

Test and Measurement Conference 2018

Somerset West, South Africa
7 – 10 October 2018

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Test and Measurement 2018

Conference and Workshop

FINAL PROGRAMME

Out with the Old...In with the New
Turning a new leaf in measurement science and quality assurance

Lord Charles Hotel and Conference Centre, Somerset-West

Sunday 7 October 2018

14h00 – 17h00	Registration
18h00 – 18h30	Cocktails and Get together
18h30 onwards	Dinner

Day One Monday 8 October 2018

07h30	Registration and Coffee		
Venue Room	Grand Ballroom		
08h30	Opening and Welcome		
			M101
08h45	Georgette MacDonald <i>The Revised SI: A Change That's Worth the Weight</i> NRC Canada		1 M102
09h30	Mark Blumenthal <i>Single Electron Pumping</i> UCT		22 M103
10h15	Ndwakhulu Mukhufhi <i>An African approach to Shorten the Traceability Chain</i> NMISA		34 M104
11h00	Tea/Coffee		
Venue Room	Somerset 1	Somerset 2	Somerset 3
11h30	Aletta Karsten <i>Out with the Old, in with the New: The Revised SI for the kilogram</i> NMISA 44 M105	Alvaro Silva Ribeiro <i>Role of Metrology in a Civil Engineering R&D Institute and its Impact on national Safety and Security'</i> National Laboratory for Civil Engineering Portugal 140 M205	Quentin Hurt <i>Structure of the personnel certification scheme for South African emission testers</i> 210 Skyside M305
12h00	Thapelo Mametja <i>Uncertainty Budget for the NMISA's Prototype Kibble (Watt) Balance</i> NMISA 60 M106	Barry Pearce <i>MATCIVILS PTS Feedback, trends and questionable methods</i> Learning Matters etc 154 M206	Mpilo Dlamini <i>Volumetric flow rate vs standardised (mass) flow in gas flow measurements</i> 224 NMISA M306
12h30	Ronél Steyn <i>Mass and volume measurements performed at the NMISA Mass laboratory – not on mass pieces but on Si (silicon) spheres</i> NMISA 72 M107	Keith Nare <i>From Crude Oil to Application: A Low Temperature and Ageing Nexus Approach to Material Memory</i> Nelson Mandela University 161 M207	Kristo Engelbrecht <i>The evolution of thermal imaging (inc. Gas Detection)</i> Comtest Pty Ltd M307

13h00	LUNCH – Exhibition Viewing		
Venue Room	Somerset 1	Somerset 2	Somerset 3
14h00	<p style="text-align: center;">Mariesa Nel <i>In with the new: Telecommunication advancements in Africa</i> NMISA 77 M108</p>	<p style="text-align: center;">Sean Strydom <i>Open for Business: Civil Laboratory Controller Registration with ECSA</i> SANRAL 176 M208</p>	<p style="text-align: center;">Prely Marebane <i>Continuous improvement of emission reference materials</i> NMISA 234 M308</p>
14h30	<p style="text-align: center;">Jason Strydom <i>EMI/EMC vs. Industry 4.0: a legislative and practical approach</i> Comtest Solutions (Pty) Ltd 91 M109</p>	<p style="text-align: center;">Joseph van Houten and Gretchen Weber-Cherry <i>Challenges converting from TMH 1 to Sans 3001</i> SANRAL 194 M209</p>	<p style="text-align: center;">Gerald Woollatt <i>Quality Assurance of Continuous Emission Monitoring Systems – A practitioner’s guide to BS EN 14181:2014 and BS EN 13284-2</i> Levego 239 M309</p>
15h00	<p style="text-align: center;">Gavin van Rooy <i>How wireless technology is changing our Test and Measurement world</i> Comtest Distribution 106 M110</p>	<p style="text-align: center;">Barry Pearce <i>What do I do with the PTS report data?</i> Learning Matters etc 199 M210</p>	<p style="text-align: center;">Angeliqe Botha <i>Method validation for stack emissions testing – the principles</i> NMISA 258 M310</p>
15h30	Tea/Coffee – Exhibition Viewing		
Venue Room	Grand Ballroom		
16h00	<p style="text-align: center;">Steve Sidney/Angeliqe Botha/John Wilson <i>ISO/IEC 17025:2017: A view on what’s new</i> NLA-SA/NMISA/AMS (Pty) Ltd 115 M111</p>		
18h30	Pre-dinner drinks		
19h00	Dinner		

Day Two Tuesday 9 October 2018

08h00	Registration and Coffee		
Venue Room	Grand Ballroom		
09h00	Alvaro Silva Ribeiro <i>Why Accreditation need strong Laboratory Associations? - EUROLAB networking experience</i> EUROLAB		273 T101
09h45	Jeff Gust <i>NCSL International - Serving the World of Measurement</i> NCSLI		297 T102
10h30	Steve Sidney <i>The role of the NLA-SA</i> NLA-SA		312 T103
11h15	Tea/Coffee and Manned Poster Session		
Venue Room	Somerset 1	Somerset 2	Somerset 3
11h45	Wynand Louw <i>The Revised International System of Units (SI) and the change to Quantum standards with a focus on the realisation of the Ampère and Kelvin</i> NMISA 317 T104	Neville Tayler <i>Evaporation – The Angels Share?</i> SANAS 423 T204	Ingrid Flemming <i>What a Faecal Coliform REALLY is</i> IFM Quality Services Pty Ltd 488 T304
12h15	Efreem Ejigu <i>The importance of establishing a very-high temperature radiation thermometry measurement capability at the National Metrology Institute of South Africa (NMISA)</i> NMISA 337 T105	Bongani Ndlovu <i>The uncertainty analysis for the hydrometer calibration at NMISA</i> NMISA 438 T205	Dipuo Chaha <i>The challenges and opportunities of a new toxicity laboratory in Eskom</i> ESKOM 505 T305
12h45	Les Wesson <i>Setting up a high voltage calibration laboratory</i> Repair and Metrology Services 348 T106	Regina Mnguni <i>Water Activity Measurements at the NMISA</i> NMISA 446 T206	Loyiso Magadla <i>The use of Analytical Data and Operational Information to Diagnose Potential Biofilm ingress in a Water Reticulation</i> Johannesburg Water 511 T306
13h15	LUNCH – Exhibition Viewing		

