



Applications are invited for the following a PhD studentship for the following project:

The viscoelastic properties of nanosheet networks

The position will be based with *the Soft Matter group* at the School of Physics, Trinity College and be part of the Engineered functional materials platform within the Advanced Materials and Bioengineering Research Centre (AMBER) centre.

Summary of project

Nanosheets, such as graphene, can be added to polymers to create nano-composites which act as highly sensitive strain sensors. This behaviour is controlled by the structure of the nanosheet network inside the matrix, which determines both the electrical transport and the mechanical (rheological) properties. In this project, the student will characterise the rheological properties of these sensors for various nanosheets and explore how the mechanical properties of the sheets and the structure influence the mechanical response. The goal is to understand and tune the mechanical properties of these sensors.

The ideal applicants will have a 1st Class Honours Bachelor's degree in *physics*.

The researcher will work closely with other members of a multidisciplinary project team. Excellent written and oral communication skills are essential.

How to apply:

CVs with the names and addresses of three referees should be submitted to:

Prof. Matthias Möbius

Email: mobiusm@tcd.ie

Positions will remain opened until filled but preferred start date is *September 2 2019*. Only short-listed applications will be acknowledged.

This position is funded by the SFI-research centre AMBER.

The AMBER research centre, as a community of researchers, welcomes its responsibility to provide equal opportunities for all. We are actively seeking diversity in our research teams and particularly encourage applications from underrepresented groups.