# **DISTINGUISHED SPEAKERS – Global Engineering Education**

# Tuesday (March 6, 2018)

# Session I: Global Engineering Education

8:00 – 9:30 am (Tuesday) - Room Kapla

Session Chair: Dr. Syed Ahmad Helmi Al Haddad, Universiti Teknologi Malaysia, Johor, Malaysia

8:00 - 8:30 (Tuesday)



#### Dr. Syed Ahmad Helmi Al Haddad

Program Coordinator for MSc in Industrial Engineering Faculty of Mechanical Engineering Associate Fellow, Center for Engineering Education (CEE) Universiti Teknologi Malaysia Johor, Malaysia

Problem Based Learning (PBL)

Dr. Syed Ahmad Helmi is a senior lecturer in the Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), and is affiliated to the UTM Centre for Engineering Education. He is currently the Graduate Programme

Coordinator for the Department of Material, Manufacturing and Industrial Engineering. He has a Bachelor of Science in Mechanical Engineering, Master in Mechanical Engineering, and a PhD in Engineering Education. Prior to joining UTM, he worked as industrial extension officer in Standard and Industrial Research Institute of Malaysia (SIRIM) and as an engineer in various industries, such as INTEL and SIME-DARBY. Syed Helmi was a visiting scholar in University of Waterloo, Canada, and one of a task force member in-charged of propagating active learning in UTM. Over the years, as a practitioner of Problem-Based Learning (PBL), he has conducted several workshops to train academics, especially those in Science, Technology, Engineering, and Mathematics (STEM) education areas, on Outcomes-Based Educaction (OBE) particularly in effective implementation of Student Centred Learning (SCL) throughout Malaysian higher institutions, and international institutions such as in China, India, Korea, Turkey, and Afganistan. Dr. Syed Helmi was invited as speaker in several international conferences. He has also won several awards, including the Diamond Award for Best Paper at the 2005 UNESCO International Centre of Engineering Education Conference on Engineering Education in Bangkok, Thailand, the Best Paper Award at the 2011 IEEE Global Engineering Education Conference in Amman, two gold medals in the International Innovative Practices in Higher Education Exposition (i-PHEX2014) and one gold medal in i-PHEX2105. He also had published numerous articles related to his area of interest. His recent works include SCL, change management, complex engineering problems, manufacturing systems and optimization, and modelling of complex industrial systems.

8:30 - 9:00 (Tuesday)



Professor Rifky Ismail

Head at Center for Biomechanics, Biomaterials, Biomechatronics and BioSignal Processing UNDIP: Diponegoro University Semarang, Central Java, Indonesia

A research collaboration model for developing biomedical engineering research in Indonesia

9:00 - 9:30 (Tuesday)



**Dr. Azharul Karim** Senior Lecturer Mechanical Engineering, Science and Engineering Faculty Assistant Editor: Drying Technology Queensland University of Technology Queensland, Australia

Designing Innovative Project Based Learning (PBL) for post graduate engineering courses

Dr. Azharul Karim is currently working as a Senior Lecturer in Mechanical Engineering and course leader of Master of Engineering Management at Queensland University of Technology, Brisbane, Australia. Through his scholarly and innovative research, he has established a national and international standing. His excellence in research has been demonstrated by development of many innovative new products, 162 high quality refereed publications (including 74 Journal papers, 2 books and 12 book chapters), 16 research grants amounting A\$3.2 million, being invited by reputed world universities for invited seminars and his editorial role in top ranked Journals. Dr Karim is

the inventor of energy and water efficient ultrasonic washing machine (patent WO02089652) and Ultrasonic dishwasher (patent WO0229148). He

March 6-8, 2018

is the assistant editor of 'Drying Technology' and 'Journal of Industrial Engineering' journals. Dr Karim is currently leading 'Energy & Drying' research group at QUT. In last five years, he conferred 9 PhD degrees. His current research areas are Solar thermal energy, Lean Manufacturing, Microstructure investigation of food drying, and project based learning in engineering.

