37th IEA Combustion TLM (2015)

PROGRAMME

Key Events

Sunday 2nd August

Registration from 4:00pm to 8:00 pm in the School of Medicine Foyer

Monday 3rd August

Registration from 8:00 am to 9:00 am in the School of Medicine Foyer

Free evening

Tuesday 4th August

Registration from 8:00 am to 8:30 am in the School of Medicine Foyer

Trip to "Falkland Palace:" leaving by Bus at 2:00 pm SHARP! Early supper at the Palace circa 5:00 pm

Wednesday 5th August

Banquet at 7:00 for 7:30 pm at New College Hall

Thursday 6th August

End of the Science Programme at 1:00 pm followed by Lunch and end of Conference

2:00 Pm EX CO meeting in the School of Medicine

6:30pm for 7:00pm: Ex Co Dinner in the New Golf Club Dining Room – a short walk!

MAIN VENUES:

ACCOMODATION: AGNES BLACKADDER HALL, NORTH HAUGH

MEETING: REGISTRATION AND RECEPTION: SCHOOL OF MEDICINE, NORTH HAUGH

TUESDAY OUTING: FALKLAND PALACE BY BUS

WEDNESDAY BANQUET: LOWER COLLEGE HALL, ABOUT 1 MILE OR 20 MINS WALK

MONDAY 3rd August

Time	Talk
09:00 - 09:10	**Welcome and Administrative Information** **Doug Greenhalgh, Chair Ex Co and Organiser**
	Gas Engines: Chair – Yuri Wright
09:10 - 09:50	Thermodynamic and Optical Investigation of Natural Gas - Diesel Dual Fuel Combustion in a Compression Ignition Engine, by: Jeremy Rochussen, Jeff Yeo, Mahdiar Khosravi, and **Patrick Kirchen**; **University of British Columbia**
09:50 - 10:20	Application of LPG to SI Engines, by: **Choongsik Bae** and Jinyoung Jung; **KAIST**
10:20 - 10:50	Prechamber Operation of a Natural Gas HD Engine, by: **Bengt Johansson**; **Lund University**
10:50 - 11:10	**Coffee /Tea Break**
	Gas Engines: Chair – Bengt Johansson
11:10 - 11:40	Gas Engine Research at Aalto, by: Karri Keskinen, **Teemu Sarjovaara and** Martti Larmi; **Aalto University**
	Engines: Chair - Bengt Johansson
11:40 - 12:10	A Study of Preignition in a Highly Boosted Gasoline Engine, by: **Yasuo Moriyoshi**, Tatsuya Kuboyama and Koji Morikawa; **Chiba University**

12:10 - 12:40	Multi-Dimensional Modelling of Soot Formation in DISI Engines based on Detailed PAH Kinetics and Particle Dynamics Framework, by: **Kyoungdoug Min**; **Seoul National University**
12:40 - 13:10	In-Cylinder Processes of Natural Gas Combustion Modes, by: **Mark Musculus**; **Sandia National Labs, CRF**
13:10 - 14:00	**Lunch**
	Engines: Chair - Paul Miles
14:00 - 14:30	Combustion of Hydrogen into a SI and HCCI Engine; which one for Ultra-Low Emissions and High Efficiency? By: **Fabrice Foucher**, Guillaume Dayma, Fabien Halter, Philippe Dagaut and Christine Mounaim-Rousselle; **PRISME, ICARE Caprysses Consortium, CNRS-Univ Orléans**
14:30 - 15:00	In-Cylinder Fuel Reforming to Support High EGR Dilution in High Efficiency SI Engines, by: **Jim Szybisti; Oak Ridge National Laboratory** ≈
15:00 - 15:30	Experiences on E85 Dual-Fuel Combustion, by: **Teemu Sarjovaara** and Marti Larmi; **Aalto University**
15:30 - 16:00	**Tea/Coffee Break**
	Engines: Chair - Yasuo Moriyoshi
16:00 - 16:30	Fuel/Engine Interactions: Potential for Emissions and Efficiency Benefits, by: **Paul Miles**; **Sandia National Labs, CRF**
16:30 - 17:00	Time Series Measurement of Fuel Film Adhering to Model Cylinder Wall, by: Shinya Okam Okamato, Hisanobu Kawashima and **Tsuneaki Ishima**; **Gunma University**
17:00 - 17: 30	Recent understanding for controlling emissions from LD compression ignition engines, by: **Kumara Gurubaran Ramaswamy**, Dimitrios P. Touloupis, Christos Keramiotis, Nikolaos Soulopoulos, Christopher Hong, and George Vourliotakis
17:30 – 18:00	Spray and Combustion Research for Large Marine 2-Stroke Diesel Engines, by: **Andreas Schmid**; **Winterthur Gas & Diesel Ltd**
	End of the Sessions – FREE EVENING

