:30 am

Keynote: Dr. Mauricio Becerra Fernandez, Director of the Industrial Engineering Program, Director of the Master in Smart and Sustainable Cities, Escuela de Ingeniería, Ciencia y Tecnología, Universidad del Rosario, Bogota, Colombia

12:00 pm

Keynote: Dr. Nubia Milena Velasco Rodríguez, Director of Doctorate in Administration, Master of Research in Administration, Universidad de los Andes, Bogotá, Colombia

12:30 pm

Keynote: Dr. Ing. Adriana Esguerra Arce, Docente, Directora del Centro de Estudios en Gestión de Tecnología e Innovación, Directora del Grupo de Investigación CIMSER, Decanatura de Ingeniería Industrial, Escuela Colombiana de Ingeniería Julio Garavito, Bogotá, D.C., Colombia

1:00 Lunch Break – Buffet Lunch at Ballroom

11:00 am – 1:00 pm, WEDNESDAY

Online Room 4

Session Chair:

Quality, Reliability and Maintenance

ID 39 Failure Mode and Effects Analysis to Improve Locomotive Subsystem Reliability

Bheki B.S Makhanya, Postgraduate School of Engineering Management, Faculty of Engineering and the Build Environment, University of Johannesburg, PO Box 524, Auckland Park 2006, South Africa

ID 89 Proposal to improve the maintenance system in telescopic cranes based on preventive maintenance to reduce costs

Guzmán Pipa, Manuel; Huaranga Angulo, Renato Alonso; Noriega-Aranibar and María Teresa, Career of Industrial Engineering, Faculty of Engineering and Architecture, University of Lima, Lima-Perú

ID 90 Proposal to improve the maintenance system in telescopic cranes based on preventive maintenance to reduce costs

Guzmán Pipa, Manuel; Huaranga Angulo, Renato Alonso; Noriega-Aranibar and María Teresa, Career of Industrial Engineering, Faculty of Engineering and Architecture, University of Lima, Lima-Perú

ID 117 Critical resource management strategy measures in the maintenance management of public assets

Khotso Dithebe, Wellington Didibhuku Thwala and Clinton Aigbavboa, University of South Africa, University of Walter Sisulu and University of Johannesburg, South Africa

ID 133 A Comparative Analysis of Online Banking and Mobile Wallet Services by Customers in the National Capital Region

Nichelle Nadine E. Dioneda, Joshua Peter D. Duco, Andre Luigi D. Elagio and Alexandra P. Sy, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
 Carlos P. Lugay, Ph. D, PIE, ASEAN Engr., Professor, Industrial Engineering Department, University of Santo Tomas, Manila, Philippines

May 8, 2024 (Wednesday) - Session: 2:00 – 3:45 pm

2:00 – 3:45 pm, WEDNESDAY**Plenary****Onsite Room 1**

Session Chair:

Plenary Speakers

Innovation and Entrepreneurship

Topics:

Innovation

Entrepreneurship

Business Management

DISTINGUISHED SPEAKERS

May 8, Wednesday, 2:00 – 3:40 pm

Session Chair: Professor Camilo Alarcon Nieto

2:00 pm – 2:20 pm (Wednesday, May 8)

Professor Camilo Alarcon Nieto

Assistant Professor

Fundacion UNIR Colombia

PhD Candidate in Management

Researcher leader in entrepreneurship and technology adoption

2:20 pm – 2:40 pm (Wednesday, May 8)

Professor William E. Mosquera Laverde

Director of Organizations and Strategic Group 4.0 category A1. Colombia

Director of the Course Design of Organizational Processes, USA

Business Administration Program

Faculty of Administrative and Accounting Economic Sciences

Cooperative University of Colombia

Bogotá. Colombia

2:40 pm – 3:00 pm (Wednesday, May 8)

3:00 pm – 3:20 pm (Wednesday, May 8)

3:20 pm – 3:40 pm (Wednesday, May 8)

Professor Donald M. Reimer

Chief Operating Officer

IEOM Society International

Southfield, Michigan, USA

2:00 – 3:45 pm, WEDNESDAY**Onsite Room 2**

Session Chair:

Panel on AI in Engineering

Panel Chair

Dr. Juan Sebastian Sánchez

Universidad Catolica de Colombia

Universidad de Los Andes

Panel Speaker I

Panel Speaker II

Panel Speaker III

Panel Speaker IV

2:00 – 3:45 pm, WEDNESDAY**Onsite Room 3**

Session Chair: Peter Poon Chong, University of the West Indies, St. Augustine, Trinidad, West Indies

Manufacturing, Assembly and Design**ID 28 Cargo Craft - Innovative Toolbox for Economy Cars**

Nitin Jadhav, Cal State Northridge, United States

ID 32 BreezeGuard DualFan Hanger

Christian Chamoun, Department of Manufacturing Systems Engineering and Management, California State University Northridge, Northridge, CA 91330, USA

Justin Lee, Department of Manufacturing Systems Engineering and Management, California State University Northridge, Northridge, CA, USA
Karim Omar, Department of Manufacturing Systems Engineering and Management, California State University Northridge, Northridge, CA, USA
Sankalp Pala, Department of Manufacturing Systems Engineering and Management, California State University Northridge, Northridge, CA, USA
Ali Pacaci, Department of Manufacturing Systems Engineering and Management, California State University Northridge, Northridge, CA, USA
Sepideh Abolghasem, Professor, Department of Manufacturing Systems Engineering and Management, California State University Northridge Northridge, CA 91330, USA**ID 86 Steelpan Sinking Quality Approach Employing Dynamic Nonlinear Finite Element Method**

