

Sixth International Conference on Industrial Engineering and Operations Management (IEOM)

JW Marriott Hotel
Kuala Lumpur, Malaysia
March 8 – 10, 2016

Keynote Speakers

Opening Keynote (Tuesday, March 8, 2016): 10:00 – 11:00 am



Dr. Ronald G. Askin

Professor and Director
School of Computing, Informatics, and Decision Systems Engineering
Arizona State University
Tempe, AZ, USA

Ronald G. Askin, Ph.D., is a Professor of Industrial Engineering and Director of the School of Computing, Informatics, and Decision Systems Engineering at Arizona State University. Dr. Askin received a B.S. in Industrial Engineering from Lehigh University and an M.S. in Operations Research and a PhD in Industrial and Systems Engineering from Georgia Institute of Technology. He has over 30 years of experience in the development, teaching and application of methods for systems design and analysis with particular emphasis on production and material flow systems. Dr. Askin is a Fellow of the Institute of Industrial Engineers (IIE) and Editor-in-Chief of IIE Transactions. He also serves on the INFORMS Board of Directors and has previously served on the IIE Board of Trustees, as President of the IIE Council of Fellows, Chair of the INFORMS Manufacturing and Service Operations Management Society, Chair of the Council of Industrial Engineering Academic Department Heads (CIEADH) and Chair of the Association of Chairs of Operations Research Departments (ACORD). Dr. Askin has published over 120 journal and conference papers and presented invited Keynote Addresses on four continents. His list of awards includes a National Science Foundation Presidential Young Investigator Award, the Shingo Prize for Excellence in Manufacturing Research, IIE Joint Publishers Book of the Year Award (twice), IIE Transactions on Design and Manufacturing Best Paper Award (twice), the Eugene L. Grant best paper award from The Engineering Economist, and the IIE Transactions Development and Applications Award.

Key Industrial Engineering Principles and Research Opportunities for Advancing Operations Management

Abstract:

A revolution has occurred over the past hundred years in the variety of products available to improve our personal and professional lives. While scientific discoveries enabled design engineers to conceptualize these products, it has been the innovations in operational methodologies that have made these products widely available and affordable to an increasing number of individuals. A systems perspective and analytical models powered by the availability of data have been key drivers of reducing waste, cost and time in operations while increasing flexibility and quality. We begin this talk with some of the key principles we have discovered for effective operations management to improve operational performance. We then address remaining opportunities for production systems researchers. Focus is placed on constructing more comprehensive and realistic data-driven models for decision making, from the strategic view of the entire supply network down to real-time dynamic control at the individual and equipment level. The presentation will conclude with a computationally efficient multi-level modeling approach that integrates capacity planning and detailed scheduling for effective management in a semiconductor assembly and test manufacturing environment.

Industry Keynote (Tuesday, March 8, 2016): 1:00 – 2:00 pm (Boxed Lunch Provided)**Dr. Anwar Ali Mohamed**

O.R. Freelance Consultant

Penang, Malaysia

Former Principal Engineer at Intel Malaysia

Dr. Anwar Ali is a freelance trainer and consultant in Operations Research (OR). He has 27 years' experience in semiconductor industry, 2 years at Texas Instruments in Kuala Lumpur followed by 25 years at Intel Technology Sdn Bhd in Penang. He was a Principal Engineer for his last 5 years at Intel. He practiced OR (discrete event simulation and mathematical modelling) for 13 years. His areas of expertise include high fidelity equipment simulation modelling, factory capacity modelling and optimization, and the relevant enterprise data integration involved.

Previously, he held Industrial Engineering (IE) management positions supporting factory start-up and designing, developing and deploying enterprise systems for IE capacity planning. He was an equipment development engineer for 7 years, developing IC logo machine vision inspection and PC-based equipment control during the days of 286/386. Dr. Anwar Ali completed his B.Eng. in Mechanical Engineering (Industrial Engineering major) from Universiti Teknologi Malaysia (UTM) in 1988, M.Sc. in Decision Science from Universiti Utara Malaysia (UUM) in 2005, and doctorate in Engineering Business Management from UTM in 2014.