Dr Karim has pioneered innovative project based learning (PBL) for postgraduate engineering management students. This new project based learning is designed as the platform where students practice and pursue evidence-based practice using authentic industry problems, cases and projects and utilise their skills with contemporary software/analytic tools and engineering management skills. This allows students to constructively develop, synthesize and apply their learning in engineering management being realised in their authentic industry based projects. Through this PBL, students are able to develop higher level skills and understanding which are increasingly in high demand in industry and highly recommended by professional bodies such as Engineers Australia. Due to careful planning, designing and delivery of real-world and authentic unit content and learning environments, final student outcomes were highly satisfactory. Students found that the outcomes of their learning were highly supportive of their career development and progression.

### Session II: Global Engineering Education

11:30 am - 12:45 pm (Tuesday, March 6) - Room Kapla Session Chair:

11:30 - 12:00 (Tuesday)



Dr. Matteo Mario Savino Professor University of Sannio Benevento, Italy

Matteo Mario Savino got his Ph.D. Industrial Operations at University of Naples, Italy. Actually he is Professor of Industrial Operations and Production Systems at University of Sannio, Benevento. He is the head of the Centre on Production, Reliability and Industrial Management Engineering. He manages national industry-based and EU funded projects on Operations Management. He has been Guest Editor of Special Issues on International Journal of Product Lifecycle Management, Journal of Operations and Quantitative Management and he is IJOQM Europe

Editor. Actually Prof. Savino is in the Editorial Board of several peer reviewed international journal. He manages several research project funded and co-funded by European Commission and he is also in the National Quality Evaluators Panel for Universities and Research Centres. His main research interests are related to quantitative approaches for Quality and Environmental Management, Production and Supply Chain Management. His research works appeared on several peer-reviewed International Journals.

12:00 - 12:30 (Tuesday)



#### Dr. Md. Mizanur Rahman

Senior Lecturer, Department of Thermo Fluids, Faculty of Mechanical Engineering University Technology Malaysia (UTM), Skudai, Johor Bahru, Malaysia

Md. Mizanur Rahman is currently a Senior Lecturer at Department of Thermo-Fluids, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia UTM, Johor Bahru, Malaysia. Before joining at UTM, he has served as a Postdoctoral Researcher at Aalto University School of Engineering, Finland. Rahman also has more than 12-year working experience in a government statutory body namely Rural Electrification Board (REB), Bangladesh. During his tenure in REB, Dr. Rahman has gathered practical experience in dealing with techno-economic and sociocultural challenges faced by rural electrification programme. He has accumulated deep insights towards the solution pathways for the Global Mega-challenge of having 1.2 billion people without access to electricity yet. Mr. Rahman has sound understanding into the global energy sector challenges and its societal implications. Mr. Rahman received his Ph.D. in Energy Economics and Power plant Engineering from Aalto University, Finland, M.Sc. in Sustainable Energy Engineering from Royal Institute of Technology KTH, Sweden, and B.Sc. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh. His research interests include rural electrification, energy economics, energy management, energy efficiency and system, sustainable and renewable energy, energy system modelling, Life-Cycle Analysis, distributed power generation, multicriteria

evaluation etc. Dr. Rahman has several publications in International referred journals in energy engineering domain.

#### 12:30 - 1:00 (Tuesday)



#### Dr. Razali Hassan

Associate Professor Faculty of Technical & Vocational Education Universiti Tun Hussein Onn Malaysia 86400 Parit Raja, Batu Pahat Johor, Malaysia

Razali Hassan is a former Dean at Faculty of Technical and Vocational Education, Currently attached as UNESCO UNEVOC Coordinator at Universiti Tun Hussein Onn Malaysia (UTHM), Batu Pahat, Johor, Malaysia. PhD holder from University of Warwick, United Kingdom, Master Sc. (TVET) UPM, BTech. with Edu. (Electrical Technology)