Peter Poon Chong, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of the West Indies, St. Augustine, Trinidad, West Indies

2:00 – 3:45 pm, WEDNESDAY**Online Room 4**

Session Chair:

Simulation, Optimization and Productivity Improvement**ID 72 System Dynamics Approach: Enhancing the Traffic Condition in Consolacion, Cebu**Marie Clarice P. Arong, Sheena Marie E. Buot, Ahya Mae K. Lucero and Felaiyn P. Oyao, Student, Bachelor of Science in Industrial Engineering Cebu Technological University – Main Campus, M.J. Cuenco Avenue Cor. R. Palma Street, Cebu City, Philippines
Engr. Jerpri T. Medillo, Instructor at Industrial Engineering Department, Cebu Technological University – Main Campus, M.J. Cuenco Avenue Cor. R. Palma Street, Cebu City, Philippines**ID 126 Warehouse Efficiency Improvement Model Applying Lean Manufacturing Methodology in a Roller Shade Company**

Adrián Humberto Cuenca Bazán and César Augusto Arrunátegui Vásquez, Escuela de Ingeniería, Universidad de Lima, Lima

ID 193 Proposal to Improve the Productivity of T-shirts through Lean Manufacturing Tools in an SME of the Textile Sector

Elizabeth Reyna-Medina, Valeria Quispe-Quispe and Carlos Urbina-Rivera, Faculty of Engineering and Architecture, University of Lima, Peru

ID 20 Improvement proposal for the reduction of time in reception and picking processes through systematization in a logistics operatorDiego Zavaleta Leon, Mateo Zuloeta Ortiz, Students of engineering, Industrial Engineering Department, University of Lima, Peru
Paul Angello Sanchez Soto, Master's degree in supply chain management, University of Lima, Peru**ID 18 Production Management Model to Increase Efficiency in the Cotton Garment Manufacturing Process Applying MPS Kaizen and SMED Tools in a SME in the Textile Sector**

Juan Sebastian Naranjo-Torres, Pablo Benjamin Izaguirre-Bendezu and Jorge Antonio Corzo-Chavez, Carrera de Ingeniería Industrial, Facultad de Ingeniería, Universidad de Lima, Lima, Perú

ID 113 Proposal for Implementing a Data Classification Model for the Supply Chain in a Food Company Based on Artificial IntelligenceHector Valverde Acuña, Bsc, Industrial Engineering Student, Engineering School, Lima University, Lima, Peru
Diego Vilela Gutierrez, Bsc, Industrial Engineering Student, Engineering School, Lima University, Lima, Peru**ID 65 Improvement of a Bolivian telecommunications company's occupational health and safety system: program development based on the 5S**Boris Christian Herbas-Torrico, Technologic of Monterrey, Guadalajara, México
Luciana Galindo-Borda, Bolivian Catholic University, Cochabamba, Bolivia**ID 17 Production Management Model for Increase Efficiency by Applying Lean Manufacturing Tools as Standardized Work, Autonomous Maintenance and SLP in a Plastic Bottle Company**

Ana Maria Meza-Cardenas and Jorge Antonio Corzo-Chávez, Facultad de Ingeniería, Universidad de Lima, Perú

May 8, 2024 (Wednesday) - Session: 4:00 – 5:45 pm**4:00 – 5:45 pm, WEDNESDAY****Manufacturing****Onsite Room 1**

Session Chair:

ID 4 Optimization of the Machining Parameters for the Difficult to Cut Materials through Machine Learning Applications: A Review
Semir Saleh (PhD Candidate), Mechanical Engineering, Ankara Yildirim Beyazit University, Ankara, Turkey

ID 33 AUTOBVM

Kevin Hernandez, Alexander Garcia, Tatsuro Kajioaka, Daniel Cuara, Jeffrey Liu and Sepideh Abolghasem, Department of Manufacturing Systems Engineering and Management, California State University Northridge, Northridge 91330, California, USA

ID 46 Optimization Model for Cell Formation Problem Incorporating Systemic Reliability

Paulo R. Figueroa Torrez, Escuela de Ingeniería Industrial, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile
Orlando M. Durán Acevedo, Escuela de Ingeniería Mecánica, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile

4:00 – 5:45 pm, WEDNESDAY

Onsite Room 2

Session Chair:

Toyota Kata Workshop

DAVE HARRY, a.k.a. “The Process Whisperer®”
Retired U.S. Naval Aviator
CEO of Process Whisperer® Consultants LLC, Greeneville, Tennessee, USA
ASQ certified Six Sigma Black Belt and A PMI certified PMP®

4:00 – 5:45 pm, WEDNESDAY

Innovation

Onsite Room 3

Session Chair:

ID 209 Hydrate Holder - Auto Water Bottle Holder

Nitin Jadhav and Dr. Sepideh Abolghasem Ghazvini, Century Engineering – President, MSE 488B - Senior Design, Cal State Northridge, United States

ID 76 Innovation in Beekeeping: A Literature Review under Brazilian Background

Isabella Mendes da Silva, Civil and Environmental Engineering Department, University of Brasília, Brasília, Brasil
Sanderson César Macêdo Barbalho, Industrial Engineering Department, University of Brasília, Brasília, Brasil

ID 29 AUTOBVM

Garcia, California State University, Northridge, United States

4:00 – 5:45 pm, WEDNESDAY

Design, Manufacturing and Safety

Online Room 4

Session Chair:

