

## Extreme Nanowire, Phase Formation and Molecular Encapsulation in Atomically Thin Capillaries: Practice, Theory and Experiment

### TALK SCHEDULE

10:30am **Arrival and Registration**

#### ***Encapsulated Extreme Nanowires – Experiment and Theory***

11:00am **Introduction** *Crystallography and functional evolution of atomically thin confined nanowires* Jeremy Sloan, Warwick

11:30am **1<sup>st</sup> Plenary Talk** *The ex nihilo prediction of the structure and properties of encapsulated picowires* Andrew Morris, Birmingham

12:10pm **1<sup>st</sup> Invited Talk** *Regulation of electronic structure and transport properties in 1D materials via nano-confinement* Andriy Vasylenko, Warwick

12:40pm LUNCH/POSTERS

#### ***From 2D to 1D to 0D – Atomic Chains, Microscopy and Doping***

1:30pm **2<sup>nd</sup> Plenary Talk** *Polymorphic structures and diversified properties of atomic chains: From 2D to 1D materials* Kazu Suenaga, AIST, Japan

2:10pm **2<sup>nd</sup> Invited Talk** *Inorganic synthesis in carbon nanoreactors: controlled formation of Low-Dimensional Nanomaterials* Thomas Chamberlain, Leeds

2:40pm **1<sup>st</sup> Student Talk** *Decreased photoconductivity lifetime in p-type doped carbon nanotubes studied by optical pump terahertz probe spectroscopy.* Maria Burdanova, Warwick

3:00pm COFFEE/POSTERS

#### ***From 0D to 1D – Phase Change Materials, Molecular Encapsulation and Synthesis***

4:00pm **2<sup>nd</sup> Student Talk** *AR-TEM and STEM studies of encapsulated PCMs in narrow to medium diameter SWCNTs* Charlotte Slade, Warwick

4:20pm **3<sup>rd</sup> Plenary Talk** *Reactions of molecules promoted by the electron beam in TEM: a tool for the discovery of new chemistry* Andrei Khlobystov, Nottingham

5:00pm **Finish/Informal Discussions**