UTM, Teaching Certificate from Technical Teachers Training College TTTCKL, (Electrical Installation & Maintenance) Cert. in CAD (RMIT Melbourne): Ordinary members in TVET Society of Malaysian, ALUMNI Uni of Warwick, UPM, UTM, TTTCKL; Members for National Union Teacher Profession (NUTP), MTUN Society, Senior members Regional Association Vocational Teacher Education (RAVTE) and Honorary Advisor for Malaysian Trainer and Industries Expert Society (MANDATE). Working Experience: Electrical maintenance workers, TVET teacher in Vocational School, Lecturer in TVET TTTC, UTHM, (Electrical Technology & Graphic Engineering) Specialize in the development of Training in TVET at national level and international networking with various countries including Australia, German, United Kingdom,

#### **Global Engineering Education**

March 6-8, 2018

Indonesia, Singapore, Thailand, Vietnam, Laos and Jordan as a Consultant, advisor, Supervisor, panel and facilitator in TVET; Educational Technology (E-learning) High impact consultancy experience; Employer Driven Skill Development Project (EDSD) by world Bank for VTC Jordan, Training Consultant (2011-2013), Yemen Consultancy Committee (2010-2011), Assessor Panel for Malaysian Qualification Agency (MQA), involve in Academic Programme development, Curriculum assessor for MoE, Coordinator & supervisor for National Dual Training System (NDTS) Project under Ministry of Human Resource (Master & PhD Students), Teaching and Supervise for Post Graduates, Bachelor's degree, & Certificate in TVET skills programs.

Session III: Global Engineering Education

2:30 – 3:45 pm (Tuesday, March 6) - Room Kapla Session Chair:

2:30 - 3:00 (Tuesday)



### Dr. Jafri Mohd Rohani

Head of the Industrial Engineering Programme Department of Materials, Industrial and Manufacturing Engineering Faculty of Mechanical Engineering Universiti Teknologi Malaysia Skudai, Johor, Malaysia

Curriculum Design/ Benchmarking of Industrial Engineering Program

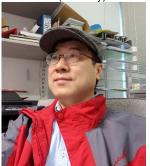
Jafri Mohd Rohaniis a Senior Quality and Statistical Engineering Lecturer. He is also Head of the Industrial Engineering Programme at the Department of Materials, Industrial and Manufacturing Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor. Currently, he is the President of JohorCost and Quality Engineers Society. He is a member of the American Society for Quality (ASQ) and Human Factor Society of Malaysia.

3:00 - 3:30 (Tuesday)



**Prof. Shekar Babu** Founding Head, AMRITA School of Business, Bangalore Adjunct Faculty, SUNY, Buffalo, USA Research & Consulting AMRITA University Bangalore, India

3:30 - 4:00 (Tuesday)



**Dr. Hongyi Sun** Associate Professor Department of Systems Engineering and Engineering Management City University of Hong Kong, China

#### Technology-Based Entrepreneurship

Dr. SUN is an Associate Professor in the Department of Systems Engineering and Engineering Management, City University of Hong Kong. His teaching and research areas include the management of technological innovation, manufacturing/operations strategy, quality management, and innovation & entrepreneurship education. Dr SUN has twice been the winner of the Teaching Excellence Award at the City University of Hong Kong and has won several other awards in education and education research for teaching and research on innovation and entrepreneurship education.

Session VI: **Global Engineering Education**: PANEL SESSION 4:30 – 6:00 pm (Tuesday, March 6) - Room Kapla Panel Chair: Dr. Abu Masud, Wichita State University, Kansas, USA

**Panelists** 

#### **Dr. Abu Masud, P.E. (Retired)** Boeing Global Engineering Professor Professor of Industrial and Manufacturing Engineering Wichita State University, Kansas, USA

