

Panels

2:30 – 4:00 pm, June 9

Continuous Improvement Panel

Panel Chair



Girish Kumar Gopalakrishnan, MS, CMBB, CSSBB, CMQ-OE
Senior Manager – Continuous Improvement – CNH
Senior Member – IEOM Society International

Girish Kumar Gopalakrishnan is a North America Continuous Improvement Senior Manager at Case New Holland (CNH). Girish has led cross-plant transformation initiatives that have significantly advanced manufacturing performance, digital innovation, and cultural engagement across CNH's operations. He is a distinguished continuous improvement leader whose 15-year career reflects deep technical expertise, transformative leadership, and a sustained impact on operational excellence. He holds a Master's degree in Industrial Engineering from North Carolina State University. He was named one among top 50 business transformation leaders to follow in 2025 by Process Excellence Network. He received the 2025 Marlyn Hyde Commitment to Excellence Award from the American Society of Quality (ASQ) NE Illinois Chapter. He serves as an Industry Advisory Board Member for the

Industrial & Manufacturing Engineering department at University of Wisconsin-Milwaukee. He is an ASQ certified Master Black Belt, Black Belt and Certified Manager of Quality and Organizational Excellence. He is also a Senior member with Industrial Engineering & Operations Management Society (IEOM), ASQ and Institute of Industrial Engineers (IIE). Girish is serving as the Secretary of ASQ NE Illinois Chapter, and as an Editor-in-Chief of the ASQ Lean Enterprise Division eZine Quarterly Magazine.

Speaker I



Tariq Masud PE, PEng, PMP, CMC, CQE
Senior Manager
Parsons Corporation
Chicago, Illinois

Tariq Masud is a Registered Professional Engineer in the U.S. and Canada with diverse experience in Project, Operations, and Construction Management. Over the years of his professional career, Tariq has worked in the transportation infrastructure, manufacturing, and heavy mechanical sectors, and has held positions of leadership and responsibility in project as well as operations management. His focus areas include quality and risk management where he has written as well as presented extensively at the international conferences and symposia.

Tariq offers institutional knowledge and best practices of the infrastructure and fabrication industries, and has worked in several types of business organizations; family-owned, union-operated, as well as project-based matrix organizations. Tariq is certified by the PMI as a Project Management Professional, by the ASQ as a Quality and

Organizational Excellence Manager, Construction Quality Manager, Quality Engineer, Quality Auditor, and holds multiple credentials with other professional associations for Consulting (CMC), Sustainability (ENV-SP), and for Procurement and Supplier Management. Tariq is also the Chairperson for the American Society for Quality (ASQ's) NEI Chapter, and is actively engaged with the Project Management Institute (PMI) and with the Institute for Management Consulting (IMC).

Speaker II



Siva Ravi
Director of Operations Excellence
Marketing Card Technology, LLC
Chicago, IL

Siva Ravi is the Director of Operations Excellence at Marketing Card Technology, LLC, where he leads enterprise-wide initiatives in quality management, regulatory compliance, and operational transformation within secure payment card manufacturing. He specializes in designing and deploying integrated management systems, including ISO 9001:2015 and ISO 27001, along with Card Quality Management frameworks for Visa and Mastercard and regulatory programs such as PCI, HIPAA, SOC 2 Type 2, and FSC.

He brings deep expertise in Lean Six Sigma and structured problem solving, applying methodologies such as PFMEA, 5-Why, Ishikawa, and 8D to drive process stabilization and continuous improvement. His work has delivered measurable impact, including significant reductions in defect rates, improved production efficiency, and sustained productivity gains across manufacturing operations.

His recent work focuses on Industry 4.0 transformation, where he has led the implementation of MES and data-driven shop floor systems to enhance traceability, enable real-time performance monitoring, and reduce manual inefficiencies. He has also applied advanced inventory analytics and optimization techniques to improve material flow and working capital utilization.

Prior to his current role, He supported global operational excellence initiatives across multiple manufacturing sites in Europe, contributing to SAP process standardization and enterprise quality system implementation.

He holds an MBA in Operations from the University of Applied Sciences Hof, Germany, and a Bachelor's degree in Mechanical Engineering from PSG College of Technology, India. He is a certified Six Sigma Black Belt, ISO 9001 Lead Implementer, Industry 4.0 MES practitioner, and a Steering Committee Member of the International Card Manufacturers Association. His expertise lies in delivering technical and regulatory quality standards for highly secure printing and manufacturing environments supporting Visa and Mastercard programs. His research and professional interests focus on digital manufacturing, data-driven operations, and supply chain optimization within card and personalization industries, with a strong emphasis on tightly controlled lead times, end-to-end traceability, and compliance-driven, high-security production systems.



Speaker III

Nikhil Hulluru
Senior Vice President, Strategy
Gary, Lexington, Kentucky

Nikhil brings a blend of strategic thinking, innovation, and operational focus to his work, shaped by years of experience leading strategy and change at global organizations. Before joining Gray, he held corporate strategy and operational roles at companies such as Keurig Dr Pepper, Inc., where he developed transformational initiatives, drove change, and enhanced business performance. At Gray, Nikhil serves as Senior Vice President of Strategy, where he plays a central role in developing governance and growth initiatives. He also champions the

implementation of these initiatives by aligning cross-functional teams. Given his extensive manufacturing background, he currently serves as the Interim CEO of Anderson Dahlen Inc. leading Gray's Specialty Equipment segment towards continued success. He holds an MBA from New York University Stern School of Business and a Master's in Integrated Manufacturing Systems Engineering from North Carolina State University. Outside of work, Nikhil enjoys hiking – especially with his dog Zuko, and spending time with his family.