ID 71 Redesigning Classroom Locker-Chair Hybrids: An Innovative Design Thinking Approach Adopting Origami-Based Engineering Design

Raphael S. Butron, Bren Omer M. Hipolito, Cris Jefferson M. Juan and Mikaela Joy M. Noveno, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
Gabriel C. Bucu, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
Department of Industrial and Systems Engineering, De La Salle University, Taft Avenue, Manila, 1002, Philippines

ID 127 Occupational health and safety management system for an automotive paint sales company based on the international standard ISO 45001-2018

Jorge Pacheco Zevallos, Maribel Espinoza Noa, Nicol Flores Ruiz, Ariet Salvatierra Hilares, Mg. Víctor Thompson Schreiber and Dr. Juan Gómez Meza, Industrial Engineering College, Ricardo Palma University, Santiago de Surco, Lima, Perú

ID 132 Correlations and Group Differences: Factors Influencing Undergraduate Students' Perceived Academic Performance

Von Anthony S. Alonzo, Stephen Paolo A. Salting, Darrel Austin B. Sanchez and Guenevere M. Tan, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
Engr. Jesselyn B. Alcain, MS, Faculty, Industrial Engineering Department, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

ID 206 Ergonomic Model to Reduce the Development of Musculoskeletal Disorders in the Process of Production of Empanadas in a SME

Mariel Pinche Ruiz, Engineering School, University of Lima, Peru
Rodrigo Alonso Ventura Paredes, Engineering School, University of Lima, Peru
Wilfredo R. Hernandez Gorriti, Engineering School, University of Lima, Peru

ID 6 Lean Manufacturing to Reduce Delivery Time to the Order Pick Up Point in a Delivery Service Company

Vicente Jose Arnaez Eguiguren, University Student, Faculty of Civil and Industrial Engineering, Universidad de Lima, Peru

ID 123 Onway: Web and Mobile-Based Delivery Management System

Aki G. Terada, Angeles University Foundation, Philippines
Nicole Frankie D. Angeles University Foundation, Philippines
Ryan Matthew C. Masanque, Angeles University Foundation, Philippines

Jonilo C. Mababa, Dit, Angeles University Foundation, Philippines

ID 122 A Brewing Solution: Utilizing Spent Coffee Grounds as An Alternative Biomass Fuel

Gerald M. Araco, Francis Miguel C. Flores, Andre Louis C. Ollica, Ralph Daniel C. Paglinawan and Damirson A. Co, MSIE, PIE, Department of Industrial Engineering, University of Santo Tomas, España Blvd., Sampaloc, Manila, Philippines

ID 198 Why is My Package Not Here Yet? A Factor Analysis on the Last Mile Delivery Process of 3PL Companies as Partner Couriers of E-Commerce Companies in the National Capital Region, Philippines

Hans Gabriel T. Garsain, John Andrei P. Peradilla, An Kristen C. So and Damirson A. Co MSIE, PIE, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, España Blvd., 1008, Manila, Philippines

May 9, 2024 (Thursday)

May 9, 2024 (Thursday) - Session: 8:00 – 9:45 am

8:00 – 9:45 am, THURSDAY

Plenary

Onsite Room 1

Session Chair:

8:00 – 9:45 am, THURSDAY

Business Management

Onsite Room 2

Session Chair:

ID 22 Sargassum Management and Uses in the Caribbean: A Review

Emely Polet Valenzuela, Gustavo A. Montero Ogando and Eduardo J. Castillo Fatule, School of Industrial Engineering, Universidad Nacional Pedro Henríquez Ureña, Santo Domingo, Dominican Republic

ID 38 Evaluation of the Environmental Energetic Sustainability of the Bayamo Municipality

David Agustin Verdecia Torres, Department of Mechanical Engineering, University of Technology, Jamaica

ID 150 Strategies for Etaa Maintenance Management

David Hernandez Mora, Juan David Lopez Montealegre and Lesly Karina Sánchez, Universidad Central, programa de ingeniería mecánica, Bogotá, Colombia

ID 88 Occupational Health Perspectives: Comparative Analysis between the Formal and Informal Construction Sector in Colombia

Anamaria Franco-Leyva and Oscar Moreno-Torres, Civil Engineering Faculty, Engineering Faculty, University Cooperativa de Colombia, Santa Marta, Colombia

ID 40 Factores Determinantes En El Proceso De Transformación Digital Basado En Capacidades Dinámicas Para Las Pymes

Daniela del Pilar Mesa Hernández, Escuela de Estudios Industriales y Empresariales, Universidad Industrial de Santander, Ingeniería Industrial Bucaramanga, Colombia

Luis Eduardo Becerra Ardila, Profesor Titular Escuela de Estudios Industriales y Empresariales, Universidad Industrial de Santander, Ingeniería Industrial, Bucaramanga, Colombia

8:00 – 9:45 am, THURSDAY

Productivity

Onsite Room 3

Session Chair:

ID 128 Add/Delete Rules for Modifying the Typical Course Offering Pattern in a Degree Program

Manohar S. Madan, Information Technology and Supply Chain Management Department, Mitchell E. Daniels, Jr. School of Business Purdue University, West Lafayette, Indiana, USA

Kingsley Gnanendran, Operations and Analytics Department, University of Scranton, Scranton, Pennsylvania, USA

ID 212 Analysis of production performance of steel strips in Slitter line of manufacturing company