Dr. Abu Masud is an emeritus professor of industrial and manufacturing engineering at Wichita State University. He was named the Boeing Global Engineering Professor at Wichita State University. Dr. Masud advanced the College of Engineering's strategic alliances for global enrichment and experiential learning of students as well as international research collaborations and partnerships. He received Duane and Velma Wallace Outstanding Educator Award from WSU College of Engineering. Previously he was held various positions at Wichita State including dean and associate dean of graduate school (2008-2013), coordinator, college ABET affairs (2006-2008),

associate dean, college of engineering (2004-2005), chair, industrial and manufacturing engineering department (1994-2004) and graduate coordinator of IME (1991-94, 1996-98, 2001-2004). Dr. Masud has engaged with various companies and governmental research centers including NASA Langley Research Center, VA, NASA/ASEE Summer Faculty Fellow (1991 and 1992), Boeing, Consulting Analyst, and Kuwait Institute for Scientific Research. He is member of Accreditation Review Council (2011-2014). Dr. Masud published book, book chapters, and numerous journal and conference papers. He is registered Professional Engineer at Kansas State. Dr. Masud is an IIE fellow. He received Ph.D. and M.S. in Industrial Engineering from Kansas State University, and B.S. in Mechanical Engineering from Bangladesh University of Engineering & Technology.

## Dr. Hamid Parsaei, PE

Professor of Industrial and Systems Engineering, Texas A&M University (College Station) Professor of Mechanical Engineering and Director of Academic Outreach, Texas A&M Uni. Qatar

#### Accreditation: Preparing an International Campus for a Successful Visit

Hamid R. Parsaei is Professor of Industrial and Systems Engineering at Texas A&M University (College Station) and also Professor of Mechanical Engineering and Associate Dean for Academic Affairs at Texas A&M University at Qatar. He is a registered professional engineer (PE) in Texas, a Fellow of the Institute of Industrial Engineers (IIE), and a Fellow of the American Society for Engineering Education (ASEE). He has published over 200 articles in peer-refereed archival journals and conference proceedings. He has also served as editor/co-editor in chief for four academic journals and five book series. His research, in excess of \$22 million, has been funded by numerous government and private institutions.



#### **Dr. Albertus Retnanto** Associate Professor, Petroleum Engineering Texas A&M University at Qatar

Assessing and Documenting Students Competencies in their Respected Disciplines

Dr. Albertus Retnanto is Associate Professor of the Practice of Petroleum Engineering at Texas A&M University at Qatar and has been in the Petroleum Engineering program since 2009. He holds a Ph.D. in Petroleum Engineering from Texas A&M University. He was a Principal Engineer with Schlumberger with more than 18 years of experience worldwide in both technical and management positions in the area of well testing, field development, production enhancement, and stimulation. He has served as the Review Chairman of Society of Petroleum Engineers (SPE) Drilling & Completion, a member of SPE Cedric K. Ferguson Medal Award Committee, a member of SPE Drilling and Completion Advisory Committee, and SPE advanced technology workshop, and currently, he serves as Technical Editor of SPE. He received the A Peer Apart SPE Award, for technical excellence of authors, to SPE, and to the industry.

# Wednesday (March 7, 2018)

Session V: Global Engineering Education

8:00 – 9:30 am (Wednesday) - Room Kapla Session Chair:

8:00 - 8:30 (Wednesday)



### Dr. N. Vinod Chowdhary

Professor and Head Department of Mechanical Engineering SRK Institute of Technology Vijayawada, Andhra Pradesh India

Teaching, Learning & Accreditation

This article aims to show how a better understanding of teachers' workplace learning might lead to increased recognition as a form of professional development and other professional bodies giving credit for such learning. Workplace learning is viewed as a component of overall development of teachers and students. The Article includes case study on how Teacher-Students learning in India in private

institutions help the overall development of students. Dr. Vinod Chowdhary is a Professor and Head of Mechanical Engineering Department at SRK

#### March 6-8, 2018

Institute of Technology, Vijayawada, Andhra Pradesh, India. He was Principal at G.H. Raisoni College of Engineering and Management, Ahmednagar (Shirdi), Maharashtra. India and Kruti Institute of Technology, Raipur, India. Dr. Chowdhary has 12 years industry experience. He has awarded FIE, LM-ISTE, ASME, and Chartered Engineer. His key achievements are:

