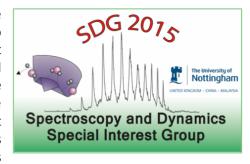
# **Spectroscopy and Dynamics Group**

Newsletter - May 2015



#### SDG annual conference 2015

This year's SDG annual conference was held at the University of Nottingham's Jubilee Campus from the 6th to the 8th of January, 2015. The total attendance was excellent with just under 160 delegates. Following registration and dinner on Tuesday evening, two tutorial talks got the meeting underway. Claire Vallance (Oxford) described the PImMS (Pixel Imaging Mass Spectrometry) camera, how it works and how the scientific community can exploit this innovation. In particular, its application to multi-mass



charged particle imaging was described. This was followed by John Plane (Leeds) who gave an insightful overview of the use of spectroscopy in our understanding of cosmic dust in our and other planets. In the spirit of a tutorial lecture, both talks were delivered with enthusiasm and at an appropriate level and were very well received.

Following the unfortunate cancellation of Mark Johnson (Yale) last year, he made up for it this year with the first talk on Wednesday in which he described the state-of-the-art in cryogenic ion spectroscopy. This was followed by nine contributed talks, lunch and the poster session in the afternoon. The poster session was extremely well attended and enabled the >60 poster presenters to discuss their latest work. This was followed by a second session of talks, starting off with Hendrik Stapelfeldt (Aarhus) who showed how nuclear motion can be tracked in real-time using time-resolved imaging and the PImMS camera that was introduced by Claire Vallance. Four more contributed talks by the younger members of the community closed the first day of scientific discussion, which was followed by dinner and the SDG Pub Quiz, which was hosted by members of Tim Wright's group. The quiz was, as always, a delight, even though I was in the team that earned the wooden spoon.

The final day of the conference started with Melanie Schnell (Hamburg) who presented work on broadband rotational spectroscopy to unpick enantiomers from a sample and this was followed by nine contributed talks. Steven Meech (UEA) opened the afternoon session with an overview of the ultrafast dynamics in light-driven molecular motors. This was followed by four additional contributed talks which took us to the close of the meeting.

The SDG conference is primarily about the younger members of the community and the 26 contributed talks by them were of the highest standards. The breadth of talks ranging from high resolution spectroscopy on small complexes to the dynamics of large macromolecules highlights the diversity and buoyancy of the SDG community in the UK. Additionally, for a few years now, the scientific sessions have been chaired by post-doctoral researchers. There were prizes for best posters and presentations. All in all, SDG2015 was a success thanks to all the delegates and especially the younger members and thanks to the local organisers who managed a faultless meeting.

Jan Verlet (Durham), SDG Chair

## SDG 2015 student prizes

Best talks: Lennart Ramakers (Strathclyde)

Rebecca Ingle (Oxford)

Best posters: James Thompson (Heriot-Watt)

Andreas Iskra (Oxford)

#### Next SDG annual conference

The next SDG conference will be held at the University of Warwick and the local organiser will be Vas Stavros. The dates are 5-7 January 2016 and the confirmed invited speakers are:

Tim Zwier (Perdue)
Ruth Signorell (ETH, Zurich)
Russell Minns (Southampton)
Caroline Dessent (York)
Graham Worth (Birmingham)

# **RSC awards Symposium**

The RSC physical chemistry medals in physical chemistry were awarded during an afternoon symposium at Birmingham University on May 5th. The winners gave great talks on their work. In keeping with the SDG presence at the meeting, the medals were awarded by Helen Fielding (UCL, pictured).

Graham Worth (Birmingham)



Harrison-Meldola Memorial Prize: David Glowacki (Bristol and Stanford, pictured centre right)

Bourke Award: Ann McDermott (Columbia, New York)
Chemical Dynamics Award: Andrew Orr-Ewing (Bristol, pictured left)
Liversidge Award: Mike Ashfold (Bristol, pictured right)

## **Outreach funding**

The RSC has funds available to support outreach activities, i.e. some event/display that promotes chemistry to the widest possible audience. For example, in previous years Ben Whitaker (Leeds) has successfully obtained funding for visual and/or audio 'sculptures' which bring together science and art and have been seen by many members of the public. If anyone has any bright ideas they should contact the group secretary, Sam Eden (s.p.eden@open.ac.uk), to obtain SDG support for their application.

#### **ANUMOCP 2015**

The 25th Annual Northern Universities Meeting on Chemical Physics (ANUMOCP XXV) will be held in the Department of Chemistry, University of Leeds on Thursday July 2nd 2015. As usual, the meeting will comprise of talks from students and postdocs, as well as posters. This is an ideal opportunity for PhD students to present their work and share it with the Northern University community in a relatively relaxed environment. (The concept of Northern University is loosely interpreted as anyone who can get to Leeds for the day!). Please register in advance by e-mail (b.j.whitaker@leeds.ac.uk) or through our web site (http://www.chem.leeds.ac.uk/ANUMOCP).

Ben Whitaker (Leeds)

## Southern SDG meeting

This year, the 2nd summer Southern Universities Spectroscopy and Dynamics Group (SUSDG) conference will be held at the University of Oxford from July 30-31st. This small meeting is modelled after the student oriented Gordon Research Seminar series, which promote active involvement and provide speaking opportunities for postgraduate students. Building on the success of last year's meeting, we encourage all students in attendance to apply for a 10-15 minute presentation on their research. Details on accommodations and formal registration will be available shortly, and we look forward to seeing you all this summer.

Lauren Jarocha (Oxford)

### **IMAMPC**

The International Meeting on Atomic and Molecular Physics and Chemistry (IMAMPC2015) will take place in Birmingham Aug 3-5 2015. Supported by the SDG, this meeting is aimed particularly at early career researchers in all fields of chemical physics and molecular dynamics. Registration is now open. For further details see the website <a href="http://stchem.bham.ac.uk/~imampc2015">http://stchem.bham.ac.uk/~imampc2015</a> or contact Graham Worth, the local organiser.

Graham Worth (Birmingham)

## **Molecular Physics Workshop**

We would like to welcome you to participate in the Molecular Physics Workshop in Caen from the 7th to the 10th of July 2015. The highlighted themes are ion collisions with molecules, low energy electron induced processes, large molecules and nanoparticles, synchrotron and laser spectroscopies, and molecular astrophysics. Generous support from the SDG, the RSC Faraday Division, and the IOP, as well as French and EU sources have ensured low registration fees. As the original registration deadlines have passed, please contact Sam Eden (s.p.eden@open.ac.uk) if you would like to join the meeting. Details are available on the meeting website.

http://www.open.ac.uk/science/physical-science-conferences/mol-phys-july-15

Sam Eden (OU)

## **Selected future RSC meetings**

Single-Molecule Microscopy and Spectroscopy: Faraday Discussion London, 14-16 September 2015

Advanced Vibrational Spectroscopy for Biomedical Applications: Faraday Discussion St Catharine's College, Cambridge, 21 - 23 March 2016

Ultrafast imaging of photochemical dynamics: Faraday Discussion Edinburgh, 31 August - 2 September 2016

Please contact Sam Eden (s.p.eden@open.ac.uk) if you would like to advertise a meeting in a future SDG newsletter.

# Acknowledgements

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SDG committee: David Carty (Durham), Sam Eden (OU, Secretary), Stuart Greaves (Heriot-Watt), Russell Minns (Southampton), Hendrick Nahler (Heriot-Watt, Treasurer), Maria Sanz (KCL), Jan Verlet (Durham, Chair), Daniel Zaleski (Newcastle)