

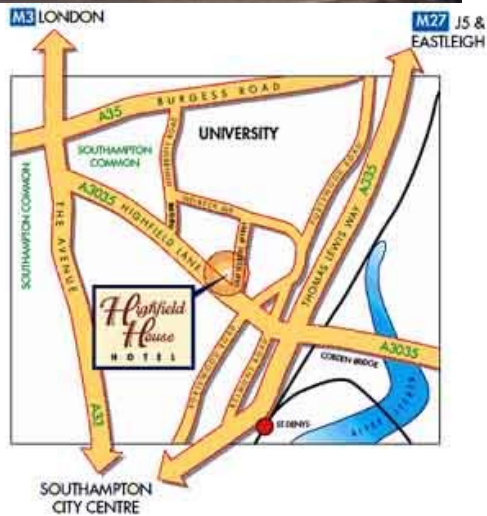
## **DATES :**

2<sup>nd</sup> and 3<sup>rd</sup> of March 2009

## **VENUE :**

<http://www.highfieldhotelsouthampton.co.uk/>

The venue for the workshop is the Highfield House Hotel and is located a short walk from the Highfield Campus of the University of Southampton.



## **WEBSITE :**

Please check here for updated details, travel information etc.

<http://www.personal.soton.ac.uk/jss1x07/ehdworkshop.htm>

## **CONTACT US :**

**Dr. John Shrimpton**

Room 5099, Tizard Building  
School of Engineering Sciences  
Highfield Campus  
University of Southampton  
Southampton, S017 1BJ, UK  
Phone : +44-(0)23-8059-4894  
Fax : +44-(0)23-8059-3058  
[john.shrimpton@soton.ac.uk](mailto:john.shrimpton@soton.ac.uk)

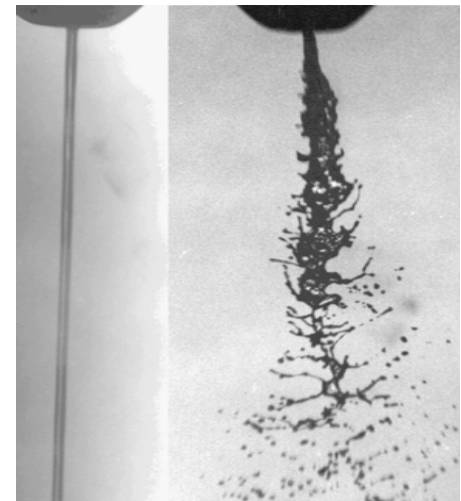
**Prof. Farzad Mashayek**

Department of Mechanical and Industrial Engineering  
University of Illinois at Chicago  
842 W. Taylor Street  
Chicago, IL 60607, USA  
Phone: 312-996-5317  
Fax: 312-413-0447  
[mashayek@uic.edu](mailto:mashayek@uic.edu)

## **SUPPORTED BY :**



## **A workshop on Electrostatic Atomization of Electrically Insulating Liquids : Principles and Applications**



UNIVERSITY OF  
**Southampton**  
School of Engineering Sciences

**UIC** Department of Mechanical  
and Industrial Engineering  
UNIVERSITY OF ILLINOIS  
AT CHICAGO  
COLLEGE OF ENGINEERING

## WORKSHOP AIMS :

1. To highlight the effectiveness of electrostatic atomization methods for electrically insulating liquids.
2. To bring together experts in electrohydrodynamics, unipolar injection of charge, multiphase fluid mechanics, spray technology and combustion.
3. To facilitate discussion across these subject areas within the context of electrostatic atomization for electrically insulating liquids.
4. To present a complete picture of the physics of the application.
5. To bring together the research and the commercial communities in order to foster development and application of the atomization technology, with a particular focus on combustion systems.

The workshop will appeal to researchers working on fundamental aspects of unipolar injection of charge, electrical atomization, spray formation and dispersion.

The workshop will also appeal to high technology and manufacturing companies interested in the unique properties that charged sprays possess.

The workshop hopes to attract people with a range of experience, from PhD students just starting out, to industry experts who can envision how this technology may be useful to them.

## WORKSHOP SCOPE :

- Fundamentals of Electrohydrodynamics for dielectric fluids.
- Unipolar injection of charge into quiescent gaseous dielectrics
- Unipolar injection of charge into quiescent liquid dielectrics
- Unipolar injection of charge into flowing liquid dielectrics
- Development of electrostatic atomizer technology for electrically insulating liquids.
- Instability mechanisms of electrically charged liquid jets
- Characteristics of electrically charged sprays generated by charge injection atomization
- Combustion of single electrically charged drops
- Combustion Systems employing electrical atomization and dispersion
- The outlook for electrostatic atomization for transport and other applications

## CONFIRMED SPEAKERS

Prof Rodica Baranescu  
<http://www.mie.uic.edu/faculty/baranescu.htm>

Prof. Josette Bellan  
<http://sec353.jpl.nasa.gov/JosetteBellan/>

Prof. Antonio Castellanos  
<http://alojamientos.us.es/ehd-cgm/miembros/Castellanos/eng/index.html>

Prof. Alessandro Gomez  
<http://www.eng.yale.edu/gomez-lab/>

Prof. Dimitrios Kyritsis  
<http://www.mechse.uiuc.edu/research/kyritsis/>

Prof Farzad Masheyak  
<http://www.mie.uic.edu/faculty/mashayek.htm>

Prof. Alexie Saveliev  
North Carolina State University

Dr. John Shrimpton  
<http://www.soton.ac.uk/ses/people/staff/ShrimptonJ.html>

Prof. Jamal S. Yagoobi  
[http://www.iit.edu/engineering/mmae/faculty/yagoobi\\_jamal.shtml](http://www.iit.edu/engineering/mmae/faculty/yagoobi_jamal.shtml)

Prof. Alexander Yarin  
<http://www.mie.uic.edu/faculty/yarin.htm~>