

**Workshop IEA Bioenergy Task 33****26. October 2016 @ HSLU Lucerne University of Applied Sciences, room C201****Gas Sampling, Measurement and Analysis (GSMA)  
in Thermal Gasification Processes**

09:00	Welcome	Sandra Hermle, SFOE / Kevin Whitty, University of Utah, task leader IEA Bioenergy Task 33 / Martin Rügsegger, T33 ETECA
9:15	General overview for Energy Gas Applications	
9:15	Overview energy gas specifications	Oliver Stankiewicz, Nordur Power Grid Association, Switzerland
9:40	Just add hydrogen - Making the most out of a limited resource	Ilkka Hannula, VTT Finland
10:05	Gasification and combustion, comparison of the potential	Thomas Nussbaumer, Verenum, IEA Task 32 Bioenergy
10:30	Coffee 15'	
10:45	Gas Sampling, Measurement and Analysis Science	
10:45	Gas Analysis Working Group (GAW): Status and perspectives	York Neubauer, TU-Berlin; Serge Biollaz, PSI
11:10	Measurement and characterization of tars using the SPA method On-going developments on tar analysis	Kevin Whitty, University of Utah, USA
11:40	Synergies in gas sampling research T32 and T33	Thomas Nussbaumer, Simon Roth, Peter Zotter, Bioenergy Research Group, Lucerne University of Applied Sciences
11:55	Short Walk to Combustion Lab HSLU	
12:00	Lab tour: Gas Measurement, Lucerne University of Applied Sciences, Horw	
12:30	Lunch	
14:00	Gas Sampling, Measurement and Analyses on Pilot, Demonstrations and early Commercials	
14:00	GSMA on the bioliq process	Mark Eberhard, KIT Karlsruhe
14:20	GSMA in Güssing	Reinhard Rauch, TU-Wien
14.40	GSMA at the CHP-Plant Stans	Bernhard Boecker-Riese, BR-Engineering
15:00	Coffee 20'	
15:20	Laws and proof of legal emissions from biomass conversion installations	Christoph Baltzer, BECO (Dep. Environment Bern Switzerland)
15:40	Gas quality and conversion of biogas (Gas turbines Gas engines)	Jürgen Karg Siemens AG Power and Gas Division, Erlangen Germany
16:00	Discussions	Wrap up by Kevin Whitty, University of Utah, task leader IEA Bioenergy Task 33
17:00	Closure	