



INCOSE EMEA Sector

Systems Engineering Conference

<http://incose-emea.org>

Systems Engineering: Exploring New Horizons

Plenary Speakers' Biographies



Felix Mehler

He was born in Frankfurt, Germany and raised in Toronto, Canada, where he completed his studies with a Masters in Applied Science (Aerospace) from the University of Toronto, Institute for Aerospace Studies. He joined Daimler-Benz Aerospace (now Airbus Defence and Space) in September 1997 and held various engineering and management positions in different large multinational programs: Systems Engineer for the A400M transport aircraft, Head of System Test & Integration for the Eurofighter Flight Control Systems, Chief Engineer SIDM / Harfang Male UAV, Head of Systems Definition across a variety of Air Systems projects, and in 2013 Chief Engineer for a large C4I Defence project.

He currently leads the Integrated Systems Engineering team, covering civil and defence C4ISR projects for customers in Europa and abroad. During his career, he has lived in Germany, France and briefly in the UAE whilst working on projects across North America, Europe, Israel, the Middle East, India and Brazil.



Dr Willem Barnard

Academic Qualifications

- 1 BSc Eng (Mech) : University of Pretoria 1969
- 2 MSc Eng (Nuclear) : University of Cape Town 1971
- 3 DSc Eng : University of Pretoria 1977

Career Particulars

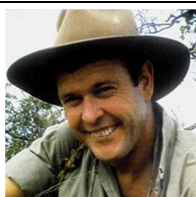
- 1969 - 1991 Several positions in engineering, research and management in high technology sectors
- 1992 - 1994 Dorbyl : Managing Director: Heavy Engineering
- 1994 - 2007 KWV : Chief Executive Officer
- 1994 - Present University of Stellenbosch : Extraordinary Professor
- 1994 - Present : Director of Companies
- 2010 - Present Vastech : Executive Chairman

Professional Membership

- 1 SA Council for Professional Engineers
- 2 Institute for Systems Analysis
- 3 South African Academy of Engineering
- 4 University of Pretoria – Alumni
- 5 Professor Extraordinary-University of Stellenbosch

Boards, Institutes

- 1 KWV SA (Pty) Ltd: Chairman (Retired)
- 2 KWV International: Chairman (Retired)
- 3 KWV Investments: Director (Retired)
- 4 Remgro/KWV Investments: Director (Retired)
- 5 AHI: Council of Trustees (Past President): Trustee
- 6 Chairman on the board of THRIP (Retired)
- 7 Advisory Board: University Stellenbosch Business School
- 8 Several Government appointments to Technology Audit and Foresight
- 9 Member of the Council, University of Pretoria (Retired)
- 10 Member of the Board: SA Wine & Brandy Company (Retired)
- 11 Namib Management Services (Pty) Ltd: Director
- 12 Ngwane Mills (Pty) Ltd Swaziland: Chairman (Retired)
- 13 Director: Caledon Dairy (Pty) Ltd.
- 14 Vastech (Pty) Ltd: Chairman



Quinton Coetzee

Born in the Namib Desert, Quinton spent most of his childhood in the African bush. He began his working career as a hunter and then later attained a degree in the natural sciences. Today, he is considered one of Southern Africa's leading bushcraft specialists.

His passion for adventure has taken him from bitter sub-Antarctic regions to the scorching deserts of the Middle-East. He has summited the highest ice-peak in Russia and has lived with 'vanishing' tribes in Africa, the frozen wastelands of Outer Mongolia and the sweltering jungles of the Amazon basin.

As a conservationist, he has managed the animal collection for one of the largest Zoological Gardens in Africa where he was committed to the breeding of endangered species around the world.

He is a frequent resource in print and on radio programs, speaking on a variety of nature topics. He is well known as a television presenter of popular wildlife programs such as "Aardwolf" and 50/50 "Veldfocus".

He has also trained as a classical pianist.

Quinton's business message has universal appeal - he has addressed audiences in more than 30 countries worldwide. His talks assist people to tap into their natural potential... to improve their business skills and performance... and to gain a better understanding of themselves and others.



David Long

For over twenty years, David Long has focused on enabling, applying, and advancing model-based systems engineering (MBSE) to help transform the state of the systems engineering practice. David is the founder and president of Vitech Corporation where he developed and commercialized CORE®, a leading systems engineering software environment used around the world. A committed member of the worldwide systems community, David is president of the International Council on Systems Engineering (INCOSE), a 9000 member professional organization focused on sharing, promoting, and advancing the best of systems engineering.

