The Fourth Stokes Summer School Skreen, County Sligo, Ireland 18th–22nd June 2004

Modern Applications of Fluorescence and Spectroscopy

About the School

This is the fourth in a series of conferences organised in County Sligo to honour the life and work of Sir George Gabriel Stokes at his birthplace in County Sligo, on the West Coast of Ireland, "within the sound of the Atlantic breakers." The 2004 School honours Stokes' extensive investigations into the interaction of light and matter, during which he introduced the term *fluorescence*. Attention will be concentrated on Applied Fluorescence and Spectroscopy, with lectures ranging from mathematical theory to practical applications. The Schools are noted for their informal atmosphere, and afternoons are kept free for discussion and interactions. Like the previous summer schools, lectures will be held in the historic setting of the single-roomed Victorian Parochial School.

List of Invited Speakers

• Sergei Basun (*Ioffe Physico-Technical Institute*, *St. Petersburg, Russia*)

Spectroscopic properties of doped insulators: manifestations of the photo electron transfer between impurities and host

- Michael Berry (*HH Wills Physics Laboratory, University of Bristol, UK*) Stokes, Hamilton, and Victorian Optics: the Irish Connection
- John Donegan (*Department of Physics, Trinity College, Dublin, Ireland*) Quantum dot fluorescence and applications in Biophysics
- Geraint Evans (*Renishaw plc, Wotton-Under-Edge, UK*)

New innovations in Raman technology and applications

• Paul French (*Physics Department*, *Imperial College*, *UK*)

Photonics in Biomedicine

• Frank Imbusch (*Department of Physics, NUI Galway, Ireland*) The Stokes Shift in Materials Luminescence

- Claus Klingshirn (*Institute of Applied Physics, University of Karlsruhe, Germany*) Semiconductor spectroscopy: Basics and applications to ZnO
- Martin Kuball (*HH Wills Physics Laboratory, University of Bristol, UK*) Raman spectroscopy: the application of a fundamental spectroscopy technique to device studies
- Brian McCraith (School of Physical Sciences, Dublin City University, Ireland) Fluorescence-based sensors
- Cees Ronda (*Philips Research Laboratories, Aachen, Germany*) Luminescent materials: theory meets praxis
- Alan Ryder (*National Centre for Biomedical Engineering Science, NUI, Galway*) Nanoscale Photonics
- Alastair Wood (*Centre for Modelling with Differential Equations, Dublin City University, Ireland*) Stokes, Skreen, and Spectroscopy

How to Book

There will be a registration fee of €150 (Stg£105/US\$190 approx.) per person and a fee for accommodation and meals of €320 (Stg£225/US\$400 approx.) per person. Accommodation is in local bed and breakfast houses. A limited amount of self-catering is available at a reduced rate. Accompanying persons are welcome at the same cost, but no registration fee. There will be limited funding available for E.U. postgraduate and postdoctoral researchers. Because of the capacity of this scenic and historic venue, attendance is restricted to 50. Early booking is advised. See the website http://www.cmde.dcu.ie/Stokes/ for full details. Alternatively, please email cmde@dcu.ie.

Scientific Organising Committee

Michael Berry and Martin Kuball (Physics Department, University of Bristol, UK), Frank Imbusch (National University of Ireland, Galway and Royal Irish Academy), Alastair Wood (Centre for Modelling with Differential Equations, Dublin City University, Ireland).