TUESDAY 4th August

Time	Talk
08:30 – 08:35	**Administrative Information** **Doug Greenhalgh, Chair Ex Co and Organiser**
	Low Temperature Combustion: Chair - Alex Taylor
08:35 - 09:10	Towards 60% efficient IC engine, by: **Bengt Johansson; Lund University**
09:10 - 10:20	Soot Characteristics of Mode transition between Low Temperature Combustion and Conventional Combustion by: **Choongsik Baeb** and Behzad Rohan; **KAIST**
10:20 - 10:50	Experimental Investigations of Diesel and Biodiesel Blends for Low Temperature Combustion in a Diesel Engine, by: **Seungmook Oh**; **KIMM**
10:50 - 11:10	**Coffee /Tea Break**
	Sprays: Chair – Choongsik Bae
11:10 - 11:40	Characterizing Ignition and Sooting Behavior in High-Pressure Sprays with Multiple Injections of n-Dodecane, by: **Scott Skeen**; **Sandia National Labs, CRF**
11:40 - 12:10	Liquid and Vapor Phase Detection of GDI Sprays Impacting on a Heated Surface, by: **A. Montanaro**, L. Allocca, G. Meccariello, M. Lazzaro; **CNR, Istituto Motori**
12:10 - 12:40	X-Ray Diagnostics of Cavitation, Gas Injection, and Shot-to-Shot Variation, by: **Christopher Powell**, Daniel Duke, Nicholas Sovis, Andrew Swantk and Alan

	Kastengren; **Argonne National Laboratory**
12:40 - 13:10	Butanol-Diesel Blend Spray Combustion Investigation by UV-visible Flame Emission in a Prototype Single Cylinder Compression Ignition Engine, by: **G. Valentino**, L. Marchitto, S. Merola and C. Tornatore; **CNR, Istituto Motori**
13:10 - 14:00	**Lunch**
14:00 – 14:30	**BUS DEPARTS TO "FALKLAND PALACE"**
14:30 - 16:00	**GUIDED TOUR OF FALKLAND PALACE**
16:00 - 17:00	**OPPORTUNITY TO ENJOY THE GARDENS AND VISIT THE SMALL TOWN OF FALKLAND**
17:00 - 19:00	**SCOTTISH "PICNIC" AT FALKLAND**
19:00 – 19:30	**RETURN TO "NORTH HAUG "by BUS**