Speaker IV



Iftekharuddin Khan
Instructor, Industrial and Manufacturing Engineering Department
University of Wisconsin – Milwaukee

Mr. Khan has had a lifelong impact on quality and continuous improvement in both industry and academia. He served at General Motors for 25 years, first as Director of Quality for North American Operations and later as Director of Quality for Asia Pacific Operations. Prior to joining GM, Mr. Khan worked in Aeronautics and Astronautics for eight years as a quality director, where he oversaw quality and reliability for the vessel guidance systems that helped send Americans to the moon. Mr. Khan has been an instructor in the Industrial and Manufacturing Engineering Department at UWM's College of Engineering and Applied Science for 50 years. He also serves as an academic staff mentor to several student organizations and was recently recognized with the 2026 Advisor of the

Year award at UWM. In addition, he has informally mentored many junior faculty members and lecturers throughout his career. Beyond the university, Mr. Khan has been deeply involved with the Muslim community in Milwaukee, generously giving his time to prison ministry programs that help incarcerated individuals prepare to successfully rejoin society.

2:30 – 4:00 pm, June 9

Reliability and Maintenance Panel

Panel Chair

Tim Rautmann, CRL, PPOE1, MLT
Director of Operations Engineering Solutions
CINTAS Corporation, Milwaukee, Wisconsin



Tim Rautmann is Director of Operations Engineering Solutions at Cintas Corporation, where he helps drive engineering, reliability, quality, and safety performance across more than 100 sites throughout central and western North America. With more than 19 years of experience spanning frontline operations, maintenance, engineering, and leadership roles, Tim brings a practical, enterprise-wide perspective to improving asset reliability and operational performance. He is a strong advocate for reliability excellence, technician development, and creating structured career pathways for maintenance professionals. Tim holds certifications as a Certified Reliability Leader (CRL), Certified Uptime Elements Instructor, Machine Lubrication Technician I (MLT I), and First-Class Power Plant Operating Engineer. In addition to his work at Cintas, he serves on the advisory board for the Industrial Maintenance

Technician program at Waukesha County Technical College. He earned a Bachelor of Business Administration in Production & Operations Management from the University of Wisconsin–Milwaukee.

Speaker I



Kevin Spiegl
Regional Reliability Engineer
CINTAS Corporation
Franklin, Wisconsin

Speaker II



Giancarlo Vazquez
Regional Reliability Engineer II
Cintas Corporation
Chicago, Illinois

4:30 – 6:00 pm, June 9

Panel on IEOM Curriculum and Engineering Education with AI Integration

Panel Chair



Dr. Maria Auxiliadora Cannarozzo Tinoco
Associate Professor in Industrial Engineering
Universidade Federal do Rio Grande do Sul (UFRGS), Brazil

Presentation Title: Best Practices for Modernizing Industrial Engineering Curricula: Insights from Benchmarking Initiatives in Developing Countries

Maria Auxiliadora Cannarozzo Tinoco is an Associate Professor in Industrial Engineering at the Universidade Federal do Rio Grande do Sul (UFRGS), Brazil, where she currently serves as Chair of the Department of Industrial Engineering and Transportation. She holds a Ph.D. and M.Sc. in Industrial Engineering from UFRGS and a Bachelor's degree in Chemical Engineering. Her academic trajectory includes leadership roles in undergraduate program coordination and active engagement in the university's innovation ecosystem. She is an active researcher affiliated with the Organizational Engineering Research Group (NEO/UFRGS) and the Innovation and Sustainability Center (NIS/UFRGS), leading projects on digital technologies for vocational and training education, as well as new business design based on public data. She currently leads initiatives focused on the modernization of engineering education, supported by CAPES and the Fulbright Commission, involving benchmarking with North American universities. Her research interests include Service Management, Quality Management, Sustainable Product-Service Systems, Innovation, and Engineering Education, with a recent emphasis on the integration of Artificial Intelligence.

Panel Speaker I



Dr. Gloria Guadalupe Navarro, EdD
Chief Executive Officer
Rex Academy (Rex K-12), Milwaukee, Wisconsin

Dr. Gloria Guadalupe Navarro is an education leader, entrepreneur, and systems strategist committed to expanding access to technology education and workforce-aligned learning pathways. She serves as the Chief Executive Officer of Rex Academy (Rex K-12), an education technology organization focused on preparing learners for the future of work through programs in artificial intelligence, computer science, cybersecurity, and emerging digital skills.

Dr. Navarro brings extensive experience across K-12 education systems, state education policy, and nonprofit leadership. Prior to leading Rex Academy, she held leadership roles with the Wisconsin Department of Public Instruction and City Year Milwaukee, where she designed and implemented statewide continuous improvement systems to support schools identified under federal accountability frameworks. Her work has focused on strengthening instructional systems, expanding equitable access to high-quality learning, and building partnerships that connect education with workforce and industry needs.