María de los Ángeles Martínez-Mercado

Azucena Minerva García-León

Daniela del Carmen Bacre-Guzmán

Elva Patricia Puente-Aguilar

School of Chemical Science

Professors of Industrial Engineering and Management

Universidad Autónoma de Nuevo León

San Nicolás de los Garza, Nuevo León, México

ID 219 Logistic Flow Control System for the Dispatch-Reception Process in Pharmaceutical Sector Companies

Sandra Biviana Bustamante Londoño and Maritza Correa Valencia

Facultad de Ingeniería

Universidad Autonoma de Occidente

Cali, Colombia

ID 207 Forging Resilience in Manufacturing Strategy: An Interdisciplinary Approach in a VUCA World

Cristian Rincón Guio, Industrial Engineering Department, Engineering Faculty, Corporación Universitaria Minuto de Dios - UNIMINUTO

Bogotá, Colombia

8:00 – 9:45 am, THURSDAY**Online Room 4**

Session Chair:

Graduate Student Paper Competition sponsored by Eaton Corporation**ID 37 Factors Considered by Holiday Makers in Selecting a Guesthouse in the Post-Covid-19 Pandemic Era**

Bheki B.S Makhanya, Postgraduate School of Engineering Management, Faculty of Engineering and the Build Environment, University of Johannesburg, PO Box 524, Auckland Park 2006, South Africa

High School STEM Competition**ID 24 Can LLMs Have a Fever? Investigating the Effects of Temperature on LLM Security**Chan Xing Yu, James, Chan Si Yu, David and Chow Ban Hoe, River Valley High School, Singapore
Poh Hui-Li Phyllis, Member of Technical Staff, DSO National Laboratories, Singapore**ID 68 Upgrading legacy systems for Industry 4.0 with Node-RED and OPC-UA**Daniel Ribeiro de Sousa and Eduardo Paciência Godoy, Scientific Initiation Program PIBIC Junior CNPQ/Reitoria UNESP, São Paulo State University (UNESP) – Sorocaba Campus, Sorocaba, Sao Paulo, Brazil
Vitor Mendes Caldana, Professor, Industry Department, Federal Institute of Sao Paulo (IFSP) – Sorocaba Campus, Sorocaba, Sao Paulo, Brazil**Human Factors and Ergonomics Competition sponsored by CINTAS****ID 5 Improvement in The Cutting Area to Increase Labor Productivity in The Company Airin S.A. Using Work Design And 5s Tools**Naylea Maybet Perez Medina, Faculty of Engineering and Architecture, University of Lima, Lima, 1501, Perú
Gabriela Zuñiga Valdivia, Faculty of Engineering and Architecture, University of Lima, Lima, 1501, Perú**ID 119 Meditation Leads to Integrity and Acceptance**

Som R. Soni and Gita D. Soni, AdTech Systems Research Inc., 1342 North Fairfield Road, Beavercreek, Ohio 45432 USA

ID 129 Lab-Tested: How Laboratory Design Affects the Performance of UST Chemical Engineering Students

Renzo Miguel M. Lanip, Therese Adrienne M. Macawile, Czarina Danielle B. Mendoza, and Damirson A. Co, PIE, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

May 9, 2024 (Thursday) - Session: 10:00 am – 1:00 pm**10:00 am – 1:00 pm, THURSDAY****Onsite Room 1**

Keynote Modarator: Professor Ivanhoe Roza Rojas, Head/Director of Industrial Engineering, Universidad Católica de Colombia, Bogota and Professor Don Reimer

10:00 am

Keynote: Dr. Jorge Andrés Vivares Vergara, Research Professor, Universidad Nacional Abierta y a Distancia (UNAD), Bogotá, Colombia

10:30 am

Keynote: Dr. William J. Guerrero, Associate Professor, Head of the Research Group on Logistic Systems and Head of the IT and Process Optimization Department, Universidad de la Sabana, Bogota, D.C., Capital District, Colombia

11:00 am

Keynote: Dr. Paloma Maria Teresa Martinez Sanchez, Engineering, Universidad El Bosque, Bogota, Colombia

11:30 am

Keynote: Mohammad Islam, Associate Director, Optum – United Healthcare Inc., New Jersey, United States of America

12:00 pm

Keynote: Rafael Forero Vargas, Food Safety & Quality Manager Colombia, Rich's Product Corporation, Bogotá, Colombia

12:30 Keynote:

1:00 – 2:00 – Lunch Buffet

10:00 am – 1:00 pm, THURSDAY

Online Room 4

Session Chair: Laura Visintainer Lerman, PhD

Manufacturing, Assembly, Design, Supply Chain and Sustainability**ID 67 Improving Manufacturing Layout: A Bolivian Food Company's Experience with Factory Physics and Simulation**

Boris Christian Herbas-Torrico, Tecnológico de Monterrey, Guadalajara, México
 Oscar Roberto Luján Sainz, Universidad Católica Boliviana "San Pablo", Cochabamba, Bolivia

ID 44 Mejora de la productividad en los procesos de manufactura de una empresa de confección empleando 5S, Kanban y SMED

Paola Bendezú-Santivañez, Universidad Continental, Peru
 Anyela Vilchez-Aquino, Universidad Continental, Peru
 José Velásquez-Costa, Universidad Continental, Peru
 Herbert Vilchez, Universidad Continental, Peru

ID 115 Structural Analysis of Driveshaft of an Electric Vehicle Using Aluminum Alloy 7075

Babs, V. Omidiji, Mechanical Engineering Department, Obafemi Awolowo University, Nigeria
 Ayodele, A. Daniyan, Materials Science and Engineering Department, Obafemi Awolowo University, Nigeria
 Kunle, M. Oluwasegun, Department of Mechanical and Manufacturing Engineering, University of Manitoba, Winnipeg, Manitoba, Canada
 Timilehin, J. Oladokun and D. Egbibunmi, Mechanical Engineering Department, Obafemi Awolowo University, Nigeria

