

**Programme****Tuesday 13 June 2017**

09.00		Registration and coffee & tea			
09.15		Meeting chairs/speakers day 1		Mees Auditorium	
				Exhibition floor	
09.45		Welcome		Liesbeth Jansen, Chairperson NEN Energy Policy Committee	
09.55		Opening speech		Rolf Brouwer, Managing Director of GATE Terminal	
10.20		Opening lecture: Creating impact by improving reliability and accuracy of results: the contribution of international standards developed by ISO/TC 158		Adriaan van der Veen, ISO/TC 158 chairman	
10.45					
		Mees Auditorium		Penn room I & II	
		Parallel session "Process industry"		Parallel session "Health, safety and the environment"	
		Session chair: Peter van Vuuren, SpectraSensors Inc. [an Endress+Hauser company] (US)		Session chair: Annarita Baldan, VSL (NL)	
11.00	A.01	Keynote: Advanced data analytics solution for process stabilization and quality improvement	<i>Xiao Wei, Yokogawa (NL)</i>	B.01	Keynote: Air quality monitoring with low cost sensor networks <i>Sywert Brongersma, Holst Centre (NL)</i>
11.40	A.02	Development of SI traceable certification of hydrogen chloride gas standards	<i>Cassie Goodman, NIST (US)</i>	B.02	Alternative use of FTIR for the analysis of industrial gases emission <i>Igor Dyakov, Institut Scientifique de Service Public (BE)</i>
12.05	A.03	Innovations in process gas chromatography – Standardization, modularity and digitalization	<i>Frederic Thielland, Siemens (DE)</i>	B.03	Standards and scales for atmospheric CO2 measurements <i>Joële Viallon, BIPM (FR)</i>
12.30		Networking lunch and exhibition visit		Exhibition floor	
13.50	A.04	Customer field experience with LNG probe vaporizer and alternative analysis	<i>Hans-Peter Visser, ASaP (NL)</i>	B.04	Automated real-time analysis of greenhouse gases from rice paddies <i>Okjung Ju, Gyeonggi-do Agricultural Research & Extension Services (KR)</i>
14.15	A.05	Recent developments of interband cascade lasers for gas sensing applications	<i>Lars Hildebrandt, nanoplus (DE)</i>	B.05	Development of high accurate greenhouse gases standards in South Africa <i>Silindile Lushozi, National Metrology Institute of South Africa (ZA)</i>
14.40	A.06	Online monitoring of particulate from cylinder gases with spICP-MS	<i>Chun-Ling Chang, CMS/ITRI (TW)</i>	B.06	High accuracy primary reference gas mixtures for high-impact greenhouse gases <i>Gerard Nieuwenkamp, VSL (NL)</i>
15.05	A.07	Industry development and trends in packaging gases	<i>Lex van Leeuwen, Linde Group Benelux (NL)</i>	B.07	Calibration strategies for FTIR and other IRIS instruments for accurate 13C and 18O measurements of CO2 in air <i>Edgar Flores, BIPM (FR)</i>
15.30		Networking coffee & tea break and exhibition visit		Exhibition floor	
16.15	A.08	Real-time monitoring and quality control of organic, inorganic gases and volatiles by IMR-MS	<i>Christian Leidlmair, V&F Analyse- und Messtechnik (AT)</i>	B.08	Improved surface treatment optimizes the response time of Picarro ammonia analyzer to meet the requirements of agricultural and environmental NH3 monitoring <i>Rob Peters, Picarro (US)</i>
16.40	A.09	Monitoring of trace contaminants at the ppb level in bulk gases using tunable filter spectroscopy	<i>Roberto Bosco, MKS Instruments (US)</i>	B.09	Primary ammonia reference materials fulfilling EU data quality objectives <i>Janneke van Wijk, VSL (NL)</i>
17.05	A.10	The precise temperature control of ball SAW sensors for trace moisture measurement at ppb level of concentration	<i>Yusuke Tsukahara, Ball Wave (JP)</i>	B.10	State of the art stationary and mobile infrastructure for the dynamic generation and dilution of traceable reference gas mixtures of ammonia at ambient air amount fractions <i>Daiana Leuenberger, METAS (CH)</i>
17.30		Opening drinks		Exhibition floor	
19.00		Closure of exhibition		Exhibition floor	