A Milwaukee native, Dr. Navarro's leadership is grounded in both lived experience and research. She earned her Doctor of Education in Applied Learning Sciences from the University of Miami, where her work examined how learning theory and inclusive design principles can strengthen professional training and skill development. Today, she works at the intersection of education, technology, and workforce development to help schools, communities, and employers build pathways that equip learners with the skills needed to thrive in a rapidly evolving digital economy.

Through her leadership at Rex Academy and her work with cross-sector partners, Dr. Navarro advocates for integrating artificial intelligence and emerging technologies into education in ways that expand opportunity, strengthen innovation ecosystems, and prepare learners for the demands of Industry 4.0.

Panel Speaker II



Dr. Joana Siqueira de Souza
Associate Professor in Industrial Engineering
Universidade Federal do Rio Grande do Sul (UFRGS), Brazil

Joana Siqueira de Souza is an Associate Professor in Industrial Engineering at the Universidade Federal do Rio Grande do Sul (UFRGS), where she currently serves as Vice Chair of the Department of Industrial Engineering and Transportation. She holds a Ph.D. and M.Sc. in Industrial Engineering and a Bachelor's degree in Civil Engineering from UFRGS, and completed postdoctoral research in risk management. She is a faculty member of the Graduate Program in Production Engineering (PPGEP/UFRGS), where she supervises master's and Ph.D. students, and has held leadership roles including Coordinator of NECOP and Undergraduate Program Coordinator. Her research and teaching focus on engineering economics, cost management, and risk management, alongside strong engagement in curriculum innovation initiatives supported by Fulbright. Her recent work emphasizes active learning, performance assessment, and the benchmarking of international practices to support the continuous improvement of industrial engineering education programs.

Panel Speaker III



Dr. Rafael Faermann Korman
Co-founder and Director of Autonomia and founder of Instituto DEEP Nexus, Brazil

Rafael Faermann Korman holds a Ph.D. in Education from the Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), including a sandwich period at the Harvard Graduate School of Education, and a degree in Production Engineering from UFRGS, where he also developed research on curriculum reform in Engineering Education. He is the first certified Data Wise educator in Latin America and has extensive experience in educational leadership, having served as Administrative-Pedagogical Coordinator of High School at Colégio Israelita, where he led the implementation of the Brazilian National Curriculum (BNCC). He is co-founder and director of Autonomia and founder of Instituto DEEP Nexus, leading the dissemination of Data Wise and data-driven educational practices across Latin America. His work focuses on active learning methodologies, teacher training, and the use of assessment data to improve teaching and learning. He has also implemented initiatives such as Problem-Based Learning and Team-Based Learning at the curricular level and developed award-winning innovation projects in education, contributing to the advancement of engineering education and school management practices.

8:00 – 9:30 am, June 10 (Wednesday)

Virtual Panel: Quality in AI-Driven Era

Organizer and Chair:



Dr. M. Affan Badar, CPEM, IEOM Fellow
Professor and Director of Ph.D. in Technology Management Program
Bailey College of Engineering & Technology
Indiana State University, USA

M. Affan Badar, PhD, CPEM, IEOM Fellow is Professor of Engineering and Director of PhD Tech Mgt Program in Bailey College of Engr & Tech at Indiana State Univ (ISU), USA. He was Professor & Chair, Industrial Engr & Engr Mgt Dept at Univ of Sharjah (UAE) from 2016 till 2018 on leave of absence from ISU. Prior to 2016 at ISU, he served as interim associate dean, Aug 2014 - May 2015; dept chair, 2010-2014; and program coordinator, 2007-10. He has also served on the University Faculty Senate and College Faculty Council. He has been an ABET program evaluator (EAC and ETAC) since 2010 and also served as an ETAC commissioner for five years. He is involved with ASEE, ASEM, IEOM, IISE, etc. He has published over 100 articles in the areas of reliability, quality, lean manufacturing, coordinate manufacturing, design, and supply chain. He has secured over \$1M funding from NSF, other agencies, and industries. He is Editor-in-Chief, Associate Editor, and editorial board member for several

journals.

Speaker 1:



Dr. Ashwani Kumar
Professor & Head Mechanical Engineering
Technical Education Department
Government of Uttar Pradesh, India

Presentation Title: *“Human Resource Digital Twins: Ethical, Psychological, and Governance Challenges”*

Prof. (Dr.) Ashwani Kumar is a distinguished academic and researcher with over 15 years of experience in Mechanical Engineering. He holds a Ph.D. and is currently a Professor and Head of Department in Technical Education Department Uttar Pradesh Kanpur (Government of Uttar Pradesh), India. His career includes tenure as an Assistant Professor at Graphic Era University, Dehradun. Dr. Kumar's extensive administrative experience includes roles such as Nodal Officer for the PMKVY-TI Scheme and various positions within examination cells and government bodies. A prolific publisher, Dr. Kumar is a Series Editor for nine book series with major international publishers like Taylor & Francis (CRC Press), Scrivener-Wiley, Springer Nature, and Apple Academic Press. His editorial and review work extends to over 28 international journals. Dr. Kumar has authored over 280 research articles & book chapters and co-authored or edited 45+ books on topics including Mechanical Engineering, Materials Science, and Renewable Energy. His research focuses on Artificial Intelligence in Mechanical Engineering, Smart Materials, and Renewable Energy. He holds five patents and has received a Research Excellence award. He has also guided 15 students and is actively involved in international conferences. In September 2025, a survey by Stanford University USA and Elsevier recognized him as a “Top 2% scientist of the world” in the field of Mechanical, Materials Engineering and Transports.

