

**Program of the 3rd Topical Workshop
(Hotel Hilton, Budapest, 30 March, 2015)**

9:00 **Plenary lecture**

Matthias Olzmann (KIT, Karlsruhe):

How accurately can we determine rate coefficients for elementary chemical steps?

9:40 Matteo Pelucchi:

Curve matching: a generalized framework for combustion model validation

(coauthors: M.S. Bernardi, M. Pelucchi, A. Stagni, L.M. Sangalli, A. Cuoci, P. Secchi, T. Faravelli; Milano)

10:00 Tibor Nagy:

Uncertainty of the rate parameters of several important elementary reactions of the H₂ and syngas combustion systems

(coauthors: T.Nagy, É. Valkó, I. Sedyó, I.Gy. Zsély, M.J. Pilling, T. Turányi; Budapest and Leeds)

10:20 John Bugler:

An investigation of the thermochemical parameter and rate coefficient assignments for the low-temperature oxidation pathways of alkanes: A case study using the pentane isomers
(coauthors: J. Bugler, K.P. Somers, E.J. Silke, H.J. Curran; Galway)

10:40 Aamir Farooq (Thuwal):

Recent advancements in the measurements of the rate coefficients of H-abstraction by OH reactions

11:00 Break

11:30 Guillaume Vanhove:

RCM characterization initiative: Towards a better description of low temperature ignition
(coauthors: S.S. Goldsborough, G. Vanhove; Argonne and Lille)

11:50 Arnas Lucassen (Braunschweig):

Decreasing uncertainties in photoionization mass spectrometry introduced by photoionization cross-sections

12:10 Shuang Li:

Accelerate global sensitivity analysis using Artificial Neural Network algorithm
(coauthors: S. Li, B. Yang, F. Qi; Hefei and Beijing)

12:30 Andrea Matrisciano:

An *a priori* thermodynamic data analysis based chemical lumping method for the reduction of large and multi-component chemical kinetic mechanisms
(coauthors: A. Matrisciano, L. Seidel, C. Klauer, F. Mauss, H. Lehtiniemi; Göteborg, Lund, Cottbus)

12:50 Lunch

- 14:00 Mara De Joannon, George Skevis:
COST Action CM1404: Chemistry of Smart Energy Carriers and Technologies (SMARTCATS)
(Naples, Thessaloniki)
- 14:10 **Plenary lecture**
Andrea D'Anna (Università degli Studi di Napoli Federico II):
Probing nascent particles in flames:
sensitivity of experimental techniques and influence of probe artifacts
- 14:50 Lars Seidel:
Comprehensive kinetic modeling and experimental study of a fuel-rich,
premixed *n*-heptane flame
(coauthors: L. Seidel, K. Moshammer, C. Klauer, T. Zeuch, K. Kohse-Höinghaus, F. Mauss;
Bielefeld, Cottbus, Göttingen, Livermore, Lund)
- 15:10 Vladimir A. Alekseev:
Laminar burning velocity of lean H₂ + air mixtures and its temperature dependence
obtained from flat flames
(coauthors: V. A. Alekseev, M. Christensen, E. Berrocal, E.J.K. Nilsson, A. A. Konnov; Lund)
- 15:30 Alexey Fomin:
Absolute HCO concentration measurements for validation of
methane combustion mechanisms under fuel-rich conditions
(coauthors: A. Fomin, T. Zavlev, I. Rahinov, V.A. Alekseev, A. A. Konnov, S. Cheskis;
Tel Aviv, Raanana, Lund)
- 15:50 Lei Deng:
Compensating deviations from one-dimensionality in flame experiments
by direct numerical simulation
(coauthors: L. Deng, N. Sikalo, O. Hasemann, S. Kluge, H. Wiggers, C. Schulz, A. Kempf, I.
Wlokas; Duisburg-Essen)
- 16:10 Break
- 16:40 George Skevis:
Synergies and uncertainties in the combustion chemistry of fuel blends
(coauthors: G. Skevis, G. Vourliotakis, M. A. Founti; Thessaloniki, Athens)
- 17:00 Alexander Snegirev:
Microscale combustion calorimetry as a tool to develop kinetic models of polymer pyrolysis
and volatile oxidation
(coauthors: A. Snegirev, V. Talalov, V. Stepanov; St.-Petersburg)
- 17:20 Closing