

Chairman's Message

May I start by wishing you a belated happy and successful 2009! This year is an 'odd' year where there is no International Symposium, however there are important new events planned for the year and the Committee is keen to promote additional activities in these years. Information on these events is provided in the newsletter.

The International Symposium for 2008 was held at the University of Manchester and was a great success. Thanks are due to Dr Carl Percival and Dr Andy Horn for organising and hosting the event. The Chemistry Department at the University of Manchester was an excellent venue, and the 'Theatre of Dreams' provided a memorable backdrop for the conference banquet.

Prof Piergiorgio Casavecchia delivered an exemplary Polanyi Medal lecture, and much of the material that Piero presented will be coming out in a Research Review publication in PCCP. I am pleased to announce that in the future all recipients of the Polanyi Medal will be invited to author a Research Review in PCCP, promoting the activities of the Group to a wider audience. A full report of the conference can be found below. The International Symposium for 2010 will be held at the University of Leuven, Belgium, with Prof Shaun Carl as the Chair of the local organising committee. The Gas Kinetics Committee will be discussing possible themes and plenary speakers in spring 2009, so please get in any requests or suggestions to any of the committee as soon as possible.

Finally, a brief word on the composition of the Gas Kinetics Committee. Until recently, the tenure of the Chair was two years, and the timing of the change over did not correspond well with the cycle of organisation of the International Symposium. Therefore, it has been agreed that in the first instance, I will remain as Chair until the end of 2010. We can then consider whether the tenure for future Chairs should continue at two years (but now 'in phase' with the Symposium), or be extended to four years. In 2008 a number of long standing committee members – Prof Ian Sims, Dr Tony Cox and Dr David Rowley – finally stepped down from the Committee. We are extremely grateful for their extensive contributions to the work of the Group, including acting as Chairs, Secretaries and local organisers. In their place we welcome several new members: Dr George Marston (Reading) will help further enhance the links with the atmospheric community; Prof Shaun Carl is the Chair of the Leuven Organising Committee; and Dr Christa Fittschen (University of Lille) will be able to provide additional insights into European perspectives on events and activities. We welcome all the new members, I am sure that the Group will benefit greatly from their knowledge and skills.



Professor Paul Seakins, Chairman of the Gas Kinetics Discussion Group



Professor Casavecchia receiving the Polanyi Medal

Report on the Manchester Conference

The Department of Chemistry at the University of Manchester provided an excellent venue for the 20th International Symposium, organised by Dr Carl Percival and Dr Andrew Horn. Exemplary plenary lectures were provided by: Prof Laurie Butler; Richard Wayne; Paul Dagdigian; Shaun Carl; Tim Softley; Reinhard Zellner; Marsha Lester; and, at the last moment owing to illness, by Dr Andrew Horn. We are grateful to these and all the other lecturers for providing a stimulating set of lectures.

A very positive development was the number of postgraduate and postdoctoral researchers who delivered oral presentations. Clearly, as a subject area we are doing a good job in generating future talent. The continuous display of the posters, and their proximity to the lecture theatres and coffee points, meant that the review of posters could take place over several days. On many occasions it was clear that discussions of the previous lecture over coffee were being facilitated by the presence of several relevant posters. Once again, the quality of the posters was outstanding, and the poster judges had a difficult job in selecting the poster prizes.

As well as the formal lectures and more informal poster sessions, the local organisers had arranged several additional events. For many people with loyalties on the wrong side of the Pennines, the trip to Old Trafford will have been a highlight, whilst for others the opportunity to talk science and socialise with friends old and new in the many bars, pubs, and restaurants close to the accommodation will have been appreciated. At the conference banquet, Prof John Plane gave a heartfelt tribute to his former supervisor and supporter of the GKDG, Dr David Husain ScD. Hopefully everybody left Manchester having enjoyed an excellent conference, and looking forward to next Symposium in Leuven in July 2010.



