



THE COMBUSTION INSTITUTE
(British Section)



IOP | Institute of Physics **Combustion Physics Group**

**One-day meeting on
Current Research in Combustion:**
A Forum for Research Students and Early Career Researchers

*Sir Robert Hadfield Building,
Department of Chemical and Biological Engineering,
University of Sheffield, Sheffield S1 3JD
19 September 2019*

Invited lecture by **Professor Jim Swithenbank**
*2019 Recipient of Huw Edwards' award for Outstanding Contribution to Combustion
Physics*

The aim of the meeting is to provide a forum for contributions on current research in topics relevant to combustion physics and an opportunity to meet other researchers and industrialists. The meeting is sponsored by the IOP and industry and will provide industrialists with a broad view of current combustion research and a chance to meet potential recruits in the field.

The meeting includes oral and poster presentations from research students and early careers researchers from leading research groups in the field of Combustion Physics and covers many varied aspects of combustion. The meeting is open to members and non-members of the Institute of Physics and promises to be an interesting and constructive day of presentations and discussions about current research topics in Combustion Physics.

Registration link and fees:

To register for this meeting please visit: <https://www.eventbrite.com/e/institute-of-physics-current-research-in-combustion-2019-tickets-65422415205>

Registration is free for this event.

Researchers wishing to present a poster should submit an abstract to Dr. Ramanarayanan Balachandran (r.balachandran@ucl.ac.uk) for consideration, as soon as possible.

For additional information contact: Prof. Yannis Hardalupas (y.hardalupas@imperial.ac.uk)

Programme

- 9:30 Registration and Coffee
- 10:10 Introduction by Chairman of the Institute of Physics - Combustion Physics Group:
Professor Yannis Hardalupas, Imperial College London
- 10:15 Morning Technical Session
- 10:15 James Bailey, University of Southampton
“The Effect of Swirl on Boundary Layer-Flashback Processes for Hydrogen-Rich Gas-Turbine Combustion”
- 10:40 Priyav Shah – University of Oxford
“Advanced LITGS: Enhanced spatial resolution for optical thermometry”
- 11:05 Precious Otti - University of Strathclyde
“In situ diode laser measurements of acetylene concentration in laminar flames using cavity enhanced absorption spectroscopy (CEAS)”
- 11:30 Yu Wang – University of Edinburgh
“Full-scale experimental studies on the dwelling burning behaviour of informal settlement”
- 12:00 Lunch and Posters
- 13:15 Afternoon Technical Session
- 13:15 Jon Runyon – Cardiff University
“Characterization of Additively Manufactured Swirl Burner Surface Roughness and Its Effects on Flame Stability Using High-Speed Diagnostics”
- 13:40 James Massey, University of Cambridge
“Influences of Heat Loss Modelling on Flame Stabilisation”
- 14:05 Yushai Liu – Imperial College London
“Chemiluminescence in premixed counterflow flames”
- 14:30 Angelo Ugenti - Bladon Micro Turbine
“Combusting CFD validation of a 12kW Micro Turbine Generator”
- 15:00 ‘Huw Edwards Award (2019)’ Lecture by Professor Jim Swithenbank
- 15:45 Tea and Posters
- 16:15 Presentation of Prizes (Felix Weinberg award and IOP/British Flame poster award) and Close

[Email Professor Yannis Hardalupas (y.hardalupas@imperial.ac.uk) for any further information.]