

Keynote Speakers

9:40 am, Tuesday, October 30, 2018 – Welcome Addresses



Mr. Livhuwani Tommy Makhode

Deputy Director-General: Institutional Planning and Support
Department of Science and Technology
Republic of South Africa

Livhuwani Tommy Makhode is currently Deputy Director-General: Institutional Planning and Support the Department of Science and Technology. Amongst others he is responsible for developing Departmental Strategic Plans and Annual Performance Plans for the Department of Science and Technology. Providing to support to DST entities for Board appointments, monitoring and evaluation of their performance with regards to both financial and non-financial performance information. He was Former Chief Director: Science Communication, Department of Science and Technology. Also worked at SABC as National TV News Editor, former Director: Media Liaison, Ministry of Education. Mr. Makhode hold an MPhil from the Nelson Mandela Metropolitan University (formerly University of Port Elizabeth) and a BA(Ed) from the University of Venda.

10:00 am, Tuesday, October 30, 2018 – Opening Keynote



Dr. Rupy Sawhney

Professor and Heath Fellow in Business & Engineering
Department of Industrial and Systems Engineering
Executive Director of CASRE (Center for Advanced System, Research and Education)
University of Tennessee
Knoxville, Tennessee, USA

Rupy Sawhney 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. Currently he is a Professor in Industrial and Systems Engineering at the University of Tennessee, Knoxville; Heath Fellow in Business and Engineering; Professor in Interdisciplinary Program in Energy; Joint Appointment with the Y12 National Security Complex; and Visiting Professor at University of Loughborough UK. He was a Weston Fulton Professor and Department Head during 2010-2013. His current research focuses on innovative ideas to enhance operational excellence in complex systems. He has decomposed his research into three components (i) manufacturing intelligence, (ii) organizational intelligence, and (iii) people based design. Furthermore, 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).

11:30 am – 12:15 pm, October 30, 2018 – Tuesday Keynote



Khaya Madiba (MPhil)

Bogie - Subsystem & Maintenance Engineer
Gibela-Rail, South Africa

Mr. Khaya Madiba is a Subsystem and Maintenance Engineer at Gibela-Rail, developer of the SMME business management strategy RBM LifeStyle and author of the book 'Just Evolve, For Effective Business Growth'. He was born in a small town of Mthatha in the Eastern Cape, South Africa.

He holds a Master's Degree in Engineering Management from the University of Johannesburg (UJ). He devoted his dissertation to the on-going debate of the downfalls of poor quality control, project quality management systems that many small and emerging companies in South Africa fail to implement in the projects. He received BTech Structures, Civil Engineering from University of Johannesburg and National Diploma in Civil Engineering from Tshwane University of Technology.

He played rugby for the All Blacks Res Rugby Team and assisted with the mix design and concrete tests done on campus by the S1 and S2 students in Civil Engineering.

He developed a business improvement approach – Results Based Management LifeStyle Approach – during his time employed at a coal mine in Mpumalanga, where he was able to reduce operating costs by half a million rand over 8 months, without changing the operating times and compromising on the quality.

12:15 pm – 1:00 pm, October 30, 2018 – Tuesday Keynote



Cobus Oosthuizen
Chief Executive Officer
ESTEQ
Pretoria, Gauteng, South Africa

Mr. Cobus Oosthuizen is an Entrepreneur/Businessman/Mechanical Engineer. He loves to help people to grow, develop and reach their full potential. Mr. Oosthuizen is passionate about Technology. He makes it his mission in Life to create environments where people can grow and develop. He enjoys solving difficult problems and helping people to succeed, both in Engineering and Mr. Oosthuizen currently holds an Honours degree in Mechanical Engineering from the University of Pretoria and a Masters in Business Leadership from UNISA. His work experience covers the fields of Experimental Stress Analysis, Vibration Analysis, Modal Testing, Finite Element Analysis and Fracture and Fatigue Analyses in my early engineering career and is currently involved in Strategic Consulting, Business Process Improvement, Innovation Management, Product Lifecycle Management as well as high level Digitalisation consultation and implementation.