- Development and substitution of Indian components with replacement of USA and Canadian parts.
- Improvement in the design to make the test rigs suitable for Ultrasonic inspection of Indian Products.
- Performed Automated Ultrasonic tube / pipe testing systems for customer like nuclear fuel complex, PSL limited, Mishra Dhatu Nigam Ltd, BHEL (R&D).
- Interacting with workshops of different industries for supply of the high quality materials in time. 200 /240 students in distinction and first division.
- Labs established. Civil Department started Consultancy and a part in designing civil work for college to a tune of 10 lakhs.
- Students increases from 900 to 1540. 5 courses started for ME, Diploma and increase in UG Mechanical intake.

8:30 - 9:00 (Wednesday)



#### Jedsada Tipmontian

Executive Board Member Thai Association for Cooperative Education (Public Relations) Nonthaburi, Thailand Lecturer King Mongkut's University of Technology North Bangkok

Industrial and Systems Engineering Application through Cooperative and Work Integrated Education in Thailand

9:00 - 9:30 (Wednesday)



**Dr. Eldon Caldwell** Director, Industrial Engineering Department Engineering School University of Costa Rica San Jose, Costa Rica

Challenges of Operations Engineering Education on a Industrial Clustering Environment in Central America Eldon Caldwell, is full professor/ Cathedraticus of the University of Costa Rica, Central America; Doctor (Ph.D.) in Industrial Engineering major in Lean Operations Engineering. He developed new heuristic sequencing algorithms

in order to reduce cycle times and received Suma Cum Laude in his doctoral dissertation and Academic Crown Excellence Award in Autonomous University of Central America/ University of Nevada, USA. Currently, he is doctoral researcher at the (Dr. Sc.) Computing Science Program at the University of Alicante, Spain and doctoral researcher at the Dr. Ed. Program at University of Costa Rica, receiving the Academic Excellence Award 2013.

Dr. Caldwellis "Lean Systems Certificated Specialist", MAPV-University of Nevada, USA, ASQ-Six Sigma Black Belt Certified Trainer, and Spanish publications technical reviewer of Gary Conner, 2002 Shingo Prized. Also, Dr. Caldwell has been recognized by the IEOM Society with the "Outstanding Service Award" for his career of over 25 years as an educator, researcher and promoter of development of industrial engineering. Dr. Caldwell earn his B.Sc. and Master degree in Industrial Engineering at University of Costa Rica (Summa Cum Laude) and he earn a Master degree in Service Marketing, as well in Financial Analysis at Interamerican University of Puerto Rico (Costa Rica); M.Sc. Health Management Systems at UNED, Costa Rica and a M.Sc. Operations Management at ITESM, México. He is author of many scientific articles and two books: "Marketing of Social Products & Services", UCR Pub. and "Lean Manufacturing: Fundamentals and techniques for cycle time reduction", Kaikaku Ins. Press, USA. Dr. Caldwell served as Operations Manager at MASECA, CA; Lean Manufacturing Project Manager at Eaton Corp. Costa Rica, General Manager at Quirós & Cía-Bandag Inc. and General Manager at Lean Systems Intl., USA. He has 25 years of experience as advisor and consultant in Operations Management, Lean Manufacturing and Lean Logistics at Interamerican Bank for Development, WHO, UN, World Wide Bank, Coca-Cola, Ministry of Health, Costa Rica, Honduras, Panamá, Costa Rica Institute for Electricity, RTC- Perú, Young Electrical Signs, Nevada, USA, AirCare Inc., Reno, Nevada, Plan International-Honduras, and many others. Currently, Dr. Caldwell is Director of Industrial Engineering Department at Engineering School of University of Costa Rica.