Programme continues on page 2


Programme **Wednesday 14 June 2017**

08.30		Meeting chairs/speakers day 2		Mees Auditorium		
		<i>Mees Auditorium</i>		<i>Penn room I & II</i>		
		Parallel session "Laboratory & process analysis"		Parallel session "Energy supply chain"		
		Session chair: Robert Wielgosz, BIPM (FR)		Session chairs: Paul Holland, EffecTech (GB) & Tracey Jacksier, Air Liquide (US)		
09.00	D.01	Keynote: Innovative technologies for analysis in the process industry	Daniel Reiser, Air Liquide (DE)	C.01	Keynote: Biomethane supply chain and applications	Jens Eberlein, BayWa r.e. Green Energy Products (DE)
09.40	D.02	A new synthetic zero air standard	Ruth Hill Pearce, NPL (GB)	C.02	Invited: Hydrogen: enhanced flexibility of energy supply chains	Marianne Julien, Air Liquide (FR)
10.05	D.03	Preparation of calibration gas mixtures using dynamic methods: validation of mixing system using mass flow controllers	Jean-Luc Blanc, Air Liquide (FR)	C.03	Development of an LNG sampling and composition measurement reference standard	Jianrong Li, VSL (NL)
10.30		Networking coffee & tea break and exhibition visit		Exhibition floor		
11.00		Poster session		Exhibition floor		
12.30		Networking lunch and exhibition visit		Exhibition floor		
13.40	D.04	Analytical verification of calibration gases	Bert Anders, Physikalisch-Technische Bundesanstalt (DE)	C.04	Miniature low-cost inline calorific value sensor for natural gas and biogas	Arjen Boersma, TNO (NL)
14.05	D.05	Stability evaluation of calibration gas mixtures containing both NO and NO ₂	Christophe Lachaud, Air Liquide (FR)	C.05	Pressure and gas-dependence of humidity sensors and analyzers	Andrea Peruzzi, VSL (NL)
14.30	D.06	Evaluation of the nitrogen dioxide concentration and reactive nitrogen in 400 ppb and 800 ppb nitric oxide mixtures	Giorgio Bissoletti, Società Italiana Acetilene e Derivati - SIAD (IT)	C.06	MEMS technology for safe, wireless infrared gas detection	Christian Heinlein, GasSecure (NO)
14.55	D.07	Micro preparation of reference gas mixtures without compromising uncertainty	Gergely Vargha, EffecTech (GB)	C.07	Calibration and measurement standards and related methods for biogas and biomethane conformity assessment	Adriaan van der Veen, VSL (NL)
15.20		Networking coffee & tea break and exhibition visit		Exhibition floor		
16.00	D.08	Lowering detection limits for gas analysis in GC by using most selective stationary phases and conversion of CO and CO ₂ to methane using a new methanizer to enhance detector sensitivity	Jaap de Zeeuw, Restek (NL)	C.08	Hydrogen purity – removing the roadblock to greener transport	Sam Bartlett, NPL (GB)
16.25	D.09	The Performax® cylinder passivation: a brand new approach for aluminium cylinders	Gavin Squire, EffecTech (GB)	C.09	Cavity ring-down spectroscopy analyzers for purity analysis of fuel-cell-grade hydrogen	Florian Adler, Tiger Optics (US)
16.50	D.10	Optograf™ and "pipe-centric" process and sampling interfaces – the new paradigm for a total process analytical solution	Peter van Vuuren, SpectraSensors (US)	C.10	Experimental study on the impact of H ₂ on GCV measurement on the gas grid	Beatrice Sanz, ENGIE Lab CRIGEN (FR)
17.15		Closure of exhibition		Exhibition floor		
17.45		Start social event		Meeting point main entrance WTC Rotterdam		