Speaker 2:



Abdel Magid Hamouda, Ph.D., FRSA
Professor & Former Associate Dean for Research and Graduate Studies
College of Engineering, Qatar University, Qatar

Presentation Title: *“Rethinking Accreditation and Quality Assurance in the AI Era”*

Abdel Magid Hamouda is Professor in Mechanical and Industrial Engineering at the College of Engineering, Qatar University. Prior to this, Dr. Hamouda was Head of the Mechanical and Industrial Engineering Department, Associate Dean for Research and Graduate Studies, Associate Dean for Academics, and Dean of the College of Engineering, Qatar University. Dr. Hamouda has published over 450 articles, of which over 250 are in well-reputed international journals. In the last five years, he and his team were granted five US Patents. He and his team won the Outstanding Paper Award in the Emerald Literati Awards for Excellence in 2019 and 2020 for their papers published in the Journal of Applied Research in Higher Education. He was honored with the prestigious Takreem Scientific and Technological Achievement Award in 2010, which is the highest award for scientific and technological achievement for Arab scientists globally. He won the Qatar University Merit Award in 2010, 2014, and 2020. Also, he was the winner of the QU Research Excellence Award in 2016 and the QU Service Award. Dr. Hamouda is currently leading major initiatives including an electrical vehicle demonstration car at Qatar University,

which is funded by the Japanese company Marubeni as well as the Development of Proactive Resilience Plan (PRoP): An Integrated Framework Applied to Industrial Facilities Sector.

Speaker 3:



Dr. Shane E. Downing and Dr. M. Affan Badar

Presentation Title: ***“Quality Assurance Machine – A Software Quality Assurance Architecture for ML-Enabled Systems”***

Dr. Shane E. Downing, Software Quality Assurance (SQA) architect, Cleerly Health, USA

Dr. Shane E. Downing is a software quality assurance architect and leader specializing in AI-enabled and ML-enabled systems. He is currently SQA Architect/Staff SQE at Cleerly Health, where he helps build end-to-end software quality assurance solutions for clinical products, with emphasis on product quality, regulatory traceability, and test automation aligned to real-world clinical workflows. He previously served as Senior Director of Software Quality Assurance for AI-enabled systems at Enlitic, where he led quality strategy, automation infrastructure, and process improvement for healthcare-focused ML platforms. Dr. Downing received his Ph.D. in Technology Management with a specialization in Quality of AI-Enabled Systems from Indiana State University. His dissertation and related research developed and evaluated the Quality Assurance Machine (QAM), a system-level SQA

architecture for ML-enabled systems that integrates product assurance, process assurance, traceability, reproducibility, auditability, and performance monitoring. His work bridges industrial software quality practice, regulated medical software, Design Science Research, and quality systems. He also holds an M.E. in Embedded Systems, a B.S. in Computer Science, and a B.S. in Automated Systems Engineering Technology. He is an ASQ Certified Manager of Quality/Organizational Excellence and holds an ISO 13485 Requirements certification.

2:30 – 4:00 pm, June 10

Supply Chain Management Panel

Panel Chair



Senthilkumar Thiyagarajan, Ph.D.

Senior Supply Chain Analyst

Medline Industries, LP

Northfield, Illinois, USA

Dr. Senthilkumar Thiyagarajan is a Senior Supply Chain Analyst in the Center of Excellence for Inventory Management at Medline Industries, LP. He earned his Ph.D. in Supply Chain Management from Purdue University and MS in Industrial Engineering from Arizona State University. His expertise spans supply chain resilience, digital twin technology, Industry 4.0, Lean Six Sigma, and product lifecycle management, with a proven track record of applying advanced research to real-world industry challenges. Dr. Thiyagarajan's research work has been published in leading journals, including the International Journal of Lean Six Sigma, Total Quality Management & Business Excellence, and the International Journal of Productivity and Quality Management. He has also presented his research at major international conferences. A certified Six Sigma Black Belt, he has held impactful roles in

supply chain, quality engineering, and process improvement at Tesla, Schott, Cook Medical, and Zimmer Biomet before joining Medline. Beyond his corporate contributions, Dr. Thiyagarajan actively advances the profession through editorial, advisory, and leadership service. He currently serves on the Editorial Advisory Boards of the International Journal of Lean Six Sigma and the International Journal of Quality & Reliability Management. He is a Board Member of the Logistics & Supply Chain Division of IISE and an Industrial Advisory Board Member for IISE. Within the American Society for Quality (ASQ), he leads the Content Management Committee for Supply Chain Management and contributes as a committee member for Quality 4.0 in the Quality Management Division.

Panel Speaker I



Dr. Matthew Petering

Associate Professor

Department of Industrial and Manufacturing Engineering

University of Wisconsin – Milwaukee (UWM)

Milwaukee, Wisconsin

USA

While Dr. Petering's academic career has kept him in the Midwest (Washington University in St. Louis, University of Michigan, UW-Milwaukee), his research has affected the commerce of the entire globe. His work on seaport container transshipment terminals, high-speed train scheduling, and material handling has streamlined transportation and warehousing systems around the world. His research on logistics and supply chain management has combined the ever-changing world of business with the hard science of engineering.