### Session VI: Global Engineering Education 11:30 am – 1:00 pm (Wednesday, March 7) - Room Kapla Session Chair:

Workshop on Industrial Revolution 4.0 in Higher Education

#### **Global Engineering Education**



**Dr. Chan Chee-Ming** Associate Professor and Deputy Dean (Academic and Research) Centre for Graduate Studies Universiti Tun Hussein Onn Malaysia Batu Pahat, Johor, Malaysia

Chee-Ming Chan is an Associate Professor with the Civil Engineering Technology Department, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia. She is presently holding the office of Deputy Dean in Academic and Research at the Centre for Graduate Studies in the University. Her area of expertise includes geomaterials, engineering education and higher education improvement. More recently, Dr. Chan's current work on dredged materials from Malaysian waters has gained momentum and support from the Ministry of Science, Technology and Innovation and Department of Marine, Malaysia. She is also involved in professional bodies, including the Society for Engineering Education Malaysia (SEEM), Malaysian Geosynthetics Society (MyIGS), Institution of Engineers Malaysia (IEM), Board of Engineers Malaysia (BEM), and is an education quality auditor for the Malaysian Qualification Agency (MQA). From 2009-11, Dr. Chan served as a Postdoctoral Research Fellow at the Port and Airport Research Institute (PARI), Japan.



### Dr. Alina Shamsudin

Associate Professor Deputy Dean (Teaching, Learning and Academic Training) Centre for Academic Development and Training Universiti Tun Hussein Onn Malaysia Johor, Malaysia

Alina Shamsuddin is currently an Associate Professor (Technology Management) with the Faculty of Technology Management and Business of Universiti Tun Hussein Onn Malaysia. Being a founding member of her faculty, Dr. Alina is not only knowledgeable on the immediate related fields of performance measurement, production and management, she is also an expert on educational quality assessment and assurance, with 5-year experience as

an auditor for the Malaysian Quality Agency (MQA). Her research concerns are myriad but inter-related, encompassing higher education quality assurance and reforms, effective teaching and learning, as well as innovative technology adoption for SMEs. Currently heading the Unit of New Programmes Development, Dr. Alina is consolidating her effort to make a difference in the quality of programme design and delivery in the overall higher educational arena, institutionally and nationally.



### Dr. Azeanita Suratkon

Senior Lecturer at the Faculty of Civil & Environmental Engineering Lead – Department of Building and Construction Engineering Universiti Tun Hussein Onn Malaysia Johor, Malaysia

Azeanita Suratkon is currently a Senior Lecturer at the Faculty of Civil and Environmental Engineering, and leads the Department of Building and Construction Engineering. Dr. Azeanita had a multi-national education background: bachelor's at UTM (Malaysia), Master's at Herriot-Watt University (Scotland) and PhD at Chiba University (Japan). Her international exposure has given her the leverage for a multi-facet approach in her chosen field of study, which primarily revolves around construction management, risk assessment and procurement issues. Dr. Azeanita also

aims to improve the current engineering education practice, in line with the nation's Outcome-based Education philosophy, by drawing on her rich multi-discipline background. Her continuous effort in enriching construction management and higher educational reforms are driven forward in collaboration with Japanese counterparts too.

# Session VII: Global Engineering Education

2:30 – 4:00 pm (Wednesday, March 7) - Room Kapla Session Chair:

2:30 - 3:00 (Wednesday)



Mohammad A Rahman, Ph.D.

Manufacturing and Construction Management Central Connecticut State University New Britain, CT, USA

"Role of Teams to Develop Quality Improvement Framework and Process Understanding"

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.

#### 3:00 - 3:30 (Wednesday)



#### Dr. Ho Hwi Chie, M.Sc.

Dean Binus Aso School of Engineering Bina Nusantara University (Binus) Tangerang, Banten Indonesia

Hwi Chie Ho is Dean of Binus School of Engineering and Professor in Industrial Engineering at Bina Nusantara University, and has been teaching and publishing researches associated with ergonomics, quality, and industrial psychology. She is a member of the Institute of Industrial and Systems Engineers (IISE), Human Factors and Ergonomics Society (HFES), and American Psychology Association (APA). She has also served as the faculty advisor of the newly established IISE BINUS University Student Chapter # 716 that has earned Gold Award in three

consecutive years since the establishment.

