



# Dielectrophoresis 2014

**9–11 July 2014**  
**28 Portland Place, London, UK**

Organised by IOP Electrostatics Group in collaboration with IOP Dielectrics Group, The AES Electrophoresis Society and The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS)

<http://dielectrophoresis2014.iopconfs.org>



**IOP**

Institute of Physics  
Dielectrics Group

**IOP**

Institute of Physics  
Electrostatics Group



FACSS PRESENTS  
**SCIX**  
2014

# First Announcement

This is the first notice for presentations for Dielectrophoresis 2014, which will take place in London in July 2014. This three day conference will assemble a community of electrokinetic researchers who are inspired to address the challenges of developing and applying existing and novel electrokinetic technologies to the micro- and nanoscale.

The subject area of the conference is AC electrokinetic methods in general and the application areas of dielectrophoresis in particular, including DC, insulator methods and liquids. Topics, including emerging dielectrophoretic techniques, discoveries in governing physical behaviour, and applications of electrokinetic techniques in health sciences, are welcomed. The full range of topics will be addressed in oral and poster sessions, including special focus sessions on: theory and understanding of polarisation phenomena; novel applications; and an industrial focus and presentation session.

## Confirmed speakers

- Professor Ronald Pethig, University of Edinburgh
- Professor Antonio Ramos, Universidad de Sevilla
- Professor Hsueh-Chia Chang, University of Notre Dame

## List of topics

### Dielectrophoresis

- Characterisation and Spectroscopy
- Separation, sorting and fractionation
- Assembly methods and structuring
- Dielectrophoretic Particle handling
- DC techniques
- Insulator Dielectrophoresis
- Liquid dielectrophoresis and electrowetting
- Droplet dielectrophoresis
- Nanoscale dielectrophoresis

### AC electrokinetics

- Fundamentals and Theory
- Effective polarisation and new phenomena
- Electrorotation
- Electroorientation
- Electroporation
- Travelling Wave Dielectrophoresis
- AC electroosmosis and Induced Charge electroosmosis
- Electrohydrodynamics in microsystems.
- Dielectric spectroscopy and dielectric methods

Dielectrophoresis 2014 will start on Wednesday 9 July and adjourn 11 Friday July 2014 in London, UK. The submission deadline for abstracts is the 30 April 2014.

Abstracts should include a maximum of one page of text and references and one page of figures, in standard A4 size. Please submit your abstract online at

**<http://dielectrophoresis2014.iopconfs.org>**

Papers from the conference will be invited for submission to the Special Issue on Dielectrophoresis to be published in the Elsevier journal Electrophoresis in 2015.

## This meeting is organised as a collaboration between the following organizations

- The Electrostatics Group of the Institute of Physics, UK
- The Dielectrics Group of the Institute of Physics, UK
- The AES Electrophoresis Society
- The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS)

## Conference Chairs

- Professor Ronald Pethig, University of Edinburgh, UK
- Dr Nicolas Green, University of Southampton, UK

## Conference Organising Committee

- Dr Nicolas Green, University of Southampton, UK
- Professor Michael Hughes, University of Surrey, UK
- Professor Stuart Williams, University of Louisville, USA
- Professor Mark Hayes, Arizona State University, USA

For further information, visit the website at **<http://dielectrophoresis2014.iopconfs.org>**