

Hot Topics in Graphene Based Materials

Programme

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| 1.30 | Malcolm Heggie
(Chair, BCG) | Welcome |
| 1.35 | Pablo Esquinazi
(Dresden) | Magnetic Carbon |
| 2.25 | Johan Carlsson
(FHI, Berlin) | Catalysis by Carbon |
| 3.15 | Tea break and British Carbon Group EGM | |
| 3.45 | Kostya Novoselov
(Manchester) | QED in a Pencil Trace |
| 4.35 | Alan Windle
(Cambridge) | Carbon Nanotubes |
| 5.15 | Discussion | |
| 5.30 | Close | |

The meeting is to be held in the Ada Lovelace room of the Institute of Physics, 76, Portland Place, London

For your place at this free meeting, please email BCG Hon Sec: John Fisher, john.fisher1@btconnect.com by the 6th December.

Graphite has a broad repertoire of extreme physical and chemical properties but has seldom had a starring role in the science world. It has supported metal clusters which perform feats of catalysis, lined fusion reactors, enabled lithium ion battery technology and moderated neutrons in fission reactors.

In recent times this has changed. The single sheets of graphite could be produced curved by pentagons into cage molecules (fullerenes) or rolled into carbon nanotubes. In the last two years finite single and double sheets of graphene have been produced. It turns out that the dynamics of charge carriers in mono-layer and bilayer graphene have extraordinary properties, deriving largely from the fact that they have zero effective mass.

In this meeting, graphene based materials have a starring role and their intriguing new physical and chemical properties, such as ferromagnetism, quantum electrodynamics and inherent catalytic behaviour, get top billing.

This event is organised by the British Carbon Group, an amalgamation of the special interest groups of the Royal Society of Chemistry, the Institute of Physics and the Society of Chemical Industry. The Group organises one or two meetings per year, including the annual NanoteC meetings held at the University of Sussex and elsewhere. Once every decade or so the group is responsible for the organisation of the International Carbon Conference, the last of which was held in Aberdeen this year. It was the biggest ever such conference to be held in Europe. If you are interested in carbon, become a Member today!

The
British Carbon Group