#### 3:30 – 4:00 (Wednesday)



#### Dr. Abdelaziz Berrado

Associate Professor of Industrial Engineering The Ecole Mohammadia d'Ingénieurs (EMI) Mohammed V University, Rabat, Morocco

Dr. Abdelaziz BERRADO is an Associate Professor of Industrial Engineering at EMI School of Engineering at Mohamed V University. He earned MS/BS in Industrial Engineering from same institution, an MS in Industrial and Systems Engineering from San Jose State University, and a PhD in Decision Systems and Industrial Engineering from Arizona State University. His research interests are in the areas of Data Science, Industrial Statistics, Operations and Supply Chain Modelling, Planning and Control with application in different industries. His research work is about developing frameworks, methods and tools for systems' diagnostics, optimization and control with the

aim of operational excellence. He published several papers in international scientific journals and conferences' proceedings. In addition to academic work, he is a consultant in the areas of Supply Chain Management, Data Mining and Quality Engineering for different Industries. He was also a senior engineer at Intel. He is member of INFORMS and IEEE.

# Session VIII: Global Engineering Education

4:30 – 6:00 pm (Wednesday, March 7) - Room Kapla Session Chair:

4:30 - 5:00 (Wednesday)



# Dr. Khristian Edi Nugroho Soebandrija, BSIE, MM.

Binus ASO School of Engineering Bina Nusantara University (Binus) Tangerang, Banten Indonesia

Dr. Khristian Edi Nugroho Soebandrija, BSIE, MM is one of faculty members in Industrial Engineering Department and also teaching at Binus ASO School of Engineering (BASE), in Bina Nusantara University, Jakarta, Indonesia. He earned Bachelor of Science Degree in Industrial Engineering (BSIE) from Wichita State University (WSU), Wichita, Kansas, USA; Master Degree in Management from Indonesian Institute for Management Development, Jakarta, Indonesia. He obtained Doctoral Degree in Doctoral Program in Research Management. He also has

exposures for program in Moscow Aviation Institute. Since 1991, He has professional working exposures in Thompson CSF Corporation (Versailles, France), Cessna Aircraft Company (Wichita, Kansas, USA), Frigoglass Group (Cikarang, Indonesia), Citibank, N.A (Jakarta, Indonesia), Perfetti Van Melle Indonesia (Cibinong, Indonesia). As in Education Professional and Consultancy, he has been winning several professional global awards and involving in teaching in several National and Multinational Companies and State Owned Enterprises. He is a distinguished member of Sigma Gamma Tau (Aerospace Engineering Honor Society) and Tau Beta Pi (National Engineering Honor Society), Strategic Management Society (SMS) and International Council on Systems Engineering (INCOSE). His current research comprises: a. Service innovation in Products and Services, within disruptive innovation, Industry 4.0 and design thinking; and b. Sustainability in Industrial Systems and Engineering, Strategic Management and Psychology. c. Military and Civil Collaboration.

5:00 - 5:30 (Wednesday)

#### Dr. S. C. Naik



Professor, Former Head of Chem Engg and Dean National Institute of Technology, Rourkela, Odisha, India Past President, The Institution of Engineers Past Vice-President, The Federation of Engineering Institutions in South & Central Asia

"Vision 2025-Global Engineering Education"

Professor S C Naik obtained his BTech, MS & PhD degrees-all in Chemical Engineering from the Universities of Madras, Ottawa and UK (Swansea, Wales) respectively. He taught at the National Institute of Technology, Odisha State, India where Dr. Naik was Head of the Department and Dean. He guided many Research Fellows, some medium scale Industries and helped in establishment of an Engineering College. Dr. Naik authored/co-authored some books, published many papers in International and National Journals and presented papers in several countries. He was a Keynote Speaker at the Technical Events in Sri Lanka, South Korea, some Gulf countries, Naples, Tokyo and San Francisco in 2006. Dr. Naik was a Consultant to a prestigious Journal.