Venue Room	Somerset 1	Somerset 2	Somerset 3
14h30	<p>Hein Erwin <i>Identifying all possible measurement errors in a Large Power User Metering installation</i> KoCos 369 T107</p>	<p>Pritesh Jivan 451 <i>Optical metrology</i> NMISA T207</p>	<p>Donnelly Lloyd <i>Producing a more efficient method for the detection of Cryptosporidium and Giardia in water samples by incorporating the Filta-Max xpress™ elution station</i> Umgeni Water 522 T307</p>
15h00	<p>Marcus Hlakola <i>Automated Calibration System for AC Power and Energy Meters</i> 383 NMISA T108</p>	<p>Zamokuhle Luthuli <i>Traceability Challenges for Optical Length Metrology</i> University of Stellenbosch 459 T208</p>	<p>Nestor van Eeden <i>Some important chemical measurements in nuclear power stations</i> ESKOM 529 T308</p>
15h30	<p>Jeff Gust <i>The Metrology Behind Wideband/RF Improvements to the Fluke Calibration 5790B AC Measurement Standard</i> 390 FLUKE Calibration T109</p>	<p>Macdufe Mkabela <i>Characterization of the spectroradiometer system for ambient temperature dependence</i> NMISA 467 T209</p>	<p>Hein Venter <i>Microbiological Quality Control requirements in an ISO/IEC 17025 laboratory</i> 537 ANATECH T309</p>
16h00	Tea/Coffee – Exhibition Viewing		
Venue Room	Somerset 1	Somerset 2	Somerset 3
16h30	<p>Patrick Masina <i>Upgrade of Gauge Blocks Measuring Equipment at the</i> NMISA 405 T110</p>	<p>Refuoe Pepenene <i>A new facility for the calibration of reference Air Kerma Area Product meters</i> NMISA 477 T210</p>	<p>Alvaro Silva Ribeiro <i>Flow measurement traceability used to improve water management</i> National Laboratory for Civil Engineering Portugal 550 T310</p>
17h00	<p>James Matosse <i>NMISA's new 20 kNm Torque Standard Machine</i> NMISA 412 T111</p>	<p>Wendy Thoka <i>Calibration of alpha and beta emitting wide area reference sources using a windowed gas proportional counter</i> NMISA T211</p>	<p>Nondalo Shandu <i>Drinking Water Quality Management using Johannesburg Framework outline</i> 562 Johannesburg Water T311</p>
18h30	Pre-dinner drinks		
19h00	Banquet (Dress code: Jacket and Tie)		

Day Three Wednesday 10 October 2018

08h00	Registration and Coffee		
Venue Room	Grand Ballroom		
09h00	Ron Josias <i>The changing accreditation environment</i> SANAS		574 W101
09h45	Jaco Marneweck <i>The implementation of Legal Metrology Regulations</i> NRCS		587 W102
10h30	Johan Louw <i>SABS Laboratory Services is on its way to becoming the first testing and calibration laboratories to transition to ISO/IEC 17025:2017</i> SABS		608 W103
11h15	Tea/Coffee and Manned Poster Session		
Venue Room	Somerset 1	Somerset 2	Somerset 3
11h45	Keikantse Pule <i>Quality management program 101 implementation for chemical on-line analyser instrumentation: Decoding ISO/IEC 17025</i> ESKOM	Marang Mutloatse <i>Evaluation of site vibrations for AUV laboratory according to vibration criteria</i> NMISA	Cody Makhuba <i>Training and Declaration of Competency of Laboratory Personnel</i> ESKOM
	618 W104	683 W204	728 W304
12h15	Ingrid Flemming <i>ISO/IEC 17025:2017 – why training is not enough</i> IFM Quality Services Pty Ltd	Ian Veldman <i>Establishing primary shock sensitivity capabilities at</i> NMISA	Mandla Maphumulo <i>The accreditation of round robin testing for coal analyses</i> ESKOM
	628 W105	695 W205	734 W305
12h45	Annah Motaung <i>Introduction of continual improvement tool in Bacteriology and Zoonotic Diseases laboratory to ensure compliance with ISO 17025 requirements</i> ARC Onderstepoort	Tony Kowalski <i>Balances and Quality Systems</i> Sartorius	Guy Snelling <i>Software Validation for ISO17025:2017 Intercal</i>
	639 W106	706 W206	740 W306
13h15	LUNCH – Exhibition Viewing		

Venue Room	Somerset 1	Somerset 2	Somerset 3
14h30	Victor Kanama <i>Out the Old... In the New: ISO/IEC 17025:2017 Quality manual to Operational manual</i> Association Congolaise des Laboratoires 655 W107	Galliodien Waggjet <i>My practical experience of MOU in my laboratory</i> Indlela Soils Laboratory W207	Neville Tayler <i>Laboratory ethics</i> 754 SANAS W307
Venue	Grand Ballroom		
15h00	François Kapp <i>Progress of the MeerKAT Radio Telescope on the road to the Square Kilometre Array</i> SKA South Africa		657 W108
15h45	Closing		