Speaker II



Prabhat Rao Pinnaka

Lead Product Manager, Supply Chain – Tech & AI

Lowes

Prabhat Rao Pinnaka is a product and supply chain transformation leader specializing in AI, digital twins, and intelligent enterprise systems. He has led initiatives across fulfillment, warehouse operations, and enterprise decision support, helping organizations improve resilience, productivity, and operational performance at scale. His experience includes large transformation programs supporting companies such as Lowe's, Johnson Controls, BASF, Dow, and Kraft Heinz.

Prabhat is a frequent speaker and thought leader on AI-driven supply chain transformation, with a focus on translating emerging technologies into practical operating models and measurable business outcomes.

Speaker III



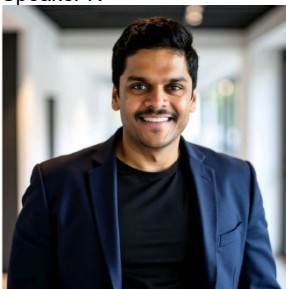
Aswin Sudarsanam
Supply Chain Integration and Technology
Medline Industries, LP
Chicago, Illinois, USA

Aswin Sudarsanam is a Senior Business Systems Analyst in the Supply Chain Integration and Technology team at Medline Industries, LP, where he focuses on enabling scalable, technology-driven supply chain transformation. He leads the integration of supply chain systems supporting mergers and acquisitions, develops Medline's long-term supply chain technology roadmap, and drives global supply chain integration initiatives.

With over six years of experience partnering closely with Medline's Supply Chain Center of Excellence, Aswin has led high-impact process improvement and digital enablement initiatives across planning, inventory, and end-to-end supply chain operations. He also spent two years in Medline Canada, where he played a key role in leading a supply chain digital transformation effort, modernizing systems and processes to support growth and operational excellence.

Aswin holds a master's degree in industrial engineering from Northern Illinois University and brings a strong systems-thinking and analytics mindset to solving complex supply chain challenges. His work sits at the intersection of business strategy, process design, and technology execution, with a focus on building sustainable, globally scalable supply chain capabilities.

Speaker IV



Girish Kumar Gopalakrishnan, MS, CMBB, CSSBB, CMQ-OE
Senior Manager – Continuous Improvement – CNH
Senior Member – IEOM Society International

Girish Kumar Gopalakrishnan is a North America Continuous Improvement Senior Manager at Case New Holland (CNH). Girish has led cross-plant transformation initiatives that have significantly advanced manufacturing performance, digital innovation, and cultural engagement across CNH's operations. He is a distinguished continuous improvement leader whose 15-year career reflects deep technical expertise, transformative leadership, and a sustained impact on operational excellence. He holds a Master's degree in Industrial Engineering from North Carolina State University. He was named one among top 50 business transformation leaders to follow in 2025 by Process Excellence Network. He received the 2025 Marilyn Hyde Commitment to Excellence Award from the American Society of Quality (ASQ) NE Illinois Chapter. He serves as an Industry Advisory Board Member for the

Industrial & Manufacturing Engineering department at University of Wisconsin-Milwaukee. He is an ASQ certified Master Black Belt, Black Belt and Certified Manager of Quality and Organizational Excellence. He is also a Senior member with Industrial Engineering & Operations Management Society (IEOM), ASQ and Institute of Industrial Engineers (IIE). Girish is serving as the Secretary of ASQ NE Illinois Chapter, and as an Editor-in-Chief of the ASQ Lean Enterprise Division eZine Quarterly Magazine.

4:30 – 6:00 pm, June 10

Women in Industry and Academia (WIIA) Panel sponsored by Ford Motor Company

Panel Chair



E. Shirl Donaldson, Ph.D. PMP
Faculty Member
College of Innovation and Technology
University of Michigan Flint

Academia is the second career for E. Shirl Donaldson. Dr. Donaldson worked as a partner in a family-owned manufacturing firm resulting in exceptional insight into entrepreneurship, manufacturing, operations management, project management, quality systems, technology management and STEM education. Before returning to Purdue University in 2009 to pursue a Ph.D. in Industrial Technology, she held positions with technical and financial responsibilities. She brings these skills and experiences to every space she enters as she continues to teach and consult. In August 2021, Donaldson joined the College of Innovation and Technology as inaugural faculty at University of Michigan Flint. Previously, Dr. Donaldson has taught operations management, project management,

supply chain, and quality systems at The University of Texas and Purdue University. Problem-solving is Shirl Donaldson's passion. Professor Donaldson is a certified project management professional (PMP) and an active member of Project Management International (PMI). Her current research agenda is highlighted in several community engaged projects such as Modifying Vehicles for Handicapped Children from a Student Perspective, Racial Equity and STEM, STEM Education and Donk Racing, Motorsports and Applied STEM, Leveraging Project Management for Student Success, Paper Ceiling Explorations, and Entrepreneurship in Underserved Communities.

