NanoTOES – an Initial Training Network under the PEOPLE Programme of the 7th Framework Programme – is offering a total of 11 PhD positions and 2 postdoctoral positions.

The members of the NanoTOES consortium are 12 partner organizations, including universities, non-university research institutions and industry, which will perform a joint study on the impact of Nanomaterials on Health and Environment. The scientific objectives of NanoTOES are to a) Identify mechanisms by which nanomaterials induce cellular stress and immune activation; b) Correlate size, shape, composition, coating of nanomaterials with defined cellular responses; c) Distinguish cell-specific from general cellular responses for cells from selected tissues; d) Identify the relevance of bystander substances and contaminants for nanotoxicity; e) Analyse the influence of biological compounds and entities on engineered nanomaterials; f) Develop and modify laboratory methods to allow their application in the work-place and in the environment.

Positions are expected to be filled with a starting date of 1st May 2011. Early stage researchers should have at the time of recruitment less than 4 years of experience and not hold a doctoral degree. These positions will offer full-time employment for 36 months and are to be combined with enrolment into an university programme with can lead to a PhD. Experienced researchers should have at the time of recruitment less than 5 years of experience, should hold a doctoral degree, and will be full-time employed for 24 months. Both types of positions offer cutting-edge research in leading laboratories dedicated to investigating the safety and impact of nanomaterials for health and environment. Inquiries can be made to the responsible supervisors as indicated below.

Salaries and terms of employment will be in accordance with the rules of the European Commission (http://ec.europa.eu/research/mariecurieactions/careers en.htm). According to these rules, applicants must be nationals of a country other than that of the host organization where they will carry out the project. At the time of selection, the researcher may not have resided or carried out his/her main activity in the country of the host for more than 12 months in the 3 years immediately prior to his/her appointment. Short stays such as holidays are not taken into account.

Applications will be evaluated according to the following criteria: Successful completion of a relevant study at Master or comparable level, quality of performance in previous studies, commitment to excellence in research, expected benefits from participation in this project.

Applicants should send directly to the responsible supervisor: CV, list of publications (if any), copy of academic degrees received, contact information for two referees and a one-page statement of the applicants expected contribution to and benefit from participation in NanoTOES.

Project titles and contact information:

1. Albert Duschl, University of Salzburg, Austria – www.uni-salzburg.at/tapir
New cellular and cell-free models for assessing NP-induced oxidative stress (PhD); Identification of specific parameters which influence the impact of nanoparticles on human cells (Postdoc)
Inquiries: albert.duschl@sbg.ac.at

2. Diana Boraschi, CNR, Pisa, Italy - www.itb.cnr.it

In vitro models of acute vs. chronic/repeated exposure for assessing nanoparticle-induced inflammation (PhD)

Inquiries: Diana.boraschi@itb.cnr.at

3. Hagen von Briesen, Fraunhofer, St. Ingbert, Germany – www.ibmt.fraunhofer.de

Sensitive chip-based assays to investigate physical, chemical and biological factors regarding their influence on the cell biological effects of nanoparticles (PhD)

Inquiries: hagen.briesen@ibmt.fraunhofer.de

4. Iseult Lynch, University College Dublin, Ireland – www.cbni.eu

Connection of the nature of nanoparticles in biofluids to the cellular uptake, translocation & subsequent biological impacts (PhD)

Inquiries: Iseult.Lynch@cbni.ucd.ie

5. Claus Svendsen, NERC, Wallingford, UK - www.ceh.ac.uk

Investigating the role of metal binding protein in nanotoxicology using a laboratory model organism (PhD)

Inquiries: csv@ceh.ac.uk

6. Maria Dusinska, NILU, Kjeller, Norway – www.nilu.no

Assessment of genotoxic potential of nanoparticles, oxidative DNA damage and repair (PhD)

Inquiries: mdu@nilu.no

7. Michael Riediker, Institute for Work and Health (IST), Lausanne, Switzerland – www.i-s-t.ch

Influence of low-volatile organic pollutants on the intrinsic ROS-production capacity (PhD)

Inquiries: michael.riediker@hospvd.ch

8. Emilia Madarasz, IEM-HAS, Budapest, Hungary – www.koki.hu/cdnb

Interaction of nanoparticles with neural stem- and tissue-type cells (PhD)

Inquiries: madarasz.emilia@koki.hu

9. Victor Puntes, ICN, Barcelona, Spain – <u>www.icn.cat</u>

The life of nanoparticles in contact with biological media and entities (PhD)

Inquiries: victor.puntes@icn.cat

10. Colin Wilde, Avanti Cell Science Ltd, Ayr, UK: www.avanticell.com

Standardised assay platforms for cell-based nanosafety testing (Postdoc)

Inquiries: Colin.Wilde@avanticell.com

11. Markus Pesch, Grimm Aerosol GmbH, Ainring, Germany - www.grimm-aerosol.com

Biological assays for on-site application (PhD)

Inquiries: mp@grimm-aerosol.com

12. Matthias Voetz, Bayer Technologies, Wuppertal, Germany – www.bayertechnology.com

Synthesis and characterization of nano-objects for health safety and environmental investigation (PhD)

Inquiries: matthias.voetz@bayer.com