

Summary of the event on February 19th, 2016

Due to its various possibilities of applications, nanotechnology is considered as key technology of the 21st century. To exclude potential risks of nanomaterials for users, accompanying toxicological investigations are urgently needed. For that reason SEON (Section of Experimental Oncology and Nanomaterials) organized the informative meeting “nanotoxicology- research for safe application of nanoparticles in biomedicine and assessment of environmental effects” (February 19th, 2016), supported by the Federal Ministry of Education and Research (BMBF). Here, the current state of research of the sensitive issue “nanotoxicology” was discussed. The event with about 200 participants took place in the Rudolf-Wöhrl Hörsaal of the University Hospital Erlangen. As speakers well-respected national and international scientists presented medically as well as environmentally relevant aspects of nanoparticles. Thus, we were very happy to welcome Dr. Scott McNeil (Nanotechnology Characterization Laboratory, Frederick, MD, USA), Prof. Dr. Bengt Fadeel (Karolinska Institutet, Stockholm, Schweden), Dr. Peter Wick (EMPA, St. Gallen, Switzerland), Dr. Klaus-Michael Weltring (Nano-Bioanalytik-Zentrum Münster, Germany), und Dr. Christoph Steinbach (DECHEMA, Frankfurt a. M., Germany) as speakers for our event. Also, numerous honored guests and longtime cooperation partners of SEON participated, so that there was an active interdisciplinary scientific exchange in the coffee breaks and at the posters. Also, the public used the opportunity to discuss directly with the experts. After the talks, guided tours through the SEON laboratories were offered to illustrate the presented facts also in “real-life”. Here, the workflow of SEON of the synthesis and physicochemical characterization of nanoparticles, the toxicological investigations, and application *in vivo* were explained. Altogether, we were very happy to receive so much positive feedback from the participants and the visitors!



Impressions of the informative meeting „Nanotoxicology - research for safe application of nanoparticles in biomedicine and assessment of environmental effects“. **A)** Rudolf-Wöhrl Hörsaal. **B)** Speakers and honored guests (from left): Prof. Dr. Dr. h. c. H. Iro (Medical Director of the UK Erlangen, Head of the ENT-Department), Dr. O. Hünnerkopf (MdL, Deputy of the Committee for the Environment and Consumer Protection at the Bavarian State Parliament), C. Matschl (retired MdL), Dr. S. Balleis (former mayor of the city of Erlangen). **C)** Speakers (from left): Prof. Dr. C. Alexiou (ENT-Department Erlangen, SEON, Erlangen), Dr. S. McNeil (Nanotechnology Characterization Laboratory, Frederick, MD, USA), Prof. Dr. B. Fadeel (Karolinska Institutet, Stockholm), Dr. C. Janko (ENT-Department, SEON, Erlangen), Dr. P. Wick (EMPA, St. Gallen), Dr. K. M. Weltring (Nano-Bioanalytik-Zentrum, Münster), Dr. C. Steinbach (DECHEMA, Frankfurt a. M.).