Speaker I



Monica L. Davis
Sr. HR Leader and Certified Professional in Human Resources (PHR)
Delek US Holdings, Inc.
Texas, USA

Monica L. Davis is a seasoned operations and human resources leader with extensive experience in production, distribution, logistics, and organizational leadership within the oil and gas industry. Over the past decade, she has successfully led operations across multiple sites, developing a strong technical and managerial foundation that enabled critical logistics and operational functions to continue seamlessly during highly challenging and disruptive periods. Currently serving as a Senior HR Leader and Certified Professional in Human Resources (PHR) at Delek US Holdings, Inc., Monica brings a unique combination of operational excellence, workforce leadership, and strategic problem-solving. Her expertise spans operational efficiency, process improvement, compliance

management, risk mitigation, safety leadership, and organizational development. Monica is widely recognized for her ability to implement innovative and cost-effective operational strategies while maintaining high standards of safety, environmental compliance, and service reliability. She has

consistently demonstrated success in optimizing scheduling systems, improving process efficiencies, strengthening risk management frameworks, and delivering operational excellence across complex environments. In addition to her technical and operational accomplishments, Monica is known as a collaborative and inspiring leader who excels at building strong relationships across diverse teams and fostering a culture of accountability, engagement, and continuous improvement. As a keynote speaker, Monica Davis shares valuable insights on operational leadership, workforce development, resilience in complex industries, process optimization, and the evolving role of human resources in driving organizational success.

Speaker II



Dawn Patterson
Founder, CEO and Creative Director of I Am My City, Brand
DFC Director of sponsorship and the Co-Creator of Socialite Detroit
Detroit, Michigan, USA

Business maven and power leader Dawn Patterson has coordinated and overseen over 400 high-end corporate, political, and social events in and around the Detroit metro area. Highly skilled in corporate communications with a reputation for excellence among the elite hospitality management/restaurant industry; Dawn elevated her acumen for emotional and social intelligence with hands-on leadership experience. She is known for her detailed and proactive approach in developing intellectual creative strategies; bringing visions to life that connect to the core of each brand she touches. Dawn is a licensed Realtor who spent her initial year in Residential Real Estate, but is now focused on Commercial Real Estate sector. Investors have found her knowledge in creating business concepts invaluable when acquiring real estate. Dawn is currently the owner of a sustainable company, I Am My City, brand, the DFC Director of sponsorship and the Co-Creator of Socialite Detroit. Attended Wayne State University, majoring

in Communications.

Speaker III



Tallie Cheairs, MHI, BSN, RN, NE-BC
Clinical Educator
OhioHealth Physicians Group

Tallie Cheairs is a Clinical Educator with OhioHealth's Clinical Excellence team and a passionate advocate for advancing innovation through education in healthcare. With more than 20 years of experience in nursing, leadership, and clinical education, she holds a Master of Healthcare Innovation (MHI) and specializes in preparing healthcare professionals to adapt to emerging technologies and evolving care models.

In her current role, Tallie leads education, onboarding, and competency development initiatives across ambulatory care settings, with a strong focus on integrating innovative products, technology-enabled solutions, and evidence-based practices into clinical workflows. Her work bridges the gap between healthcare delivery and innovation, equipping clinicians with the knowledge and confidence to implement new tools that improve patient outcomes and operational effectiveness.

As a woman leader in both healthcare and education, Tallie is deeply committed to mentoring, empowering, and advancing others—particularly women—within the industry. She is passionate about fostering inclusive learning environments and inspiring the next generation of professionals to lead, educate, and innovate at the intersection of healthcare and industrial advancement.

Speaker IV



Dr. Wilkistar Otieno
Associate Professor and Chair
Department of Industrial and Manufacturing Engineering
University of Wisconsin-Milwaukee, United States

Dr. Wilkistar Otieno is an Associate Professor and Chair of the Industrial & Manufacturing Engineering Department at the University of Wisconsin–Milwaukee. Her industry-driven research involves sustainable manufacturing, particularly remanufacturing and machine learning, with applications in manufacturing. She has a passion for teaching statistical-related courses, and inspiring student involvement. She is a faculty mentor to several student organizations, including the Society of Women Engineers, the Campus Advent Society and the Institute for Operations Research and Management Sciences and the Association of Energy Engineers. She is a long-time faculty mentor of the STEM INSPIRE Wisconsin Alliance for Minority Participation program. She received the 2022 Tony Quinn Awardee from the Louis Stokes Midwest Regional Center of Excellence (LSMRCE), and the 2022 UW System Outstanding Women of Color in Education Award. Dr. Otieno has served as the Chair of Institute of

Electrical and Electronics Engineers-Milwaukee Chapter and is the past Chair of the INFORMS Women in Operations Research and Management Sciences.

4:30 – 6:00 pm, June 11 – Room 4 + Virtual

AI-ML Panel

AI-Powered Engineering (Redefining Problem Solving in the Digital Era)

Artificial Intelligence (AI) is rapidly transforming the engineering profession, creating new opportunities to solve complex problems, optimize systems, and accelerate innovation across industries. From intelligent design tools and predictive analytics to simulation, autonomous systems, and generative AI, engineers are increasingly leveraging AI technologies to enhance decision-making and improve operational performance. This panel will bring together academic, industry, and technology experiences to explore how AI is reshaping engineering. Panelists will share real-world success stories, implementation challenges, lessons learned, and emerging trends in AI-powered engineering systems. Discussions will focus on practical applications, workforce implications, ethical considerations, and the evolving role of engineers in an increasingly AI-driven environment.