Throughout his career, David has played a key technical and management role in refining and extending systems engineering to expand the analysis and communication toolkit available to systems practitioners. He continues to lead the Vitech team as they deliver innovative, industry-leading solutions to help organizations develop and deploy next-generation systems. David has served INCOSE since 1997 including a term as the Washington Metropolitan Area chapter president and international roles including Member Board Chair, Director for Communications, and Director for Strategy. He is a frequent presenter at industry events worldwide delivering keynotes and tutorials spanning introductory systems engineering, the advanced application of MBSE, and the future of systems engineering. His experiences and efforts led him to co-author the book A Primer for Model-Based Systems Engineering to help spread the fundamental concepts of this key approach to modern challenges. In 2006, David received the prestigious INCOSE Founders Award in recognition of his many contributions to the organization.

David holds a bachelor's degree in Engineering Science and Mechanics, as well as a master's degree in Systems Engineering from Virginia Tech.



Dr Ronnie McKenzie

He is a civil engineer specialising in water resource management, Director and Chairperson of WRP. He holds a PhD (University of Strathclyde, Scotland, UK), BSc (Hons) (University of Strathclyde, Scotland, UK) and a Diploma (Computer Science) from UNISA. He is a Professional Engineer (ECSA), a Chartered Engineer (UK) and holds further professional memberships of MICE, FSAICE, FIWA, WISA, and IMESA.

Experience

Experience in Hydrology, Water Resource Planning, Management and Operation. Has considerable experience with various hydrological and water resources models including the Stanford Watershed Model (forerunner to the HSPF Model), Sacramento Model, HSPF, ARSP, WRYM, WRPM, Pitman Model, WRS2000 Model. Also developed various new modules for the Pitman Model which were eventually either incorporated into the model or modified and then incorporated into the model including AFFDEM and IRRDEM etc.

Key member of the Vaal River System Analysis team that developed the various water resource analyses models used by DWAF for all major Water Resource studies in South Africa. Responsible for many developments and software utilities in the field of Hydrology and provision of specialist hydrological services to DWAF for various projects including the establishment of the Royalty Hydrology in Lesotho which involved over 15 years of negotiation. Was heavily involved with the development of the Water Resource Yield Model and has developed similar models for use outside South Africa based on the same concepts but using non-proprietary components.

Was responsible for the hydrology and System Analyses components of many major water resource projects (listed below) and developed the original training material for the Water Resources Yield Model.



John A. Thomas

John A. Thomas is the Founder of John A Thomas & Associates LLC, a retired Senior Vice President/Chief Systems Engineer of Booz Allen Hamilton, and Past President of the 9000 member International Council on Systems Engineering (INCOSE).

John is a leader, whether his role is as engineer, program manager, mentor, multi-disciplinary team member, or business man. He has delivered both IT and Hardware intensive systems and is recognized as a developer of people. As a senior consultant, John provides systems engineering and integration services to clients across Defense, Security, and Transportation communities.

In a career spanning more than 40 years, Mr. Thomas has worked with the application of technology to mission



problems. First, he served as a technician, and then officer in the US Air Force, retiring from the USAF Reserves in 1998. John was also an engineer at the National Reconnaissance Office and engineer/program manager at E-Systems Corporation prior to his 20 years with Booz Allen Hamilton, rising to the position of senior vice president.

Mr. Thomas also is an executive coach and mentor to senior technical and management professionals and a sought-after spokesperson to both professional, lay groups, and media for systems engineering. He raises community awareness of the positive leadership impact of the systems engineer and the relevance of the discipline of systems engineering for addressing stakeholders complex and challenging problems.

John has been an INCOSE member since 1998 and has received INCOSE's ESEP (Expert System Engineering Professional) certification. He also is a member of the Institute of Electrical and Electronics Engineers (IEEE), the National Defense Industrial Association (NDIA), the Program Management Institute (PMI), the Armed Forces Communications and Electronics Association (AFCEA), and the International Test and Evaluation Association (ITEA).

He holds a M.S. degree from the Air Force Institute of Technology and a B.S. from Michigan State University. Both degrees are in Electrical Engineering.