ID 147 The Systematic Design and Manufacturing of 'Mr. Money Manager'- An Advanced Money Management Device

Mubtasim Rubaet, Md Shoaib Mahmud, Mosleh Uddin Ahmed Mukit, Md. Soadul Haque Mithu, Mehrab-Al-Islam and Md. Istiaque Ahammed Sakib, Department of Industrial and Production Engineering, Military Institute of Science and Technology. Dhaka-1216, Bangladesh

ID 202 A Study of LTC410 Composite Mold System to Improve Mold Manufacturing Process in Aerospace Industry

Phongchai Jittamai and Kanin Rungrattanachavala, School of Industrial Engineering, Institute of Engineering, Suranaree University of Technology Nakhon Ratchasima, 30000, Thailand

ID 208 Sustainability in the context of the Smart Supply Chain: A natural language processing approach

Laura Visintainer Lerman, Industrial Engineering Department, Engineering School, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
 Daisy Valle Enrique, Industrial Engineering Department, Engineering School, Universidade Beira Interior, Covilhã, Portugal
 Wagner Henz Schettert, Senior Software Architect, SAP, São Leopoldo, Brazil

ID 222 Determining the Drivers of Food Waste along the Supply Chain in Indonesian Cities

Atikha Sidhi Cahyana
 Department of System and Industrial Engineering, Institut Teknologi Sepuluh Nopember. Surabaya, Indonesia
 Department of Industrial Engineering, Universitas Muhammadiyah Sidoarjo. Sidoarjo. Indonesia
 Iwan Vanany, Niniet Indah Arvitrida
 Department of System and Industrial Engineering, Institut Teknologi Sepuluh Nopember. Surabaya, Indonesia

ID 224 Green hydrogen and supply chain management through natural language processing approach

Laura Visintainer Lerman
 Industrial Engineering Department
 Engineering School
 Federal University of Rio Grande do Sul
 Porto Alegre, Brazil

Daisy Valle Enrique
 Industrial Engineering Department
 Engineering School
 Universidade Beira Interior
 Covilhã, Portugal

Wagner Henz Schettert
 Senior Software Architect
 SAP
 São Leopoldo, Brazil

May 9, 2024 (Thursday) - Session: 2:00 – 3:45 pm

2:00 – 3:45 pm, THURSDAY

Plenary

Onsite Room 1

Session Chair:

2:00 – 3:45 pm, THURSDAY

Onsite Room 2

Session Chair:

PMI Colombia Panel

Panel Chair

President of PMI Colombia

Panel Speaker I

Panel Speaker II

Panel Speaker III

Panel Speaker IV

2:00 – 3:45 pm, THURSDAY
Engineering Management
Onsite Room 3

Session Chair:

ID 31 Sustainable Institutional Investors: Influence on Financial and Socio-Environmental Performance Indicators

Alejandro J. Useche, PhD, Associate Professor, School of Management,

Fernando Juárez, PhD, Full Professor, School of Management, Universidad del Rosario, Calle 200, Autopista Norte, Bogota, Colombia

Jennifer Martínez-Ferrero, PhD, Full Professor, Instituto Multidisciplinar de Empresa (IME), Universidad de Salamanca, Campus Miguel de Unamuno, FES 37007, Salamanca, Spain

Emma García-Meca, PhD, Full Professor, Department of Economics, Accounting and Finance, Universidad Politécnica de Cartagena

Pza. del Cronista Isidoro Valverde, C.P. 30202, Cartagena, Spain

ID 219 Logistic Flow Control System for the Dispatch-Reception Process in Pharmaceutical Sector Companies

Sandra Biviana Bustamante Londoño and Maritza Correa Valencia, Facultad de Ingeniería, Universidad Autónoma de Occidente Cali, Colombia

ID 211 Exploring Augmented Reality in Industry 5.0: A Systematic Literature Review on Human-Machine Interaction, Manufacturing, and Industrial Safety

Lauren Genith Isaza Dominguez

Professor, Faculty of Engineering

Corporación Universitaria Minuto de Dios (UNIMINUTO) - Sede Rectoría Virtual

Villavicencio, Colombia

ID 60 Policy analysis in System Dynamics Models through Reinforcement Learning Exploration

Juan Sebastián Jaén-Posadaa, Juan C. Españaab, Carlos E. Vasquezc and Esteffany Peñad, abcd ALIADO - Analytics and Research for Decision Making, Department of Industrial, Engineering, Universidad de Antioquia, Calle 67 No., 53-108, Antioquia, 50010, Medellín, Colombia

ID 83 Comprehensive indicators in wine filtration: Adoption in the Chilean industry, challenges, and development of a predictive model for operational decision-making

Luis Francisco Lillo Otárola, Hanns de la Fuente Mella and Jose Ceroni Diaz

Escuela de Ingeniería Industrial

Pontificia Universidad Católica de Valparaíso

Valparaíso, Chile

2:00 – 3:45 pm, THURSDAY
Business Management
Online Room 4

Session Chair:

ID 124 A Comparative Analysis of Online Banking and Mobile Wallet Services by Customers in the National Capital Region

Nichelle Nadine E. Dioneda, Joshua Peter D. Duco, Andre Luigi D. Elagio and Alexandra P. Sy, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Carlos P. Lugay, Ph. D, PIE, ASEAN Engr., Professor, Industrial Engineering Department, University of Santo Tomas, Manila, Philippines

