

The Laboratory of Materials and Interface Chemistry at the Eindhoven University of Technology has a vacancy (**vacancy number V37.1470**) for a

PhD Student (Marie Curie Fellowship)

for the research project

Next generation 3D nanoscale analysis for complex organic materials.

Project: The project aims at developing the next generation of electron tomography for carbon-based and/or micrometer thick samples. Based on scanning transmission electron microscopy (STEM) the nanoscale organizational features of polymer nanocomposites will be studied which includes (1) Improving the understanding of the relevant contrast mechanisms in carbon-carbon systems, (2) Analysis of interfaces between fillers such as carbon black, carbon nanotubes or grapheme and the polymer matrix, (3) Exploring the limits for volume analysis of micrometer thick samples and determining the practical resolution/thickness dependencies. (4) Utilizing STEM tomograms for quantification of nanoscale network morphologies by image analysis.

Requirements: We are looking for an enthusiastic academically qualified physical chemist or material scientist with a strong interest in 3D nanoscale characterization by electron microscopy. The candidate should have affinity to multi-disciplinary and multi-analytical problems. Existing experience in electron microscopy, electron tomography, image analysis and ultramicrotomy is welcome. Given the scope of the project and the need for a close collaboration with the other team members as well as with the industrial partner's excellent communicative skills and the ability to work in a team with chemists and physicists are prerequisites.

Appointment and Salary

The contract period is 4 years with critical evaluation after the first year. The salary is according to the "Collective Employment Agreement Dutch Universities". A salary as usual for a PhD student in the Netherlands is offered, starting at € 2042,-- gross per month. Moreover 8% bonus share (for vacation) is provided.

More information on the PhD positions can be found at: <http://jobs.tue.nl/nl/job/phd-student-next-generation-3d-nanoscale-analysis-for-complex-organic-materials-140534.html> or obtained from Prof. dr. G. de With (G.deWith@tue.nl +31-40-247 4947) or Dr. H. Friedrich, (H.Friedrich@tue.nl +31-40-247 3041),

For application please contact:

Mrs I. Scholten-Kamstra
Eindhoven University of Technology
Laboratory of Materials and Interface Chemistry
Postbus 513, NL-5600 MB EINDHOVEN
Phone: +31 40 2473034; Fax: +31 40 243 6999
E-mail: i.j.scholten-kamstra@tue.nl