

Biographies



Jürgen Angerer received his Ph.D. degree in organic chemistry in 1971 from the University of Erlangen-Nuremberg. He was then appointed as a head of the department of analytical chemistry of the Institute of Occupational Medicine in Hamburg. Since that time he published more than 400 manuscripts in the field of biological monitoring of toxic substances in occupational and environmental medicine. Using GC, GC/MS, HPLC, HPLC/MSⁿ, AAS and voltammetry he and his Ph.D. students worked among others on organic solvents, pesticides, PAHs, organochlorine compounds, Hb-, DNA-adducts, metals etc. Because of these broad activities in biological monitoring he is a member of the national committees for setting limit values for toxic substances like the German “MAK(TLV)-Commission” of the Deutsche Forschungsgemeinschaft (DFG) and the Humanbiomonitoring Commission of the Federal Agency of the Environment. Chairing the working group analytical chemistry of the senate commission of the DFG he is since 1976 editor of the collection of reliable and reproducible analytical methods “Analyses of Hazardous Substances in Biological Materials” of the DFG

which is published in Wiley-VCH. This collection covers the whole field of biological monitoring in occupational and environmental medicine according to the state of the art. In 1989 he was appointed Professor from the Senate of Hamburg. He then went to the Institute of Occupational and Environmental Medicine of the University in Erlangen-Nuremberg. Prof. Angerer is moreover member of the editorial board of some scientific journals dealing with chemical analyses as well as occupational and environmental medicine. He is a member of the board of the International Society of Environmental Medicine. As an expert in the field of analyses and evaluation of toxic substances he is consulting national and European authorities. Since 20 years he is one of the organisers of an external quality assessment scheme for toxicological analyses in biological materials with more than 150 laboratories world wide regularly taking part.



Heiko Udo Käfferlein received his Ph.D. degree in chemistry and analytical toxicology in 2000 from Friedrich-Alexander University Erlangen, Germany. His current research projects at the CIIT Centers for Health Research, Research Triangle Park, NC, USA, are focused on the mechanisms of tumor formation via genotoxic and cytotoxic pathways. Particular interest is on chemicals, which can react with macromolecules either directly or after metabolic activation to reactive intermediates. A key aspect of the research is to identify target molecules on the cellular level and to develop new strategies in biological monitoring using state-of-the-art analytical techniques (e.g., GC/MSⁿ and HPLC/MSⁿ) or post-genomic analytical methods (e.g., 2D gel electrophoresis combined with image analysis, MALDI-TOF-MS, protein chip arrays, and HPLC/MS/MS using isotope coded affinity tags). The main goal is to identify early biomarkers of disease. A wide variety of agents serve currently as model compounds including both, chemicals of occupational and environmental importance. Beside adduct dosimetry and protein expression analysis, regular biological monitoring such as the de-

termination of the parent compound or its metabolites in blood and urine is also carried out to study the relationships between biomarkers of exposure and effect.