

Special Interests Group (SIG)

Sprays in engineering applications: modelling and experimental studies

Advanced Powertrain and Fuels, Brunel University London

Research Workshop

4th – 5th December 2017 Room MLST 362 (Michael Sterling Building)

Monday, 4th December

12-30pm - 1-30pm: **Lunch**

1-30pm - 2-20pm: **Lab visit**

2-20pm - 2-30pm:

Hua Zhao (Brunel University)

Welcome

2-30pm - 3-00pm:

Sergei Sazhin (Brighton University)

Modelling of heating and evaporation of multi-component liquid films

3-00pm - 3-30pm:

Louis Nicholson (Oxford University)

**Comparison of Transient Diesel Spray Prediction Between Two
Commercially Available Computational Fluid Dynamics Codes**

3-30pm - 4-00pm: **Tea/Coffee/Water**

4-00pm - 4-30pm:

Carlos Rodriguez (City University)

Simulation of super-critical injection

4-30pm - 5-00pm:

Mansour Al Qubeissi (Coventry University)

**Impact of ambient conditions on fuel droplet heating and evaporation: an
application to gasoline-ethanol fuel mixture**

5-00pm - 5-30pm:

Jun Xia (Brunel University)

Spray simulation and modelling: An overview of current research needs

6-00pm: **Dinner at Lancaster Hotel**

Tuesday, 5th December

10-00am - 10-30am:

Mark Linne (Edinburgh University)

Detailed Spray Measurements in Edinburgh

10-30am - 11-00am:

Xinyan Wang (Brunel University)

Numerical Simulation of the Gasoline Spray with an Outward-Opening Piezoelectric Injector: A Comparative Study of Different Breakup Models

11-00am - 11-30am: **Tea/Coffee/Water**

11-30am - 12-00am:

Philip Sitte (Cambridge University)

Modelling of spray flames with Doubly Conditional Moment Closure

12-00pm - 12-30pm:

Daniel Nsikane (Brighton University)

Statistical Approach on Visualizing Multi-Variable Interactions in a Hybrid Breakup Model under ECN Spray Conditions

12-30pm - 1-30pm: **Lunch**

1-30pm: **Closure**

Posters

NAWAR AL-ESAWI (Coventry University)

A model for fuel droplet heating and evaporation: an application to diesel, biodiesel, gasoline, ethanol and their blends

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