

# Program Overview

**Monday, 14.09.2015**

08:45	Welcome	
09:00	Toops	<b>Tutorial Modeling SCR</b>
10:00	Olsson	
10:25	<b>Coffee Break</b>	
10:55	Tronconi	
11:20	Bendrich	
11:45	Tamm	
12:10	<b>Lunch</b>	
13:15	Birkhold	<b>Tutorial Urea Injection</b>
14:15	Koltsakis	
14:40	<b>Posters with Coffee</b>	
16:00	Kočí	<b>Tutorial modeling NO<sub>x</sub> storage and Three way catalysts</b>
17:00	Walting	
17:25	<b>End</b>	
19:00	<b>Dinner</b> with social get-together afterwards on-site	

**Tuesday, 15.09.2015**

09:00	Auckenthaler	<b>Tutorial Models for Engine Control</b>
10:00	Papadimitriou	
10:25	<b>Posters with Coffee</b>	
11:20	Arvajová	
11:45	Gremminger	
12:10	<b>Lunch</b>	
13:30	Sappok	<b>Tutorial DPF</b>
14:30	Vidal	
14:55	<b>Coffee Break</b>	
15:25	Maletic	
15:50	Haralampous	
16:15	Hayes	
16:40	<b>Poster Award and Concluding remarks</b>	
16:50	<b>Coffee and farewell</b>	

# Symposium Program

	<b>Monday, 14.09.2015</b>
08:45	<b>Welcome</b>
	<b>Session SCR</b> chaired by D. Chatterjee
09:00	<b>The measured and proposed chemistry of Selective Catalytic Reduction (SCR) of NO<sub>x</sub></b> T. Toops, Oakridge National Lab, USA
10:00	<b>A kinetic model for sulfur poisoning and regeneration of Cu/SSZ-13 used for NH<sub>3</sub>-SCR</b> <u>L. Olsson*</u> , K. Wijayanti, K. Leistner, Chalmers University of Technology, Göteborg, Sweden A. Kumar, S. Joshi, K. Kamasamudram, N. W. Currier, A. Yezerets, Cummins Inc., Columbus, USA
10:25	<b>Coffee break</b>
10:55	<b>Enhanced-SCR reaction: experimental and modeling study over a commercial Fe-zeolite catalyst</b> F. Marchitti, I. Nova, P. Forzatti, <u>E. Tronconi</u> , Politecnico di Milano, Milano, Italy S. Adelberg, V. Strots, IAV GmbH, Berlin, Germany
11:20	<b>Simulation of SCR/ASC systems with automatically optimized NH<sub>3</sub> dosing strategies</b> <u>M. Bendrich</u> , B. Opitz, J. Rink, A. Scheuer, M. Votsmeier*, Umicore AG & Co. KG, Hanau, Germany J.F. Forbes, R.E. Hayes, University of Alberta, Edmonton, Canada
11:45	<b>Detailed kinetic model of the hydrogen effect during the selective catalytic reduction of NO with ammonia over Ag/Al<sub>2</sub>O<sub>3</sub></b> <u>S. Tamm*</u> , Chalmers University of Technology, Göteborg, Sweden
12:10	<b>Lunch</b>
	<b>Session NO<sub>x</sub> storage and TWC</b> chaired by M. Votsmeier
13:15	<b>From the injection point to the SCR catalyst: Analysis and modeling of the AdBlue preparation</b> <u>F. Birkhold</u> , Robert Bosch GmbH, Stuttgart, Germany
14:15	<b>3-way catalyst modeling and applications for system design and control</b> D. Karamitros, A. Khatke, Exothermia SA, Thessaloniki, Greece <u>G. Koltsakis*</u> , Aristotle University Thessaloniki, Thessaloniki, Greece A.-F. Villegas, P. Barrillon, Renault SA, Lardy, France
14:40	<b>Posters with Coffee</b>
16:00	<b>NO<sub>x</sub> reduction dynamics and selectivity in lean NO<sub>x</sub> traps and three-way catalysts</b> <u>P. Kočí</u> , University of Chemistry and Technology Prague, Prague, Czech Republic
17:00	<b>The Effect of NO and O<sub>2</sub> Concentration on the Rate of NO<sub>x</sub> Storage on a Lean NO<sub>x</sub> Trap: An Experimental and Modelling Study</b> <u>T. C. Watling*</u> , Johnson Matthey Technology Centre, Reading, UK P. D. Bolton, D. Swallow, Johnson Matthey Emission Control Technologies, Royston, UK
17:25	<b>END of first day's sessions</b>
19:00	<b>Dinner</b> with social get-together afterwards on-site