Panel Chair



Dr. Hayder Zghair
Assistant Professor of Industrial Engineering, Department of Engineering and Physics
Director of Industrial Engineering Development
College of Science and Engineering
Southern Arkansas University, Magnolia, Arkansas

Dr. Hayder Zghair is Assistant Professor of Industrial Engineering and Director of Industrial Engineering Development in the College of Science and Engineering at Southern Arkansas University (SAU), USA. Prior to joining SAU, he held academic appointments as Assistant Teaching Professor of Industrial and Manufacturing Engineering at Pennsylvania State University and Lecturer of Industrial and Manufacturing Engineering at Kettering University. Dr. Zghair's research and teaching interests span industrial engineering, manufacturing systems, automation, simulation, optimization, sustainability, and engineering education. His recent work focuses on emerging Industry 4.0 and Industry 5.0 technologies, including artificial intelligence (AI), Industrial Internet of Things (IIoT), smart sensors, digital transformation, and intelligent decision-support systems. He has authored and presented numerous peer-reviewed journal articles and conference papers in these areas. In addition to his academic responsibilities, Dr. Zghair actively collaborates with industry and professional organizations to advance workforce development, applied research, and sustainable engineering practices. He serves as Chair of the Southern Arkansas University Sustainability Committee and holds leadership roles in several national and international professional organizations. He is President of the Manufacturing Division of the Association of Technology, Management, and Applied Engineering (ATMAE), Chair of the Academic-Industry Coalition Committee for Engineering for One Planet (EOP), and Faculty Advisor of the IEOM Student Research Chapter at SAU. Dr. Zghair had an Affiliate Researcher position with the Penn State Institute of Energy and the Environment and maintains active memberships in several professional societies, including IEOM Society International, ASSE, SAE International, ASME, and IISE. His current interests include AI-powered engineering systems, sustainable manufacturing, intelligent automation, and the future of engineering education in the age of artificial intelligence.

Panel Speakers



Mayra Bornacelly Castaneda
Ph.D. Candidate in Industrial Engineering
University of Central Florida, Orlando, FL, USA

Mayra Bornacelly Castaneda is an AI and engineering researcher, instructor, and applied analytics professional specializing in fair, causal, explainable, and human-centered machine learning. She is pursuing a Ph.D. in Industrial Engineering at the University of Central Florida, where her work examines how AI can improve trust, reliability, and decision-making in human-machine collaboration. With an M.Sc. in Data Science from the University of Melbourne and extensive industry experience in data analytics, predictive modeling, and engineering information systems, she brings a strongly interdisciplinary perspective to AI-powered engineering. Her recent scholarly contributions include work on BayesIntuit, reliability-aware neural decision systems, causal loops, fairness under domain shift, and structural reliability in learning-enabled systems. She has served as an instructor, invited speaker, conference and journal reviewer, and award-winning presenter. Her work contributes to the development of responsible, human-centered, and intelligent engineering systems.



Jorge Flavio Sarmiento Falla, PhD.
Lecturer
University of Central Florida
Orlando, Florida, USA

Dr. Jorge Sarmiento is a lecturer at the University of Central Florida (UCF), where he earned his Ph.D., M.S., and B.S. He received the 2024 Excellence in Graduate Student Teaching Award and has taught over 1,000 students across undergraduate and graduate courses, including Operations Research, Systems Simulation, Quality Engineering, and Engineering Statistics. His research focuses on agile systems, discrete event simulation, queueing systems, quality engineering, and continuous improvement—particularly in healthcare and service settings. His dissertation examined how information technology ambidexterity and human resource practices foster workforce agility to improve job performance in Peruvian healthcare systems, using PLS-SEM techniques. Dr. Sarmiento developed a simulation model during the COVID-19 pandemic that significantly reduced operational time for UCF Housing's drive-thru check-in process, impacting over 6,000 check-ins. He is Lean Six Sigma Green Belt

certified and skilled in Simio, R, Python, and data analysis tools. He previously served as a Graduate Teaching Associate and is a former member of the IISE Greater Miami Professional Chapter. He has published in Applied Sciences and presented at international conferences, promoting engineering education and mentorship.



Diego Guevara
Instructor
Department of Industrial Engineering
University of Central Florida (UCF)
Orlando, Florida, USA

Diego Guevara is an industrial engineering graduate, data analytics professional, and instructor. He is pursuing a Ph.D. in Industrial Engineering at the University of Central Florida (UCF), with his doctoral research focusing on safety in healthcare systems. With an MSc and BSc in Industrial Engineering from UCF, he has experience in work design and analysis, quality engineering, data analytics, automation, service engineering, and higher education systems. His published research involves structural equation modeling, psychometrics, predictive analytics, and robust statistical methods to understand complex sociotechnical systems and support evidence-based decision-making. He also has in-print research on the reliability and stability of machine learning models. He has also served as a reviewer for journals and academic conferences and supported research dissemination through conference presentations and manuscript development. He has participated as a speaker in educational contexts as well as

volunteering at conferences and academic-related settings. His work contributes to the advancement of safer, more reliable, and evidence-based engineering and educational practices, as well as serving as one of the bridges that connect engineering with humans.