ID 131 An Investment Feasibility Appraisal for Frozen Processed Food Factory Projects

Hairiza and Erlinda Muslim, Professional Engineer Program, Universitas Indonesia, Depok, Indonesia

ID 136 Segmenting QRIS Users using Cluster Analysis in Indonesia

Salwa Nahlya Tazkia, Rahmat Nurcahyo and Muhammad Habiburrahman, Department of Industrial Engineering, Universitas Indonesia Depok, West Java 16424, Indonesia

ID 201 Economic Evaluation and Risk Identification of the Work Plan for Gas Turbine Compressor Engine Exchange on Offshore Platform in Field X

Firman Santya Budi and Armand Omar Moeis, Professional Program for Engineers, University of Indonesia, Depok, Indonesia

ID 79 Analysis of Simulation Platforms in System Dynamics for Decision Making

Laura Herrera Giraldo, Laura Milena Cárdenas Ardila, Department of Industrial Engineering, University of Antioquia, Medellín, Colombia

ID 217 Neural Network Model for Improving Vulnerable Road User Safety

Carlos Antonio Marino

CENTRUM Católica Graduate Business School, Lima, Peru

Pontificia Universidad Católica del Perú, Lima, Peru

May 9, 2024 (Thursday) - Session: 4:00 – 5:45 pm

4:00 – 5:45 pm, THURSDAY
Plenary
Onsite Room 1
Global Supply Chain and Logistics

Session Chair: Professor Andrés Felipe Santos H.

May 9, 4:00 – 5:40 pm – Meeting Room 1 (Onsite)

4:00 – 4:20 pm (Thursday, May 9)

Professor Andrés Felipe Santos H.
 Profesor asociado de planta de la decanatura de Ingeniería Industrial
 Centro de Estudios en gestión y optimización de operaciones
 Investigador del grupo CIMSER
 Escuela Colombiana de Ingeniería
 Bogotá, Colombia

4:20 – 4:40 pm (Thursday, May 9)

Luis Tarazona
 University of Los Andes
 Bogota, Colombia

4:40 – 5:00 pm (Thursday, May 9)

5:00 – 5:20 pm (Thursday, May 9)

5:20 – 5:40 pm (Thursday, May 9)

Mohammad Anwar Rahman, Ph.D.
 Associate Professor
 Manufacturing and Construction Management
 Central Connecticut State University
 New Britain, CT, USA

4:00 – 5:45 pm, THURSDAY
Onsite Room 2
Project Management Workshop

Leading with Emotional Intelligence: A Seminar for Industrial Engineers

Dr. Tony Prensa, PhD, MBA, PMP, CB-PMO, CCP, ITIL, 6σ
 Chief Executive Officer & Founder
 TP Global Business Consulting, LLC
 Orlando, Florida, USA

4:00 – 5:45 pm, THURSDAY
SCM and AI
Onsite Room 3

Session Chair:

4:00 – 5:45 pm, THURSDAY
Optimization
Online Room 4

Session Chair:

ID 112 Use of Library for Promoting Students' Learning

Mani Ram Sharma and Yan Bahadur Budha, Nepal

ID 225 Integration of Pedagogical Practices and Assessment Methods to Foster Sustainable Competencies in Engineering Education

Laura Visintainer Lerman, Paula Kvitko de Moura, Maria Cannarozzo Tinoco
 Industrial Engineering Department
 Engineering School
 Federal University of Rio Grande do Sul
 Porto Alegre, Brazil

ID 74 Developing Service Recovery Strategies Through Students' Commuting Experience Using Servqual Model

Angelo P. Castillo, Sofia Nicole G. De Ramos and Clarence Edward G. Dimal, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
 Gabriel C. Bucu, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines
 Department of Industrial and Systems Engineering, De La Salle University, Taft Avenue, Manila, 1002, Philippines

ID 21 "Status of Surface Water at Three Selected Areas of Coastal Guyana and the treatment of the respective water with a suitable adsorbent"

Raymond Jagessar, University of Guyana, Guyana

ID 121 Operational Risk Management of Loading and Unloading Operations in Container Terminal Service Company
Eileen Onggaria and Armand Omar Moeis, Professional Engineer Program, Faculty of Engineering, University of Indonesia, Depok, Indonesia

ID 148 Inventory Management Optimization Model in A Restaurant Applying Inventory Control and Lean Manufacturing
Juan Carlos Bustamante Sosa, Facultad de Ingeniería Industrial, Universidad de Lima, Lima, Perú
Fabrizio Joaquín Salazar Pérez, Facultad de Ingeniería Industrial, Universidad de Lima, Lima, Perú
Richard Meza Ortiz, Senior Lecturer, Facultad de Ingeniería Industrial, Universidad de Lima, Lima, Peru

May 9, 2024 (Thursday) - Session: 7:00 – 10:00 pm

Gala Dinner – Awards Recognition

5th South American Conference on Industrial Engineering & Operations Management
Bogota, Colombia, May 7-9 2024
IEOM Society Venue: Doubletree by Hilton, Bogota



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6th South American Conference on Industrial Engineering and Operations Management

Sorocaba, Sao Paulo, Brazil, April 8-10, 2025

Host: Facens University

Conference Chair: Dr. Rodrigo Luiz Gigante, Coordinator of Production Engineering, FACENS University, Sorocaba, Sao Paulo, Brazil

15th International Conference on Industrial Engineering and Operations Management