	<b>Tuesday, 15.09.2015</b>
	<b>Session Models for engine control</b> chaired by E. Tronconi
09:00	<b>Exhaust Aftertreatment Models from the Engine Control Unit (ECU) Perspective</b> <u>T. Auckenthaler</u> , FPT Motorenforschung AG, Arbon, Switzerland
10:00	<b>Methodology for Derivation of ECU Capable Models from Detailed Models of a SCR Reactor</b> S. R. Gundlapally, <u>I. Papadimitriou</u> , S. Wahiduzzaman*, Gamma Technologies, Inc., Westmont, USA. T. Gu, University of Houston, Houston, USA.
10:25	<b>Posters with Coffee</b>
11:20	<b>Modeling of platinum oxide formation and reduction by CO and C<sub>3</sub>H<sub>6</sub> pulses during NO oxidation</b> <u>A. Arvajová</u> , P. Kočí*, University of Chemical Technology, Prague, Czech Republic <u>V. Schmeißer</u> , M. Weibel, Daimler AG, Stuttgart, Germany
11:45	<b>Influence of gas composition on bimetallic catalysts for exhaust gas after treatment of gas engines</b> <u>A. Gremminger</u> , H. W. P. Carvalho, R. Popescu, J.-D. Grunwaldt*, O. Deutschmann*, Karlsruhe Institute of Technology, Karlsruhe, Germany
12:10	<b>Lunch</b>
	<b>Session DPF</b> chaired by O. Deutschmann
13:30	<b>Lubricant-Derived Ash Accumulation and Impact on Diesel Particulate Filter Performance</b> <u>A. Sappok</u> , Massachusetts Institute of Technology, Cambridge, USA
14:30	<b>Simulation of the impact of thermophoresis on the capture efficiency of diesel particulate filters</b> <u>D. Vidal</u> , G. Matte-Deschênes, F. Bertrand*, Polytechnique Montréal, Montréal, Canada R. E. Hayes, University of Alberta Edmonton, Edmonton, Canada
14:55	<b>Coffee break</b>
15:25	<b>Modeling of NO<sub>x</sub> reduction and soot oxidation in a DPF with SCR coating</b> <u>B. Maletić</u> *, N. Markert, D. Chatterjee, MTU Friedrichshafen GMBH, Friedrichshafen, Germany E. Tronconi, I. Nova, F. Marchitti, Politecnico di Milano, Milano, Italy G. Koltsakis, LAT Thessaloniki, Thessaloniki, Greece D. Karamitros, Exothermia SA Thessaloniki, Thessaloniki, Greece
15:50	<b>Modeling of the loading in partially damaged DPFs</b> <u>O. Haralampous</u> *, Technological Educational Institute of Thessaly, Larissa, Greece C. Dritselis, University of Thessaly, Volos, Greece
16:15	<b>Modelling the Combined DOC/DPF System using a Multi-Scale Approach</b> <u>R.E. Hayes</u> *, R. Litto, J.P Mmbaga, University of Alberta, Alberta, Canada T. Atmakidis, Exothermia, Thessaloniki, Greece G. Koltsakis, Aristotle University Thessaloniki, Thessaloniki, Greece
16:40	<b>Poster Award and Concluding remarks</b>
16:50	<b>Coffee and farewell</b>

Underlined: First Author/Presenting Author

Asterisk\*: Corresponding Author