Monday May 10, 2010

09.00 – 09.25 Registration
09.25 – 09.30 Welcome address and opening by Ph. Ngendakumana
09.30 – 10.30 Invited lecture:

Market development and sustainability issues of biomass to green power
Yves Ryckmans, Chief Technology Officer Biomass Laborelec, Rodestraat 125, B-1630 Linkebeek (Belgium)

10.30 – 10.50 Coffee Break

Session 1 Combustion Systems
10.50 – 11.20 Biomass combustion in pulverized-fuel boilers: impact of an improved modelling of particles pyrolysis on complete CFD simulation results
J. Blondeau, H. Jeanmart, Y. Ryckmans, P. Allard, D. Rochaya

11.20 – 11.50 “Micromix” hydrogen combustion
E. Recker, W. Bosschaerts, P. Hendrick, H. Funke, S. Börner

11.50 – 12.20 Modelling the thermal efficiency of condensing boilers working in steady-state conditions
D. Makaire, P. Ngendakumana

12.20 – 14.00 Lunch Break

Session 2 Internal Combustion Engines
14.00 – 14.30 Comparison between instantaneous heat flux measurements and model predictions in a hydrogen combustion engine
J. Demuynck, M. De Paepe, R. Sierens, S. Verhelst

14.30 – 15.00 Laminar Burning Velocity of Ammonia – Air – Diluent Mixtures
C. Duynslaegher, H. Jeanmart, J. Vandooren

15.00 – 15.30 Natural gas as an alternative fuel for spark engines
K. Sartor, P. Ngendakumana

15.30 – 15.50 Coffee Break

Session 3 Chemical Kinetics I
15.50 – 16.20 Laminar burning velocity of ethanol + air flames at room and elevated temperatures
A.A. Konnov, R.J. Meuwissen, L.P.H. de Goey
16.20 – 16.50 *Study of a Lean Premixed Isobutene/Hydrogen/Oxygen/Argon Flame: Experimental and Modelling*  
V. Dias, J. Vandooren

16.50 – 17.20 *Experimental and numerical investigation of toluene combustion in premixed, laminar and low pressure flames*  
V. Detilleux, J. Vandooren

18.30 – Guided Tour and Conference Dinner

---

**Tuesday May 11, 2010**

09.30 – 10.30 Invited lecture:  
*Combustion in glass furnaces: next challenges and recent developments*  
Antonella CONTINO, Olivier DOUXCHAMPS, Johan BEHEN (1)  
Youssef JOUMANI, Bertrand LEROUX (2)  
1 AGC Glass Europe R&D Center, Rue de l’Aurore, 2, B-6040 Jumet (Belgium)  
2 AIR LIQUIDE Claude-Delorme Research Center, 1, chemin de la Porte des Loges, 78354 JOUY-EN-JOSAS Cedex, France

10.30 – 10.50 Coffee Break

**Session 4 Chemical Kinetics II**

10.50 – 11.20 *Effect of the variable inlet flow velocities of premixed stoichiometric Methane/Oxygen/Argon flames on their flames structures*,  
C. Hakizimana, J. Vandooren

11.20 – 11.50 *Experimental and numerical study of the structure of acetic acid flames*  
N. Leplat, J. Vandooren

11.50 – 12.20 *Experimental and modeling study of the oxidation of silane by nitrous oxide behind reflected shock waves*  
R. Mével, S. Javoy, G. Dupré

12.20 – 14.00 Lunch Break

**Session 5 Numerical Simulations**

14.00 – 14.30 *Tabulation of Dynamic Adaptive Chemistry for internal combustion engine simulations*  
F. Contino, H. Jeanmart, T. Lucchini, G. D’Errico

14.30 – 15.00 *Simulation of flame spread along vertically oriented combustible surfaces*  
P. Rauwoens, J. Degroote, J. Vierendeels, B. Merci

15.00 – 15.30 *LES-CMC simulations of hydrogen auto-ignition*  
I. Stankovic, A. Triantafyllidis, E. Mastorakos, C. Lacor, B. Merci

15.30 – 16.00 *Hybrid RANS/PDF calculations of a swirling bluff body flame (SM1)*  
R. De Meester, B. Naud, B. Merci

16.00 – 16.30 Farewell & Coffee Break

16.30 – General Assembly of the members of the Belgian Section