Singapore, February 18-20, 2025

Host : Singapore University of Social Sciences (SUSS)

Conference Chair: Associate Professor Tan Yan Weng, Head, Logistics and Supply Chain Management Programme, School of Business, Singapore University of Social Sciences, Singapore

<http://ieomsociety.org/singapore2025/>



**15th International Conference on
Industrial Engineering and
Operations Management**
February 18-20, 2025, Singapore
Host: Singapore University of Social Sciences



International Journal of Industrial Engineering and Operations Management



Visit to Universities in Colombia, March 2024















IEOM Student Chapters around World

Algeria	84. Ramaiah University of Applied Sciences	164. Pontificia Universidad Católica del Perú (PUCP)
1. Adrar University	85. Nawab Shah Alam Khan College Eng & Tech (NSAKCET)	165. Universidad Privada del Norte (UPN)
Australia	86. Global Institute Of Eng and Technology, Hyderabad	166. Universidad Continental (UContinental)
2. Queensland University of Tech., Brisbane	87. VNR Vignana Jyothi Institute of Eng and Technology	167. Universidad de Ingeniería y Tecnología (UTEC)
3. UNSW-Canberra	88. Siddhartha Institute of Engineering & Technology	168. Universidad Nacional de Ingeniería (UNI)
4. University of Melbourne	89. Osmania University – The University College of Eng	169. University of San Martin de Porres (USMP)
5. University of Wollongong	90. VJTI Mumbai – Veermata Jijabai Technologic. Institute	Philippines
6. University of Adelaide	91. BML Munjal University, Gurugram, India	170. Bulacan State University, Marolao City, Bulacan
Bahrain	92. AKTU University, Kanpur, India	171. LPU Laguna
7. University of Bahrain	93. Mufakhamjah College of Eng. and Tech, Hyderabad	172. Mapua University
Bangladesh	94. Methodist College of Engineering and Technology	173. De La Salle University (DLSU) Manila
8. Ahsanullah University of Sci & Tech (AUST)	95. Vardhaman College of Engineering	174. Adamson University
9. Bangladesh Institute of Management (BIM)	Indonesia	175. CEBU Technological University
10. Bangladesh University of Textiles (BUTEX)	96. Atma Jaya Catholic University	176. University of San Jose-Recoletos
11. BUET	97. Bina Nusantara University (Binus), Indonesia	Portugal
12. CUET	98. Institut Teknologi Bandung	177. ISEL – Instituto Superior De Engenharia de Lisboa
13. Daffodil International University (DIU)	99. Institut Teknologi Sepuluh Nopember (ITS)	Qatar
14. DUET, Gazipur	100. Sampoerna University, Jakarta	178. Qatar University
15. European University of Bangladesh	101. Shipbuilding Institute of Polytechnic Surabaya	Saudi Arabia
16. International Islamic University of Chittagong	102. Tarumanagara University	179. Alfaisal University
17. IUBAT	103. UIN Sultan Syarif Kasim, Riau	180. Effat University
18. Jessore University of Science and Technology	104. Universitas Diponegoro (Undip)	181. King Abdulaziz University (KAU)
19. Khulna University (KU)	105. Universitas Gadjah Mada (UGM)	182. King Abdulaziz University, Rabigh
20. Khulna University of Eng and Tech (KUET)	106. Universitas Iqra Baru	183. King Fahd Univ of Petroleum and Minerals (KFUPM)
21. Military Institute of Science and Technology	107. UIN Sunan Kalijaga, Yogyakarta	184. King Khalid University, Abha
22. National Institute of Textile Eng & Res (NITER)	108. Universitas Islam Negeri Alauddin Makassar	185. King Saud University (KSU)
23. Rajshahi University (RU)	109. Universitas Sebelas Maret (UNS), Surakarta	186. Umm Al-Qura University (UQU)
24. SUST	110. University of Indonesia	187. Princes Nourah University (PNU)
25. University of Chittagong	111. Universitas Sumatera, Utara Medan	188. Prince Sattam Bin Abdulaziz University
26. World University Bangladesh (WUB)	112. Narotama University, Surabaya	189. Prince Sultan University (PSU)
27. BAUST	113. Universitas Pakuan, Bogor	190. Taibah University
28. American International University-Bangladesh (AIUB)	114. Trilogi University	191. University of Tabuk
Botswana	115. MehrAstan University, Guilan	192. Taibah University
29. University of Botswana	116. University of Evyanekey	193. University of Business and Technology
Brazil	117. Technical and Vocational University (TVU)	194. King Khalid University, Abha
30. Federal University of Sao Carlos (UFSCar)	Iraq	195. University of Bisha
31. Federal University of Santa Catarina (UFSC)	118. Babylon University	196. Taif University
32. University of Sao Paulo (USP) – Sao Carlos	Israel	South Africa
33. Federal Institute of Sao Paulo, Sorocaba	119. Sapir Academic College	197. Durban University of Technology (DUT)
34. FACENS University, Sorocaba	120. Shamoon College of Engineering (SCE), Ashdod	198. Tshwane University of Technology (TUT)
Canada	Italy	199. University of Johannesburg (UJ)
35. Concordia University	121. University of Bologna	200. University of South Africa (UNISA)
36. Humber Institute of Tech and Adv Learning	122. University of Salento	201. Vaal University of Technology (VUT)
37. Polytechnic Montreal	Japan	Sri Lanka
38. University of New Brunswick at Fredericton	123. Ashikaga University	202. University of Kelaniya
39. University of Waterloo	Jordan	203. University of Peradeniya
40. University of Windsor	124. Hashemite University	Sudan
Colombia	Kenya	204. Sudan University of Science and Tech Khartoum
41. Fundación Univ. Tecn. Comfenalco, Cartagena, Bolivar	125. Kenyatta University, Nairobi	Thailand
42. University of Rosario, Bogota	Libya	205. Chulalongkorn University, Bangkok
43. University of Quindio	126. Libyan Academy	206. Chiang Mai University
44. Universidad de San Buenaventura, Cali, Valle	Malaysia	Turkey
45. Institución Universitaria Colegios de Colombia	127. Universiti Malaysia Sabah (UMS)	207. Turkish-German University
46. Escuela Colombiana de Ingeniería Julio Garavito	128. Universiti Putra Malaysia (UPM)	UAE
47. Universidad Católica de Colombia	129. Universiti Teknologi Malaysia (UTM)	208. University of Science & Technology of Fujairah
48. Universidad Santo Tomás de Aquino	130. Universiti Tun Hussein Onn Malaysia (UTHM)	UK
49. Fundación Universitaria Internacional de La Rioja	131. Universiti Utara Malaysia (UUM)	209. University of Derby
50. Universidad América	Mexico	210. University of the West of England, Bristol
51. Universidad Militar Nueva Granada (UMNG)	132. Instituto Politécnico Nacional (IPN), Mexico	USA
52. Universidad Cooperativa de Colombia (UCC)	133. Universidad del Caribe, Cancun	211. Central Connecticut State University
Costa Rica	Morocco	212. Eastern Michigan University
53. University of Costa Rica	134. Akhawayn University	213. Lawrence Technological University, Michigan
Czech Republic	135. Ecole Mohammadia d'Ingénieurs (EMI)	214. University of the District of Columbia
54. University of West Bohemia, Pilsen	136. Sidi Mohamed Ben Abdellah University of Fez	215. Indiana State University
Ecuador	137. N. School of Appl Sci. Kenitra, Ibn Tofail Univ	216. Florida Polytechnic University
55. Technical University of Ambato	138. Ecole Supérieure De Technologie, Fez	217. Buffalo State College
Egypt	Mozambique	218. Southern Arkansas University
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57. Fayoum University	Namibia	220. Loyola University Chicago
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64. Accra Technical University	148. Sultan Qaboos University	Zimbabwe
Haiti	149. Middle East College	229. University of Zimbabwe, Harare
65. Université Quisqueya	Pakistan	230. National University of Science and Technology
India	150. Dawood University of Eng and Technology, Karachi	231. Harare Institute of Technology (HIT)
66. College of Eng and Tech, Bhubaneswar, Odisha, India	151. Government College University Faisalabad	232. Women's University in Africa (WUA)
67. College of Engineering Guindy, Chennai	152. Mehran University of Eng and Tech, Jamshoro, Sindh	233. Chinhoyi University of Technology (CUT)
68. Guru Nanak Dev Engineering College	153. Riphah International University, Lahore Campus	High School Chapters
69. Pandit Dendayal Petroleum Univ., Gujrat	154. University of Engineering and Technology, Lahore	234. Bay Area of San Francisco & San Jose, CA
70. P.D.A. College of Engineering, Gulbarga	155. UOT – Nowshera	235. Arongghata, Khulna, Bangladesh
71. Vellore Institute of Technology	156. Information Technology Univ. of the Punjab, Lahore	
72. Vidya Jyothi Institute of Technology, Hyderabad	Papua New Guinea	
73. Universal College of Eng & Tech (UCET), Guntur	157. Papua New Guinea University of Technology	
74. National Institute of Technology (NIT), Warangal	Paraguay	
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79. Amrita school of Arts and Sciences, Mysuru	161. Universidad de Lima (ULima)	
80. Amrita School of Business, Coimbatore	162. Universidad Peruana de Ciencias Aplicadas (UPC)	
81. Aligarh Muslim University, Aligarh	163. Universidad Ricardo Palma (URP)	
82. Mahant Bachittar Singh College Eng & Tech, Jammu		
83. Baba Banda Singh Bahadur Eng College		

