



**The British Flame Research Committee  
In Collaboration with the Coal Research Forum and the University of Kent**

**TECHNICAL MEETING**

**Combustion Diagnostics, Control, Computational Methods & Process Optimisation  
at**

**The University of Kent, Canterbury, Kent CT2 7NT, UK**

**Thursday 2<sup>nd</sup> May 2013**

**PROVISIONAL PROGRAMME**

09:15 – 10:00 **REGISTRATION/COFFEE**

10:00 - 10:05 **Welcome and Opening Address**  
*Mr Roger Dudill, British Flame Research Committee*

10:05 – 10:30 **Keynote: Address**  
*Professor Leo Tognotti, IFRF*

**SESSION 1: LABORATORY SCALE EXPERIENCE**

10:30 – 10:55 **Experimental Estimation of Separated Jets Oxy-Flame in a 1000C Furnace**  
*Youssef Joumani, L'Air Liquide R&D*

10:55 – 11:20 **Monitoring and Characterisation of Oxy-Gas Burner Flames using Digital Imaging and Spectral Analysis Techniques.**  
*Md M. Hossian, G Lu, Y. Yan, University of Kent*

11:20 – 11:45 **Qualitative Assessment of Flame Stability through Image Processing and Data Fusion**  
*University of Kent*

**SESSION 2: CFD AND COMPUTATIONAL ANALYSIS**

11.45 – 12.10 **Validation of CFD Modelling for Conventional and Unconventional Combustion**  
*A. Duncan, Doosan power*

12:10 – 12:35      **Experimental and Computational Investigation of Flameless Oxidation of Pulverised Coal at Pilot Scale (230kW<sub>th</sub>)**  
*M. Weidmann, V. Verbaere, G. Boutin, D. Honoré, S. Grathwohl, G. Godard, C. Gobin, H. Dieter, G. Scheffknecht, University of Stuttgart, RWTH Aachen University, University of Rouen*

12:35 – 14:00      **Lunch and Poster Presentation**

SESSION 2: CONTINUED

14:00 – 14:25      **Internal Gas Composition and CFD Predictions of Counter Rotating Axial Swirlers with Axial Fuel Injection between the Two Swirlers**  
*P. T. King, T. M. Lazim, and G. E. Andrews, University of Leeds*

14:25 – 14:50      **Heat Transfer of Zinc Galvanization**  
*X. Liu, S. Blakey, C. Leong, University of Sheffield*

14:50 – 15:05      **COFFEE**

SESSION 3: INDUSTRIAL SCALE EXPERIENCE

15:05 – 15:30      **Results from study on Low Nox Combustion at SSE Ferrybridge**  
*J. Goldring RJM International*

15:30 – 15:55      **Low NO<sub>x</sub> Burner Retrofits with BMS for Process Heater Optimisation**  
*Rex K. Isaacs, Zeeco Inc*

15:55 – 16:20      **The Monitoring and Control of Burners Co-Firing Coal and Biomass using Joint Time- Frequency Methods**  
*Palaniappan Valliappan, University of Glamorgan*

16:20 – 16:45      Paper to be Confirmed

16:45 – 17:00      **CONCLUDING REMARKS**  
*Mr Roger Dudill*

**POSTER PRESENTATION**

**1) Studies on Flashback Resistance with CO<sub>2</sub> Injection for Hydrogen Enriched Blends**  
*J. Lewis, A. Valera-Medina, R. Marsh, N. Syred, T. Griffiths, P. Bowen, S. Morris, Cardiff University*

**2) Posters from the University of Kent**  
*University of Kent*