WEDNESDAY 5th August

Time	Talk
08:30 – 08:35	**Administrative Information** **Doug Greenhalgh, Chair Ex Co and Organiser**
	Modelling and Chemistry: Chair - Frank Behrendt
08:35 - 09:10	Chemical Kinetic Mechanisms for Components and Surrogates of Transportation Fuels and Multi-Zone Engine Modelling, by: **Bill Pitz**; **LLNL**
09:10 - 10:20	Quantum Chemical Investigation on the PAH Formation via Fulvenallenyl Radicals, by: **Akira Miyoshi**; **University of Tokyo**
10:20 - 10:50	Sub-Atmospheric Flame Speeds : Interest and Difficulty to Improve Kinetic Modelling, by: **Guillaume Dayma**, Fabien Halter,Fabrice Foucher, Christine Mounaim-Rousselle and Philippe Dagaut; **ICARE, PRISME, Caprysses Consortium, Cnrs-univ Orléans**
10:50 - 11:10	**Coffee /Tea Break**
	Lasers and diagnostics: Chair – Doug Greenhalgh
11:10 - 11:50	The Future of Combustion/Engine Laser Diagnostics, by: Yanni Hardalupas and **Alex MKP Taylor**; **Imperial College**
11:50 - 12:20	Laser Induced Photofragmentation Fluorescence of Alkali Chlorides in Flames, by: T Leffler, C Brackmann, ZS Li, **S-I Möller** and M Aldén; **Lund University**
12:10 - 12:40	**Alternative Fuels: Chair – Doug Greenhalgh**
12:40 - 13:10	A Study of Novel Biofuels from Biomass focused on Methyl-Furans (MF), by: Chongming Wang and **Hongming Xu**; **Birmingham University**
13:10 - 14:00	**Lunch**
	Alternative Fuels: Chair – Mario Ditranto
14:00 – 14:30	Generation of Gaseous Fuel for Combined Heat and Power from Woody Biomass, by: **Alba Dieguez-Alonso** and Frank Behrendt; **TU-Berlin**
14:30 - 15:00	Numerical Simulation of the Impact of the Feeding Process in the Combustion of Biomass, by: **Jacobo Porteiro**, Miguel Angel Gómez, David Patiño and José Luis Míguez; **University of Vigo**
15:00 - 15:30	Towards a Tar Tolerant Biomass-Gassification-CHP system : Primary Experiments with an HCCI engine, by: **Subir Bhaduri**, Francesco Contino and Hervé Jeanmart; **Université Catholique de Louvain**
15:30 – 16:00	MILD combustion of Biogas on a 30 kW and 200 kW lab furnaces: scale effects and influence of the geometrical configuration, by: **Gabriele Mosca** and Delphine Lupant; **UMONS**
16:00 - 16:20	**Tea/Coffee Break**
	Gas Turbines: Chair - Christine Mounaïm-Rousselle
16:20 – 16:50	Experimental Investigation of an Oxy-Fuel Gas Turbine Burner, by **Mario Ditaranto** and Inge Saanum; **SINTEF Energy Research**
16:50 – 17:20	Catalytically Supported Combustion Concepts for H2-Rich Fuels in Gas Turbine Engines, by: I. Mantzaras and **P. Jansohn**; **Paul Scherrer Institute**
17: 20 – 17:50	Flame Investigation of a Gas Turbine Burner using OH-PLIF and High-Speed Chemiluminescence Imaging, by: A A Subash, A Kundu, R Whiddon, R Collin, **S-I Möller**, M Aldén and J Klingmann; **Lund University**
19:00 – 19:30	**BANQUET in LOWER COLLEGE HALL**

THURSDAY 6th August

Time	Talk
08:30 – 08:35	**Administrative Information** **Doug Greenhalgh, Chair Ex Co and Organiser**
	Chemistry: Chair - Bill Pitz
08:35 - 09:05	Flame Structure Studies of Ethyl Pentanoate, by: **Veronique Dias**; **Université Catholique de Louvain**
09:05- 9:35	Soot Characteristics of Mode transition between Low Temperature Combustion and Conventional Combustion, by: **Choongsik Bae** and Behzad Rohani; **KAIST**
09:35 – 10:05	Trends in laminar flame speeds of C2-C7 Esters, by: **Elna Nilsson; Lund University**
10:05 – 10:35	Threshold photoelectron spectroscopy to trace chemistry in molecular beams and flames , by: **Thomas Gerber, Patrick Hemberger; Paul Scherrer Institute,**
	Engines: Chair Bob Gallagher
10:35-11:05	Combustion and emissions of DMMn as alternative of Diesel Fuel, by: Zhi Wang, Jianxin Wang and Shijin Shuai, Presented by **Homing Xu**; **Tsinghua University/Birmingham University**
11:05 - 11:20	**Coffee /Tea Break**
	Energy Policy: Chair – Bob Gallagher
11:20 – 10:50	French Policies for Energy Topics : Especially or Combustion Applications, by: **Christine Mounaïm-Rousselle**; **CNRS-Université d'Orléans**
11:50 – 12:00	**Closing Remarks: Bob Gallagher Sec. & Doug Greenhalgh, Chair Ex Co**
12:00 - 12:30	**Collaborative Task Meetings (to continue through Lunch)**
12:30 – 13:30	**Lunch**
13:30 – 14:00	Departure for Delegates
14:00 – 15:30	**EXCO in the SCHOOL of MEDECINE**
15:30 - 16:00	**Coffee/Tea Break for EXCO**
18:30 – 19:00	**EXCO DINNER IN THE NEW GOLF CLUB DINING ROOM**