Wednesday Morning Keynote (March 9, 2016): 9:30 – 10:15 am**Ir. Dr. Zuhairi Abd. Hamid**

Executive Director

Construction Research Institute of Malaysia (CREAM)

Kuala Lumpur, Malaysia

Green, Sustainability and Lean Systems in Malaysia Construction Industry and Management

Zuhairi Abd. Hamid is the Executive Director of Construction Research Institute of Malaysia (CREAM), a research institute established under Construction Industry Development Board (CIDB) which he joined in January, 2006. He has over 27 years of experience in the construction industry and started his professional career as a civil and structural engineer with Public Works Department of Malaysia in 1984. He has worked under various capacities as road engineer, bridge engineer, building engineer, district engineer, assistant director of planning, forensic and structural design engineer. He joined CIDB in 1998 as a senior manager at the Technology Development Division and later was appointed to his current post at CREAM. He holds a B.Eng. (Hons.) Civil from University Technology Malaysia. He gained his Masters in Structural Dynamic Engineering from Kanazawa University, Japan and his PhD in IT Construction majoring in Healthcare Facilities Management from University of Salford, United Kingdom. He is a Professional Engineer (P.Eng.) in the Board of Engineers Malaysia and a Fellow of the Institution of Engineers Malaysia (FIEM). → He sits in many committees as construction industry advisor to UTM, UTHM, UTP, UPNM and UiTM. He also sits as a Board Member in the United Nation support International Research Council, CIB "Conseil International du Bâtiment" (International Council for Research and Innovation in Building and Construction). His research interest and expertise is within the area of Strategic Management of IT in Construction, Strategic Facilities Management in Health Sector, Structural dynamic (wind engineering and earthquake engineering), Prefabricated building construction and Open Building System and Manufacturing.

Wednesday Morning Keynote (March 9, 2016): 10:15 – 11:00 am**Mohammad Shaharudin bin Shamsudin**

Head of Production Planning and Control
PROTON Holdings Berhad, Malaysia

En Mohammad Shaharudin Bin Shamsudin was born in 1969 at Machang in Kelantan. He studied at Sekolah Menengah Sains Kelantan and then further his studies in Mechanical Engineering in 1987. He graduated with a BSc (Honours) in Mechanical Engineering from University Technology Malaysia. He joined Proton in 1994 as an Executive in Production Planning and Control Department and have been there until the present time. He gradually work his way up in the department to be the Head of Progress Control Tanjung Malim. There he is involved in the development of the Automatic line Control (PALC) in the new plant at Tanjung Malim. Then he is transferred to be the head of Manufacturing Product and Data Management. This involve the management of data of new products as well as managing changes in product engineering changes in current products. Engaged with consultants in developing manufacturing system and Enterprise resource planning, En Mohammad Shaharudin have wide experience in systems. However his main speciality is still in the development of the Manufacturing Bills of Material and Production Planning. In 2014, he was appointed as the Head of Supply Chain Management and Production Control. In this position he is involved with improvements in the efficiency of supply chain through out the process flow in the making of vehicles.

Wednesday Lunch Keynote (March 9, 2016): 1:00 - 2:00 pm**Dr. Rupy Sawhney**

Heath Fellow in Business and Engineering
Professor, Industrial and Systems Engineering
University of Tennessee, Knoxville, USA

Rupy Sawhney is a Professor & Heath Fellow in Industrial and Systems Engineering at the University of Tennessee, Knoxville. He earned B.S. and M.S. in Industrial Engineering and Ph.D. degrees in Engineering Science and Mechanics from the University of Tennessee, Knoxville in 1981, 1984 and 1991 respectively. He was a Weston Fulton Professor and Department Head during 2010-2013. He is also a faculty for the newly created Center for Interdisciplinary Research and Graduate Education (CIRE) in Energy. His current research focuses on trying to use technology and innovation to enhance organizational productivity. Dr. Sawhney has assembled a team over the past five years that has a greatest critical mass within the history of the Industrial Engineering department to compete with other academic institutions in the lean area. His research group at this moment consists of 40 Postdocs, Ph.D. and Master students. He has published significant journal papers, conference papers and has submitted for 5 patents. He has graduated more than 50 Master's and 8 Ph.D. students. His funded research projects are in the millions of dollars. He has worked with over 200 companies and is a recipient of various awards (Boeing Welliver Fellow, Alcoa Faculty Award, IIE Lean Teaching Award, Reuben Harris Award, and Accenture Teaching Excellence Award).

**Conference Award Keynote, March 8, 2016, 7:00 pm****Hulas King**

Director, Diversity, Professional Affiliations & Global Community Relations
Siemens PLM Software
St. Louis, Missouri, USA

Hulas is responsible for the strategy and operational leadership of Siemens PLM Software Global Diversity Council. He also leads Professional Affiliations & Global Community Relations Teams, driving innovation and digitalization value for youth, displaced workers, strategic customers and business partners. Mr. King is a decorated Vietnam veteran, a Certified Manufacturing Engineer and a Certified NC Manager. He was inducted into the African-American Biographies Hall of Fame for outstanding contributions in Business and Engineering. He represents SIEMENS on several professional boards

including the Institute of Industrial Engineers, the Society of Manufacturing Engineers, Advancing Minorities' Interest in Engineering, the Stone Soup Foundation, the Accreditation Board for Engineering & Technology (ABET), the International Federation of Engineering Education Societies (IFEES) and the Professional Business Leadership Council. He travels extensively within the Americas, Europe, the Middle East and Asia Pacific, speaking at various technical seminars in support of Global Opportunities in PLM.