Programme continues on page 3



Programme

Thursday 15 June 2017

08.30		Meeting chairs/speakers day 3		Mees Auditorium		
		Mees Auditorium		Penn room I & II		
		Parallel session "Laboratory & process analysis"		Parallel session "Health, safety and the environment"		
		Session chair: Paul Krüseemann, Philips (NL)		Session chair: Douglas Longstaff, Dräger (GB)		
09.00	D.11	Assessment of sampling and analytical methods for total silicon quantification in biogases	Vincent Chatain, Université de Lyon / INSA Lyon (FR)	B.11	Developing an SI traceable infrastructure to underpin proton transfer reaction mass spectrometry (PTR-MS) measurements	Dave Worton, NPL (GB)
09.25	D.12	Development and optimization of the siloxanes sampling from biogas matrix and the formation of analytical silicon specie	Katarina Hafner, Institute of Metrology of Bosnia and Herzegovina (BA)	B.12	Optimization of human breath sampling for VOC analysis	Hugo Knobel, Philips (NL)
09.50	D.13	THT odorant control in natural gas grids	Henk Top, DNV GL Oil & Gas (NL)	B.13	Surface interactions in oxygenated VOC analysis	Stefan Persijn, VSL (NL)
10.15	D.14	LNG sampling and methods for improving measurement uncertainty	Joey Walker, EffecTech (GB)	B.14	SI-traceable standards for atmospheric monitoring of essential climate variables	Céline Pascale, METAS (CH)
10.40	Networking coffee & tea break and exhibition visit			Exhibition floor		
11.15	D.15	Measuring system of trace moisture: Wavelength-meter controlled cavity ring-down spectroscopy	Koji Hashiguchi, NMIJ/AIST (JP)	B.15	A novel gravimetric primary mercury vapour standard	Hugo Ent, VSL (NL)
11.40	D.16	The proper mechanisms for field validating moisture analyzers	Gerard McKeogh, GE Oil & Gas (US)	B.16	Development of an open-path, laser dispersion spectroscopy (LDS) analyser for the measurement of large area methane emissions	Graham Leggett, MIRICO (GB)
12.05	D.17	Dual-laser cavity ring-down spectroscopy for trace-moisture measurement	Hisashi Abe, NMIJ/AIST (JP)	B.17	Calibration and instrumentation gases for portable emission monitoring system (PEMS) in the automotive industry	Roberto Parola, Linde (DE)
12.30	Networking lunch and exhibition visit			Exhibition floor		
13.45	D.18	Focus on sulphur compound analysis: Real time monitoring of sulphur compounds at low ppb level using direct SIFT MS – Comparison of this novel technique with sulphur compound analysis using GC-MS and GC-FPD/PFPD	Wilco Agterhuis, Interscience (NL)	B.18	Trace measurement of aldehydes without derivatization	Andreas Kremser, Shimadzu Europe (DE)
14.10	D.19	Spectroscopic transfer standards for gases: complementing gaseous standards	Javis Nwaboh, Physikalisch-Technische Bundesanstalt (DE)	B.19	Development of formaldehyde reference materials	Tatiana Macé, LNE (FR)
14.35	D.20	Verification of reliability of TDLAS-based dew point hygrometer	Ken Sugimura, Shinyei Technology Co. (JP)	B.20	The D-Fenceline measurement system - advanced remote sensing solution accommodating industrial monitoring challenges	Gilad Shpitzer, Atmosfir (US)
15.00	D.21	Developing a silver nanoparticle source for use in condensation particle counter calibrations	Isabel Hessey, NPL (GB)	B.21	How and why did Takachiho get Japan's first calibration gas MRA accreditation?	Maki Egami, Takachiho Chemical Industrial Co. (JP)
15.25	Networking coffee & tea break and exhibition visit			Exhibition floor		
15.45	Concluding session with best lecture award and best poster award		Adriaan van der Veen, ISO/TC 158 chairman			
16.00	Closure of exhibition					