Professor John Plane

Activities for 2009

Atmospheric Chemistry Forum – 2nd April 2009 Royal Society of Chemistry, Burlington House, London. One important area where the Committee feels that we could do more is in the promotion of careers targeted at potential PhD applicants, current PhD students and postdoctoral workers. The Environmental Chemistry Group of the RSC has had similar views and have put together a workshop on Atmospheric Chemistry including opportunities for presentations and discussions on careers. A promotional leaflet is attached. The GKDG has been involved with initial discussions and applications are welcome from GKDG members. We would like to hold a similar event possibly towards the end of 2009, possibly focusing more at the dynamics/combustion component of the GKDG portfolio. Comments from both industrial and student members of the GKDG would be particularly welcome.



Dr Martin Levy presenting an award to the local organisers

2nd – 4th September Meeting – Heriot-Watt, Edinburgh –

Previous September meetings have generally taken the form of a short standard format meeting. Although these have generally been successful and well attended, it was agreed after general discussion and community soundings at the Manchester GK08 that perhaps we should try something a bit different. In particular, there was considerable support for a student/PDRA workshop on a particular topic, with a short lecture meeting attached. Several ideas for topics were put forward, with particular support for computational and theoretical chemistry for experimentalists. With the rapid growth in availability and use of computational structure codes, and the use of kinetic and dynamical modelling software we hope that this will be of interest to a wide range of the community (kinetics, dynamics, combustion, atmospheric). We expect the format to consist of two days of tutorial lectures on various topics, followed by practical, hands-on introduction to the relevant computational techniques and packages. The final day will be a standard meeting format, with invited speakers and contributed talks.

Leuven 2010

From the 18th - 23rd July of 2010, the Gas Kinetics Group of Katholieke Universiteit Leuven, Belgium, will host the 21st International Symposium on Gas Kinetics. The group there has been active since the early 1970's in experimental and computational research, tackling a wide range of kinetics issues in atmospheric, combustion, plasma and interstellar chemistry. The group was headed by Prof. em. Jozef Peeters until 2006, and is now headed by Prof. Shaun Carl. Dr Luc Vereecken is also a long-standing member of the group, whose current research interests are in the unravelling of tropospheric oxidation mechanisms using advanced quantum mechanical and statistical methods.



Early organized interest in gas kinetics in Belgium probably stemmed from attempting to understand flames and detonations related to the coal-mining industry - the First International Colloquium on Gas Dynamics of Explosions was held in Brussels in 1967. The late Prof. Adolphe Van Tiggelen was probably most instrumental in establishing a strong research interest in gas kinetics in Leuven (and at Université Catholique de Louvain, located in Louvain-la-Neuve). Indeed he was honoured in 1961 with the most prestigious Belgian scientific award, "Prix Francqui", for his important contribution to the understanding of flame processes. Research in flames and combustion is still active at Université Catholique de Louvain under the guidance of Prof. J. Vandooren, who was until recently the Chair of the Belgium section of the Combustion Institute.



The Jubilee lecture theatre - venue for the Polanyi lecture



The University Great Hall – possible banquet venue.



The 'Hotel Professor' – accommodation for our plenary lecturers??

The Local Organizing Committee has already put a lot of work into locating venues and facilities. Matt and Paul visited Leuven and toured (by bike naturally!) several of the venues which are located in the heart of this historic city. We can look forward to a conference in 2010 that promises to be a feast of scientific and cultural excellence and the pictures below give a taste of what we should expect!

Committee

Chair: Prof Paul Seakins (p.w.seakins@leeds.ac.uk),
Secretary: Dr Matt Costen (m.l.costen@hw.ac.uk),
Treasurer: Dr Martin Levy
Members: Dr Carl Percival, Prof Shaun Carl, Dr Christa Fittschen, and Dr George Marston



Shaun and Matt on a tandem outside Castle Arenberg on the Leuven Campus