Hulas managed the GO PLM (Global Opportunities in Product Lifecycle Management) program, nurturing strategic partnerships that provide significant added value for academic institutions, youth development programs and our global communities. These partnerships exemplify SIEMENS as the PLM Industry Leader and are successful in developing technology environments where underutilized citizens of the world can work together to improve their economic conditions and promote peace. He served as McDonnell-Douglas' Program Manager for Enterprise Life-Cycle Processes for Team Columbus Engineering / Manufacturing in support of C-17 Production in Columbus, OH.

Education

- * Belleville Area College, 1970: AS, Data Processing
- * Southern Illinois University, Edwardsville, 1972: BS, Management Science/Data Processing
- * Southern Illinois University, Edwardsville, 1974: MBA, Marketing and Business Administration
- * Southern Illinois University, Edwardsville, 1975: MS, Government/International Relations.
- * Southern Illinois University, Edwardsville, 1978: MS, Management Science and Systems
- * Southern Illinois University, Edwardsville, 1979: SPC, Health Care Management Systems
- * University of Missouri - Columbia, 1983: MS, Industrial Engineering

Thursday Morning Keynote Speaker (March 10, 2016): 9:30 – 10:15 am



Dr. Hans-Juergen Hoyer

Secretary General of the International Federation for Engineering Education Societies (IFEES)

Executive Secretary of the Global Engineering Deans Council (GEDC)

Resident Scholar in Global Engineering at Marquette University

Hans J. Hoyer is the Secretary General of the International Federation for Engineering Education Societies (IFEES), Executive Secretary of the Global Engineering Deans Council (GEDC), and Resident Scholar in Global Engineering at Marquette University. Former Director of International Programs and Strategy for the American Society for Engineering Education (ASEE) and co-founder of the Indo-US Collaborative for Engineering Education (IUCEE). Prior to 2006, Hans J. Hoyer was CEO of World Links, a spin-off of the World Bank. In this capacity, he worked globally on issues related to secondary education, teachers' education, and on-line collaborative learning focusing on science and social studies among high school students across the globe.

Dr. Hoyer has been a Visiting Scholar at the Center for International Studies at MIT, a Fellow at Harvard's School of Education and Visitor at the Kennedy School of Government. He was dean of the graduate program at the School for International Training, World Learning and Executive Director of the Executive Training Program for global governmental and NGO leaders in Brattleboro, Vermont. Prior to this, he taught cultural anthropology and Latin American Studies at George Mason University in Fairfax, VA. and Montgomery College, Takoma Park, MD. He earned his Ph.D. at American University in Washington, D.C. and was a post-doctoral fellow at the Organization of American States, carrying out research in the Rio de la Plata region of South America. He is Honorary Professor in universities in India, Hungary, Peru and Kazakhstan. He started his career as a Peace Corps Volunteer and high school teacher in Linares and Talca, Chile and has lived in over twenty countries including India, Sri Lanka, Chile, Peru, Brazil, Ecuador, Paraguay, Argentina, Mexico, South Asia, Belgium, and Sub-Saharan Africa (Kenya and Zimbabwe). Over his extensive career he has visited more than 136 countries, is fluent in four languages and conversant in an additional five languages.

Dr. Hoyer has led several international development programs, including CARE, Plan International, and Heifer International. In these latter roles, he held executive leadership positions such as Senior Vice-President/Chief Operating Officer, and Regional Executive and was responsible, among others, for raising large financial resources from a multitude of donors including government agencies, the World Bank, IAB, several foundations, corporations and private donors. He also represented the largest U.S. farming membership association as a spokesperson at the European Union and European Parliament in Brussels and also represented them in Mexico and Central America. He has served on the board of directors with Nelson Mandela of El Taller, a global civil society network headquartered in Tunisia as well as on several social-action community groups. He was also on the staff of the Inter American Foundation, created by the U.S. Congress to support socio-economic development throughout Latin America/Caribbean. He was on the advisory board of Hewlett Packard's e-Inclusion Global Advisory Board related to their work in South Africa and Founding member of the Board of the Engineering for the Americas (EftA) initiative under the umbrella of the OAS. He serves on the Editorial Committee of the Argentinean Journal of

Engineering Education, Science and Technology. He has written and published on a broad range of subjects related to international development, politics, health, education, and engineering education. Born in Berlin, Germany, he immigrated to the US as a teenager. His wife is Canadian and he has four children who were born in the U.S., Brazil, Mexico and Belgium.