Mr. Oosthuizen currently holds the position of Managing Director with ESTEQ PLM and CEO of the ESTEQ Group. He is passionate about Photography and outside of work I enjoy Cycling and 4x4.

9:40 am – 10:20 am, October 31, 2018 – Wednesday Morning Keynote I



Professor Angina Parekh
Deputy Vice Chancellor: Academic
University of Johannesburg
South Africa
Former Special Advisor on Higher Education to the Minister of Education

Professor Angina Parekh is the Deputy Vice Chancellor: Academic at the University of Johannesburg, South Africa. Prior to that appointment, she served as a Special Advisor on Higher Education to the Minister of Education. During her years in government, she headed the restructuring and transformation of South Africa's higher education system through mergers and incorporations, and contributed significantly to higher education policy formulation, including the National Plan for Higher Education, the Language Policy for Higher Education, and the Higher Education Qualifications Framework. She has served on several Ministerial task teams, including chair of the Ministerial Working Group on the establishment of a National Higher Education Information and Applications Service for South Africa. Professor Parekh has held several academic appointments, including Chair of the Department of Psychology. She was a founder member of the 1st Centre for Population Studies and Reproductive Health in Africa. She is a standing member of the QS-Maple

International Academic Advisory Committee and a member of its Scientific Technical Review Committee. She is also on board of the Higher Education Quality Committee of the Council of Higher Education.

10:20 am – 11:00 am, October 31, 2018 – Wednesday Morning Keynote II



Dr. Abu Masud, P.E.
Professor Emeritus
Department of Industrial and Manufacturing Engineering
Wichita State University
Kansas, USA

Student Learning: Assessment and Improvement

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.

11:30 am – 12:15 pm, October 31, 2018 – Wednesday Morning Keynote III



Arthur Mutambara

Former Deputy Prime Minister of Zimbabwe
Visiting Full Professor at the University of Johannesburg

Professor Arthur Mutambara is a former Deputy Prime Minister of Zimbabwe. He is the author of a new trilogy, In Search of the Elusive Zimbabwean Dream: An Autobiography of Thought Leadership. He was one of the three principals who created and led the Government of National Unity (GNU). The other two were then Prime Minister Robert Tsvangirai, and then President Robert Mugabe. As Deputy Prime Minister, his functions included assisting the Prime Minister with policy formulation and the supervision of policy implementation. He worked on three major national initiatives, namely Shared National Vision, Rebranding Zimbabwe, and the National Infrastructure Master Plan.

He is currently a Visiting Full Professor with the University of Johannesburg. He is also an independent technology and strategy consultant, based in South Africa. He recently served as President of the African News Agency (ANA). His primary mandate included media technology innovation, digital platform development, and harnessing social media tools. He was driving the use of Artificial Intelligence and the deployment of Intelligent Algorithms in the media, resulting in the development of new business models. He is a Chartered Engineer, a Fellow of the Institute of Engineering and Technology (IET), a Professional Engineer, a Fellow of the Zimbabwe Institute of Engineers (ZIE), a Fellow of the Zimbabwe Academy of Sciences (ZAS), and a Senior Member of IEEE. He was a Research Scientist at NASA, Visiting Professor at MIT, Professor at FAMU-FSU, and a Management Consultant with McKinsey & Company. He has written two books about electrical engineering. He holds a PhD in Robotics and Mechatronics and an MSc in Computer Engineering, both from the University of Oxford, where he was a Rhodes Scholar. He graduated with a BSc (Honours) in Electrical Engineering from the University of Zimbabwe. In 2007, Mutambara was accorded World Economic Forum (WEF) Young Global Leader status, and subsequently attended WEF events in Davos, China, India and Africa.

12:15 pm – 1:00 pm, October 31, 2018 – Wednesday Morning Keynote IV



AAA. Atayero, Ph.D.