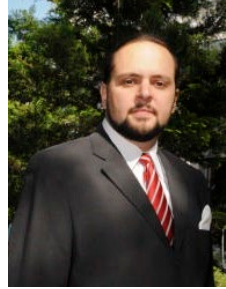
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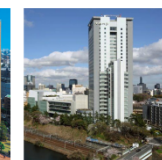
9th North American Conference on Industrial Engineering and Operations Management
Washington, DC, USA, June 4-6, 2024
Host: University of the District of Columbia (UDC)
Venue: UDC Campus, 4200 Connecticut Ave NW



7th European Conference on Industrial Engineering & Operations Management
Augsburg / Munich, Germany
July 16-18, 2024
Host: Augsburg Technical University



5th Asia Pacific Conference on Industrial Engineering and Operations Management
Sept. 10-12, 2024, Tokyo, Japan
Host: Hosei University, Venue: Waseda Univ.



Industrial Engineering and Operations Management Annual World Congress
October 9-11, 2024, Detroit, USA
Venue: Lawrence Technological University



3rd Australian Conference on Industrial Engineering and Operations Management
Sydney, Australia, Sept. 24-26, 2024
Venue: Hotel in Sydney
Host: University of Wollongong Australia



UNIVERSITY OF WOLLONGONG AUSTRALIA



15th International Conference on Industrial Engineering and Operations Management
February 18-20, 2025, Singapore
Host: Singapore University of Social Sciences



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