Thursday Morning Keynote Speaker (March 10, 2016): 10:15 – 11:00 am



Prof. Dr. Noraini Kaprawi

Director of Strategic and Quality Management Office
Faculty of Technical and Vocational Education
University of Tun Hussein Onn Malaysia

Prof. Dr. Noraini Kaprawi is Director of Strategic and Quality Management Office at Universiti Tun Hussein Onn Malaysia (UTHM). Previously she was Dean of the Centre for Graduate Studies. She received Ph.D in Management of Higher Education from University of Manchester, United Kingdom, M.Sc. in Technology Management from University of Technology Malaysia (UTM), Postgraduate Teacher Certificate, Temenggong Ibrahim Teachers College (MPTI) in Johor Bahru and B.Sc. in Physics, from University of Aston in Birmingham, United Kingdom.

Dr. Noraini held positions at Teacher/Education Officer of Ministry of Education Malaysia during 1986 – 1996. She was Lecturer at Politeknik Port Dickson (1992-2000) and Assistant Director Technical and Vocational Education Planning and Research Division, Ministry of Education (2000-2001). Dr. Noraini held various positions at Universiti Tun Hussein Onn Malaysia (UTHM) including lecturer, Assoc. Professor, Deputy Director of Continuing Education, Centre for Research Consultancy and Continuing Education, and Head of Manager for Institutional Project Management Office (iPMO Lead).

Dr. Noraini has served in many national and international professional organization including Wide involvement in National and Institutional TVE (Technical and Vocation Education) Projects. She has published many papers, provided workshops and attended national and international conferences. Many of her publication are related on technical and vocational education and training. Dr. Noraini has received various awards including:

2012: Universiti Tun Hussein Onn Malaysia, **Jasa Bakti 10 Tahun**

2010: Research and Innovation Festival 2010, Universiti Tun Hussein Onn Malaysia, for the project Development of A New Empirical Based Competency Profile for Malaysian Technical and Vocational Education and Training (TVET) Instructors, **Silver Medal**

2009: Universiti Tun Hussein Onn Malaysia, **Vice Chancellor Award**

2007: Universiti Tun Hussein Onn Malaysia, **Excellent Teaching Award**

2006: 34th International Exhibition of Inventions of New Techniques and Products, Geneva, **Bronze Medal**

2006: The International Technology Exhibition (ITEX 2006 in KLCC for the project of Curriculum Design Management System (CDMS), **Bronze Medal**

2005: Kolej Universiti Teknologi Tun Hussein Onn, **Potential Researcher Award**

2003: Kolej Universiti Teknologi Tun Hussein Onn, **Excellent Service Award**

Thursday Lunch Keynote Speaker (March 10, 2016): 1:00 - 2:00 pm

Rajiv Ghatikar



Vice President and General Manager
Siemens PLM
ASEAN/Australasia

Rajiv Ghatikar is the Vice President and General Manager for Siemens PLM Software's business in ASEAN and Australasia. Siemens PLM Software, a business unit of the Siemens Digital Factory Division, is a world-leading provider of product lifecycle management (PLM) software, systems and services with nine million licensed seats and 77,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software helps thousands of companies make great products by optimizing their lifecycle processes, from planning and development through manufacturing and support. Located in Hong Kong, Rajiv is responsible for managing all sales, sales support and services delivery for his region.

Prior to his current role, Rajiv was associated with PLM industry. From 1991 to 1998 he also worked with Procter & Gamble in both India and China in various financial roles with increasing levels of responsibility. In charge of a region that is predominantly run through a network of channel partners, Rajiv's personal approach towards life is most helpful. As a forward thinker, Rajiv believes that it is important to build trust and mutual respect with his team, partners and customers so as to achieve the best possible results.

Born in Mumbai, India, Rajiv studied at both the St. Mary's School and the Sydenham College before completing his professional studies as a Chartered Accountant. Rajiv has spent most of his work life and career outside of India and is committed to developing the potential of the Asia Pacific region, which he sees as his home. A keen traveler and one who enjoys learning about different cultures, Rajiv spends most of his spare time visiting various countries with his wife. He is also actively involved in hiking and other outdoor activities.



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