Dr. Naik was a President of The Indian Institution of Engineers, one of the largest professional bodies in the world, a Vice President of The Federation of Engineering Institutions of South & Central Asia and a Council Member of The Indian Institute of Chemical Engineers. He is a well-known writer in his own mother tongue, Odiya and has published several social novels, a book with one hundred poems and several articles for which he has been felicitated by his State Literature Academy and his name has found place in Central Literature Academy. Dr. Naik is associated with many Committees at the State and Central levels. Professor Naik has a deep involvement in social service for which he has been even appreciated by a world-based organization. For his achievements, he has been awarded and appreciated by Regional, State, Central and Global organizations.

5:30 - 6:00 (Wednesday)



#### Dr. Mohammad T. Khasawneh, Ph.D.

Professor & Chair, Systems Science and Industrial Engineering Associate Director, Watson Institute for Systems Excellence Director, Healthcare Systems Engineering Center Graduate Program Director, Executive Master of Science in Health Systems Graduate Program Director, Industrial and Systems Engineering Thomas J. Watson School of Engineering and Applied Science State University of New York at Binghamton Binghamton, New York 13902, USA

Dr. Mohammad Khasawneh is a Professor and Chair of Systems Science & Industrial Engineering at Binghamton University. He received his Ph.D. in Industrial Engineering from Clemson University, South Carolina, in August 2003, and his B.S. and M.S. in Mechanical Engineering from Jordan University of Science and Technology, Jordan,

in 1998 and 2000, respectively. Dr. Khasawneh's research is focused on healthcare systems engineering, operations management, and data science. Dr. Khasawneh currently serves as Associate Director for the Watson Institute for Systems Excellence (WISE), an institute for advanced studies that generates 2.5-3 million US\$ in research funds annually. In addition, he currently serves as the founding director of the Healthcare Systems Engineering Center, an organized research center (ORC) at Binghamton University.

Since 2003, Dr. Khasawneh has been leading a wide spectrum of projects with U.S. hospital systems that focus on applied research in the areas of healthcare systems engineering, operational excellence, and data science. His health systems engineering center generates over one million US\$ annually in sponsored research from various healthcare and hospital systems. Building on a successful research program and an academic concentration/minor, at the graduate/undergraduate levels, Dr. Khasawneh developed a 12-month Executive Master of Science with a Health Systems Concentration, which has been offered in Manhattan since 2013. He has also been instrumental in developing a new M.S. degree program in Healthcare Systems Engineering.

Over the years, Dr. Khasawneh presented his research at various national and international conferences, including China, India, Mexico, Jordan, Korea, Thailand, Japan, and Canada. Dr. Khasawneh's research activities thus far have led to 40+ refereed journal articles, 100+ conference articles, one patent, and two new invention disclosures. In addition, his sponsored research efforts thus far have resulted in over eight million US\$ in external funding and over 39 million US\$ in software/equipment grants.

In 2006, Dr. Khasawneh received a U.S. Air Force Summer Faculty Fellowship to evaluate the use of multi-sensory cues to improve the landing of unmanned aerial vehicles. In 2009, he received another fellowship from the U.S. Air Force Office of Scientific Research to design ergonomic computer workstations for very large displays. Dr. Khasawneh received the State University of New York (SUNY) Chancellor's Award for Excellence in Teaching in 2011 and University Award for Outstanding Graduate Director in 2015. He is a member of the Alpha Pi Mu and Alpha Epsilon Lambda honor societies. Dr. Khasawneh also holds an honorary visiting professor position with the Industrial Engineering Department at Hebei University of Technology in Tianjin, China.





# **Continuous Innovation**

At Eaton, we are continually pursuing new ideas with our current and future technologies to help customers meet their goals. Our valvetrain solutions such as cylinder deactivation and hollow engine valves that are engineered to deliver efficient performance while withstanding the extreme heat requirements. Our supercharger technologies for advanced boosting provide the instant throttle response and improved fuel efficiency customers desire. We are constantly innovating differentiated technologies to provide advanced solutions for the industry and our customers. www.eaton.com

© IEOM Society International