

Nano-Carbon Enhanced Materials (NCEM) Consortium

The 1st Nano-Carbon Enhanced Materials (NCEM-1) consortium has been put forward by the **Centre for Business Innovation Ltd** (www.cfbi.com) in order to provide the consortium members a unique inside into carbon nanotechnologies and an opportunity to address commercialisation challenges. The consortium leader is **Dr Bojan Boskovic** from Cambridge Nanomaterials Technology Ltd.



Prof. Alan Windle from University of Cambridge addressing NCEM delegates at the opening dinner in Trinity Hall in Cambridge.

The NCEM-1 consortium is an opportunity to engage with leading companies in the supply chain and leading world class experts in a commercialisation pathfinder programme for a small fraction of time and total costs of alternatives such as consultancy, meetings, workshops and conferences. The use of nano-carbon materials, such as carbon nanotubes and graphene is a rapidly evolving field and this is an opportunity to influence where it goes and how fast and to facilitate the commercialisation.

The 1st NCEM-1 Cambridge meeting has been held on 18th & 19th April in Downing College and delegates were addressed by leading academics from University of Cambridge and experts in the field of nano-carbon materials: Prof. Bill Milne from Department of Engineering who gave presentation about nano-carbon electronics and Prof. Alan Windle and Dr. Krzysztof Koziol from Department of Materials Science and Metallurgy who presented scientific advances and commercialisation challenges related to carbon nanotube fibre technology. The NCEM-1 consortium members from Nokia Research Centre (UK) and International Copper Association also gave presentation about their vision and challenges related to commercialisation of nano-carbon technology in mobile electronics and copper metal composite applications.

The 2nd NCEM-1 meeting has taken place in Dalmahoy Marriott Hotel and Country Club in Edinburgh on 18th and 19th July 2012, the Scottish Baronial Manor set in 1000 acres of parkland and one of Scotland's premier golfing venues. The morning session started with the Masterclass in NanoSafety delivered by Dr Steve

Hankin and Dr Craig Poland from the Institute of Occupational Medicine from Edinburg. This has been followed by Dr Kyle Kissell, Director of Technology Development from NanoRidge, USA who presented recent development to incorporate highly conductive carbon nanotubes into copper metal that resulted in a composite material with superior properties. His presentation has been followed by presentation from Dr Francesco Bonaccorso from University of Cambridge about graphene applications in electronics and an update about European FP7 NMP 2013 call for collaborative R&D proposals by Dr Bojan Boskovic.

Dr Anna Gergely from Steptoe & Johnson LLP co-hosted the 3rd NCEM-1 meeting on 6th and 7th November in Brussels. She also presented an insight into nanomaterials related regulations in the EU at the meeting. The guest speakers were also Dr David Arthur CEO of the SWeNT in the US one of the leading SWNT producers and Dr Peter Krueger, Head of Working Group Nanotechnology, Bayer MaterialScience, Germany. Peter is also leading Inno.CNT €90M German Government supported programme about carbon nanotube commercialisation. Christos Tokamanis who is Head of Nano Sciences and Technologies at the European Commission in Brussels gave a presentation about FP7 NMP Theme and an insight into nanotechnologies and nanomaterials within a new Horizon2020.



NCEM-1 delegates at Downing College meeting.

The NCEM-1 consortium members are: University of Cambridge (UK); Nokia Research Centre (UK); ST Microelectronics (Italy); International Copper Association (USA); Nexans (France); Bosch (Germany); Codelco (Chile), National Grid (UK), Trinity College Dublin (Ireland) and Arup (UK).

The consortium is planning to visit centers of excellence in Germany and Ireland early next year. For further details and information how to join please contact NCEM Programme Director at CfBI Dr Bojan Boskovic (Bojan.Boskovic@cfbi.com) or Dr Peter Hewkin, CEO of CfBI (ceo@cfbi.com).