4:30 – 6:00 pm, June 11

Panel on PPAP (Online)

1. Overview of the PAPP Process
2. PPAP Effectiveness

Panel Chair



Steven Sibrel
Supplier Quality Manager
Harman International, Novi, MI
Past Chair – ASQ Greater Detroit

Steve Sibrel is a business process improvement trainer, coach and auditor with over 35 years of experience in the business and manufacturing world. He is currently working as a Supplier Quality Manager at Harman International, a manufacturer of audio and infotainment systems for consumer, professional, and automotive industries, with well-known brands such as JBL, Lexicon, Crown, Infinity, Mark Levinson, Becker and Harman-Kardon. Previously, he held a number of engineering and management positions in diverse industries at Applied Materials (Semiconductor), NEC (Telecommunications) and Texas Instruments (Military). He has conducted over 200 supplier audits in North America, Europe, and Asia and is a Lead Auditor for ISO/TS16949, ISO9001, ISO13485, ISO17025, and 21CFR820. He has been the Chair for Professional Development for the ASQ Detroit section since 2008. He received the Distinguished Service Award in 2008 and the Leadership Award in 2013 from ASQ. Current ASQ Certifications held are Six Sigma Black Belt, Quality Engineer, Quality Inspector, Quality Auditor, and Manager of Quality/ Organizational Excellence. He is an adjunct faculty member at Macomb Community College. Steve has a BSEE degree from Rose Hulman Institute of Technology and an MSEE degree from Southern Methodist University.



Brian Martensen
Product Manager
Plex Quality Management System
Plex, by Rockwell Automation
Detroit, Michigan, USA

Brian Martensen is the Product Manager for the Plex Quality Management System at Plex, by Rockwell Automation, bringing over 30 years of experience in quality leadership and continuous improvement. Prior to joining Rockwell, Brian led quality products and services at AIAG, specializing in quality core tools and IATF 16949.

His career spans key quality and engineering roles across multiple Tier 2 automotive suppliers and Visteon/ACH, where he earned several awards for process improvement and efficiency gains. Brian also serves as a guest lecturer on quality core tools at Wayne State University. He holds a bachelor's degree in manufacturing systems engineering from GMI Engineering & Management Institute (now Kettering University).

4:30 – 6:00 pm, June 11

Panel on Quality 4.0 / AI in Quality (Online)

Panel Chair



Saad Ahmed, CSSGB, CCQM
Senior Member American Society for Quality
Supplier Quality Management-North America Lead
bp, Chicago, Illinois

Saad Ahmed is a veteran manufacturing and supplier quality leader with more than 25 years of experience across the automotive, energy, and industrial sectors. He is known for his expertise in Core Tools, QMS architecture, and AI-enabled quality systems, advising global manufacturers while driving operational excellence, supplier performance, and Quality 4.0 transformation. Saad has led supplier development and launch governance for organizations including Dana, Volkswagen, and BP, consistently elevating quality from a compliance function to a strategic business enabler. A practitioner of modern Quality 4.0, he integrates AI-driven analytics and predictive quality into real-world manufacturing environments. He actively supports industry organizations, builds advisory boards, and contributes thought leadership across the U.S. manufacturing ecosystem — bringing a balanced,

practitioner-driven perspective to every panel he moderates.

Panel Speakers



Anastasiia Glebova
COO and co-founder of O-HIVE

Anastasiia Glebova is a technology founder, COO, and supply chain analytics expert with more than a decade of experience helping global industrial companies improve operational performance. Before becoming an entrepreneur, she held leadership roles at KONE, Konecranes, and WTMrtailTM, where she worked at the intersection of supply chain, quality, process excellence, and analytics. Today, Anastasiia is the COO and co-founder of O-HIVE, an AI powered vision intelligence company helping manufacturers automate quality inspection, production monitoring, and industrial operations through computer vision and artificial intelligence. Her work focuses on bringing practical AI solutions to traditional industries, enabling organizations to reduce defects, improve efficiency, and make better decisions through data driven automation.



Greta Cutulenco
CEO and co-founder of Acerta

Greta Cutulenco is the CEO and co-founder of Acerta, a leader in AI-driven predictive quality software for automotive and discrete manufacturing, and one of Fast Company's 2026 Most Innovative Manufacturing Companies. She also serves as Vice Chair of the Automotive Parts Manufacturers' Association (APMA) and has been recognized by Forbes 30 Under 30 and an Industry All-Star for her contributions to manufacturing innovation.



Sanath Hegde
CEO at Prodle

Sanath Hegde is the CEO at Prodle, where he drives AI-powered solutions for compliance auditing and manufacturing quality management. With over 25 years of experience in product management and engineering across enterprises like Docusign, Opentext and Dell EMC, he consistently delivers impactful products that reduce total cost of ownership and accelerate time-to-value. His work focuses on AI and intelligent automation across core compliance functions, including document control, audits, CAPA, and risk management.



12th North American IEOM Conference

June 1-3, 2027, Boston, Massachusetts, USA
Host: Northeastern University

Conference Chair

Dr. Muhammad Noor E Alam

Associate Professor

Department of Mechanical and Industrial Engineering

Director of the Decision Analytics Lab

Northeastern University

Boston, Massachusetts, USA