



Test and Measurement 2008 Conference

Misty Hills Country Hotel.

Sunday 24th August 2008

17h00 – 18h00	Registration
18h00 – 18h30	Sponsored Cocktails
18h30 onwards	Dinner

Day One Monday 25th August 2008

07h45	Registration and Coffee			
Session Chairman				
Venue Room				
08h45	Opening and Welcome			
	M101			
09h00	<p>KEY NOTE ADDRESS</p> <p><i>"The importance of regional cooperation in overcoming testing and measurement challenges to ensure credibility of results - a fundamental international trade requirement"</i></p> <p>Dr Oswald Chinyamakobvu SQAM Programme - SADC Secretariat</p>			
	M102			
09h45	<p><i>"The evolution of the GUM and the work of the JCGM"</i></p> <p>Professor Maurice Cox – NPL UK</p>			
	M103			
10h30	Tea/Coffee and Manned Poster Session			
Session Chairman				
Venue Room				
11h00	<p><i>"Verification of μCMMs"</i></p> <p>Oelof Kruger NMISA</p> <p style="text-align: right;">M104</p>	<p><i>"A New Primary Pressure Standard for NMISA"</i></p> <p>Schalk Smit NMISA</p> <p style="text-align: right;">M204</p>	<p><i>(Issues for Food & Agricultural Laboratories – risk and opportunities for industry)</i></p> <p>Chair: Margareth Mahlangu SANAS</p>	<p><i>"Infra-red Temperature Measurement, so simple and yet so easy to get wrong"</i></p> <p>John Wilson AMS (Pty) Ltd</p>
11h30	<p><i>"Performance Evaluation of Articulated Arm Coordinate Measuring Machines (AACMM) according to ASME B89.4.22-2004"</i></p> <p>Floris van der Walt NMISA</p> <p style="text-align: right;">M105</p>	<p><i>"Weights and Best Practice"</i></p> <p>Ireen Field NMISA</p> <p style="text-align: right;">M205</p>	<p><i>"Bacterial Diagnostic Development for Food borne Pathogens"</i></p> <p>Stacey Collignon University of Pretoria</p>	<p><i>"Development of a PCR-RFLP method for rapid identification of common"</i></p>

12h00	<p><i>"Calibration of internal diameters"</i></p> <p>Oelof Kruger NMISA</p> <p style="text-align: right;">M106</p>	<p><i>"Infrared Uncertainty Budget Determination in an Industrial Application"</i></p> <p>Jason Titmas Fluke UK</p> <p style="text-align: right;">M206</p>	<p><i>Penicillium species"</i></p> <p>Candice Leigh Johnston University of Pretoria</p> <p style="text-align: right;">M304</p>	M404
12h30	LUNCH – Exhibition Viewing			
Session Chairman				
Venue Room				
13h30	<p><i>"Mass Tutorial – Balances Uncertainty"</i></p> <p><i>Main topics presented during the tutorial:</i></p> <ul style="list-style-type: none"> - Metrological confirmation: the new ISO10012 approach - Test to implement for the balance calibration - Contributors and assessment of the indication error uncertainty - Contributors and assessment of the balance uncertainty - Balance verification <p>Denis Louvel Mettler-Toledo, SAS</p> <p style="text-align: right;">M107</p>	<p><i>"Autoclave Tutorial: basic use of autoclaves complying to Safety Regulations calibration and traceability - What can go wrong?"</i></p> <ul style="list-style-type: none"> - The theory of sterilization and autoclaves - Sterilization techniques - The operation of a typical autoclave - Calibration of an autoclave - Testing the efficiency of an autoclave, including load testing <p>Guy Snelling/Richard Poxon Intercal/NHLS</p> <p style="text-align: right;">M207</p>		
15h00	Tea/Coffee – Exhibition Viewing			
Session Chairman				
Venue Room				
15h30	<p><i>Volume Tutorial - Glassware and pipettes uncertainty</i></p> <ul style="list-style-type: none"> - Contributors of the volume uncertainty of glassware and pipettes - Test to implement for the glassware and pipette calibration - Calculation of glassware and pipette volume - Uncertainty assessment of the volume for glassware and pipettes - Data assessment for volume verification <p>Denis Louvel Mettler-Toledo, SAS</p> <p style="text-align: right;">M108</p>	<p><i>"Whether in the Lab or in Industry, Test leads, Cables and Connectors can have a marked influence on your measurements."</i></p> <p>John Wilson AMS (Pty) Ltd</p> <p style="text-align: right;">M208</p>		
17h00	Special Interest Group Meeting <i>"NLA Automotive Sub-committee"</i>			
18h00	Sponsored Cocktails			

19h00

Dinner at the Carnivore Restaurant

Day Two Tuesday 26th August 2008

07h45	Registration and Coffee	
Session Chairman		
Venue Room		
08h45	OPENING, WELCOME AND ADMINISTRATIVE ISSUES	
	T101	
09h00	<p><i>"Latest Developments at NMISA"</i></p> <p>Shravan Singh NMISA</p>	
	T102	
09h45	<p><i>"The latest developments at the National Laboratory Association"</i></p> <p>Steve Sidney NLA</p>	
	T103	
10h30	Tea/Coffee and Manned Poster Session	
Session Chairman		
Venue Room		
11h00	<p>"SPC Tutorial – Use of Control Charts in Calibration and Testing Laboratories"</p> <ul style="list-style-type: none"> - A short introduction to Statistical Process Control - Quality of Results - The statistics behind the control chart - Control Charts – How they are constructed How to read a Control Chart <p>Steve Sidney National Laboratory Association</p>	<p>"Temperature Tutorial - Temperature, Sensors, Indicators, Installation and Calibration"</p> <ul style="list-style-type: none"> - concept of temperature - temperature sensors (thermocouples, resistance thermometers and liquid-in-glass thermometers) - advantages, limitations and errors of various sensors with demonstrations - instrumentation used with thermometers, their limitations and errors <p>John Taverner Isothermal Technology Limited - UK</p>
	T104	T204
12h30	LUNCH – Exhibition Viewing	
Session Chairman		
Venue Room		

