

Workshop “Detection of Nanoparticles” 29.11.2013 Brandenburg University of Technology Cottbus - Senftenberg

09:30 – 10:00	Registration and welcome coffee
10:00 – 10:10	Welcome address
10:10 – 10:40	Dr. Kai Dirscherl (Danish National Metrology Institute, Denmark) <i>Why it is important to detect nanoparticles.</i>
10:40 – 11:10	Dr.-Ing. Christof Asbach (Institute of Energy and Environmental Technology IUTA e.V., Germany) <i>A review of existing analytical techniques for detection of nanoparticles.</i>
11:10 – 11:40	Dr. Rudolf Reuther (ENAS Environmental Assessments, Sweden) <i>Toxicological aspects of nanomaterials.</i>
11:40 – 12:10	Dr. Dora I.A. Pereira (MRC Human Nutrition Research, Elsie Widdowson Laboratory, Cambridge, UK) <i>Nanoparticles in the gut: Interaction with cells and bacteria.</i>
12:10 – 12:30	Prof. Alexei Kornyshev (Imperial College London, UK) <i>Nanoparticles and terror attacks.</i>
12:30 – 13:30	Lunch
13:30 – 13:45	Dr. A. Demetriadou (Imperial College London, UK) <i>Theory of plasmonic detection of nanoparticles.</i>
13:45 – 14:00	Prof. V. Mirsky (BTU Cottbus-Senftenberg, Germany) Dr. A. Zybin (ISAS Leibniz-Institut Dortmund, Germany) <i>Plasmonic detection of nanoparticles. Project Nanodetector.</i>
14:00 -14:15	Dr. I. Sidorenko (Mivitec GmbH, Germany) Dr. A. Kuzmichev (ISAS Dortmund, Germany) Dr. S. Nizamov (BTU Cottbus-Senftenberg, Germany) <i>Image analysis in plasmonic detection of nanoparticles.</i>
14:15 – 14:40	Dr. S. Cattaneo (CSEM Centre Suisse d'Electronique et de Microtechnique SA, Switzerland) <i>SmartNano - Sensitive measurement, detection, and identification of engineered nanoparticles in complex matrices.</i>
14:40 – 15:05	Prof. A. Thünemann (BAM Federal Institute for Materials Research & Testing, Germany) <i>INSTANT technology for detection of Nanoparticles.</i>
15:05 – 15:20	Coffee break
15:20	OPTOLITA (Lithuania) <i>Demonstration of NANODETECTOR device</i>

The project NANODETECTOR is based on the new phenomenon discovered recently by a project partner: single objects of a sub-wavelength size give unexpectedly high optical signals in surface plasmon resonance microscopy. This provides a unique possibility for ultrasensitive on-line detection of single engineered nanoparticles.

Attendance of the workshop is free of charge. For planning the refreshments please register online under: www.zmdb.de/nanodetector/.