Vice Chancellor
Covenant University
Ota, Ogun State
Nigeria

AAA. Atayero, Ph.D., the Covenant University Professor of Communication Engineering, is the current and 4th Substantive Vice-Chancellor of the University. He served as the pioneer Deputy Vice-Chancellor (Academic), Coordinator School of Engineering, and twice as HoD of Electrical and Information Engineering of the University. Professor Atayero has a Bachelor of Science Degree in Radio Engineering, and a Master of Science Degree in Satellite Communication Systems in 1992 and 1994 respectively. He earned his Ph.D. from the Moscow State Technical University of Civil Aviation (MSTUCA) in 2000. Atayero is a Fellow of the Science Association of Nigeria, the Institute of Management Consultants, and a Senior Research Fellow of the International Association of Research Scholars and Administrators.

Engineer Atayero is a COREN Registered Engineer, member of the Institute of Electrical and Electronic Engineers (IEEE), and. As an avid researcher, having published over in International peer-reviewed journals and proceedings, Professor Atayero is the Team Lead, Covenant University Smart City (SmartCU) Project, as well as the Head, Covenant University IoT-Enabled Smart & Connected Communities Research Cluster. He is on the editorial board of several international scientific and engineering Journals and is a recipient of various awards and scholarships including the '2009 Ford Foundation Teaching Innovation Award', as well as the 2017 African Entrepreneurs Merit 'Award for Excellence & Leadership'. His current research interests are in various aspects of Communication Engineering, including (but not limited to): Wireless Sensor Networks, Wireless (Mobile) Communications, Internet of Things (IoT), Smart Cities, and Cyber Physical Systems.

7:00 pm – 10:00 pm, Wednesday, October 31, 2018 – Conference Awards Dinner

9:40 am – 10:20 am, November 1, 2018 – Thursday Morning Keynote I



Dr. Sundaravalli Narayanaswami

Indian Institute of Management
Ahmedabad, India

Sundaravalli Narayanaswami is on the faculty, Public Systems group, IIM Ahmedabad. She earned her PhD in Industrial Engineering and Operations Research from IIT Bombay, India after a Masters in Computer Science. Her research and teaching interests involve applications of ICT and OR tools in real-life problems of large impact. Sundaravalli has taught at various Institutions in India and abroad. She publishes and reviews regularly for scholarly editorials and presents her research findings among peers, both in India and abroad. She is a life member of several professional associations and was a Fellow of the British Computer Society (2009-2013). She serves on the Editorial board of the Annals of Management Science.

10:20 am – 11:00 am, November 1, 2018 – Thursday, Morning Keynote II



Eugén Ranft PrEng, PhD
 Operations Manager
 Eaton Electric (South Africa) (Pty) Ltd
 Johannesburg, South Africa

Eugén Ranft is the Operations Manager for Eaton. With over a decade of experience in the industry, Ranft oversees the effectiveness of Eaton's day-to-day activities, playing a vital role in the growth of the business. Prior to this, Ranft headed up Proconics' Sasolburg Operations delivering engineering services primarily focused on the Petro Chemical industry. Ranft began his career at Proconics Sasolburg as a key role player growing the Sasolburg electrical team from one resource to 19.

Ranft holds a Doctor of Philosophy (Ph.D.) in Electrical and Electronic Engineering from North-West University/Noordwes-Universiteit. His Ph.D thesis explored an improved model for self-sensing heteropolar active magnetic bearings. Ranft's academic research has been published in numerous accredited journal articles including Sensors & Actuators, SAIEE Africa Research Journal and Applied Mathematical Modelling Journal. Ranft also holds a Master of Engineering (M. Eng) and a Bachelor of Engineering (B. Eng) in Electrical and Electronics Engineering from North-West University/Noordwes-Universiteit. He is a certified Professional Engineer accredited by the Engineering Council of South Africa.

Ranft is located in Johannesburg, South Africa and speaks English and Afrikaans.

Eaton is a power management company with 2015 sales of \$20.9 billion. Eaton provides energy efficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, reliably, safely and sustainably. Eaton has approximately 97,000 employees and sells products to customers in more than 175 countries. For more information, visit www.eaton.com.



Continuous Innovation

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