13h30	<p>“Tutorial on the use of method validation data for the evaluation of uncertainty of measurement in a chemical testing laboratory” - principles of the GUM - precision - bias - linearity - sensitivity - selectivity - the limits of detection and quantification</p> <p>Angelique Botha NMISA</p> <p style="text-align: right;">T105</p>	<p>“Temperature Tutorial - Temperature, Sensors, Indicators, Installation and Calibration” continued</p> <p>John Taverner Isothermal Technology Limited – UK</p> <p style="text-align: right;">T204</p>
15h00	Tea/Coffee – Exhibition Viewing	
Session Chairman		
Venue Room		
15h30	<p>“Tutorial on the use of method validation data for the evaluation of uncertainty of measurement in a chemical testing laboratory” – continued</p> <p>Angelique Botha NMISA</p> <p style="text-align: right;">T105</p>	<p>“Water Laboratory Workshop - Ensuring Credibility Results from Drinking Water Quality Laboratories” <i>Credible laboratory results are an integral part in managing and regulating drinking water quality with the objective of ensuring safe drinking water and protection of public health. At this Workshop DWAF will discuss how it intends to help Water Laboratories improve the results of the tests that they conduct.</i></p> <p style="text-align: center;">Department of Water Affairs</p> <p style="text-align: right;">T205</p>
17h00	<p>Special Interest Group Meeting <i>“NLA Civil and Road Engineering Sub-committee”</i></p> <p style="text-align: right;">T106</p>	
18h00	Pre-dinner drinks	
19h00	<p>Banquet (Dress code: Jacket and Tie)</p>	

Day Three Wednesday 27th August 2008

07h45	Registration and Coffee			
Session Chairman				
Venue Room				
08h45	OPENING, WELCOME AND ADMINISTRATIVE ISSUES			
	W101			
09h00	<i>"Changes in the Global environment, their impact on Accreditation and the role of the Accreditation Act in South Africa."</i>			
	Mike Peet SANAS			
	W102			
09h45	<i>"The small Calibration or Testing Laboratory – Can it be a sustainable business?"</i>			
	Steve Sidney NLA			
	W103			
10h30	Tea/Coffee and Manned Poster Session			
Session Chairman				
Venue Room				
11h00	<i>"Maintaining Quality in an ever expanding QC Laboratory"</i> Simon Thompson Buckman Laboratories W104	<i>"Improving Ambient Air Quality Monitoring through "Service to Customer" principles using ISO as a benchmark"</i> Busisiwe Nxasana eThekweni Health W204	<i>"Proficiency testing in a developing country: the Botswana situation"</i> Pinkie Malebe Botswana Bureau of Standards W304	<i>"The Strategic Role of quantum Generation Equipment in 21st Century QA"</i> Pieter Rossouw Elabtec W404
11h30	<i>"Examining the effect of instrument resolution on the uncertainty of the measurement"</i> Chris Matthee NMISA W105	<i>"Using Excel to Measure the Particle Size Distribution of Pine Sawdust"</i> Adriaan van Niekerk ARC-IAE W205	<i>"On-line Monitoring"</i> Amanda Nkomo Johannesburg Water W305	<i>"Proficiency Testing in industrial & commercial laboratories"</i> Steve Batchelor Anglo American W405

12h00	<p><i>"Method Validation Records – What should they really contain? Some practical examples applied to fibre optic calibration methods"</i></p> <p>Bertus Theron NMISA</p> <p>W106</p>	<p><i>"Recalculating the reference value of high purity gases such as SO₂, NO using FTIR results."</i></p> <p>James Tshilongo NMISA</p> <p>W206</p>	<p><i>"Verification of on-line sampling for Cryptosporidium and Giardia in water"</i></p> <p>Monique Grundlingh Rand Water</p> <p>W306</p>	<p><i>"The value of applied statistics"</i></p> <p>Betsie van Wyk Inquisitive Quality Consulting</p> <p>W406</p>
12h30	<p>LUNCH – Exhibition Viewing</p>			
Session Chairman				
Venue Room				
13h30	<p><i>"Accreditation Workshop"</i></p> <p>Short presentations and question & answer sessions on the following:-</p> <ul style="list-style-type: none"> - Proficiency Testing for Testing Laboratories - Calibration Certificates; validity, traceability etc - Certification Marks on Laboratory Tests and ISO 17021:2006 - Technique Accreditation versus current accreditation practice <p>Facilitator: Neville Tayler SANAS</p> <p>W107</p>			
15h00	<p>Tea/Coffee</p>			
15h30	<p><i>"Laboratory Safety - Revisited"</i></p> <p>Neville Tayler SANAS</p> <p>W108</p>			
16h00	<p>Conference Closing</p>			