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EDUCATION

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| 2000 | <u>Habilitation</u> (Dr. rer. nat. habil. and <i>venia legendi</i> in Pharmaceutical Chemistry, 07/02, University of Heidelberg); Thesis: <i>"New lipidic drug targeting systems for the treatment of cancer patients"</i> |
| 1992 | <u>Ph.D. (Biochemistry)</u> (06/92, Max-Planck-Inst. for biophysical Chemistry, Göttingen); Thesis: <i>"Synthesis of enantiomerically pure analogs of sphingomyelin and their use for studying the substrate recognition of phospholipase C and sphingomyelinase"</i> |
| 1989 | <u>Master of Chemistry</u> (02/89, University of Göttingen, Germany); Thesis: <i>"Synthesis of optically pure dimethylacetals of glyceraldehydes from D-mannitol"</i> |
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CURRENT AND PREVIOUS POSITIONS

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| 2015 - | Research Scientist, Dept. Head, Andreas Hettich GmbH & Co KG, Freiburg, Germany |
| 1993-2014 | Research Scientist, Dept. Head, Tumor Biology Center, Freiburg, Germany |
| 2009- | Prof. (apl.), Pharmaceutical Institute, University of Freiburg, Freiburg, Germany |
| 2001-2008 | Prof. (apl.), Faculty of Pharmacy, University of Heidelberg, Heidelberg, Germany |
| 1992-1993 | Post. Doc. Max-Planck-Inst. for biophysical Chemistry, Göttingen, Germany |
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Teaching activities at the Universities of Freiburg & Heidelberg (Pharmaceutical Chemistry, Stereochemistry, Instrumental Analysis, Nutrition, New Pharmaceutical Strategies in Oncology).

Research interests: Pharmaceutical Technology, Liposomes, Lipid Nanoparticles (LNP), Phospholipids, Lipid-metabolism, Nutrition, Oncology

Research highlights:

- Dual centrifugation as a new tool for sterile nanoparticle preparation
- Role of LysoPC in cancer metastases and human lipid metabolism
- Omega-3 fatty-containing phospholipids (marine PL) to prevent metastases
- Development of new liposomes for cancer treatment (e.g. Gemcitabine-Liposomes)
- Development/Synthesis of alkylphosphocholines (APC) for anticancer research
- Development of lipid-based phospholipase A₂ inhibitors
- Combinatorial synthesis of cationic lipids for gene transfer

Awards: Tecan-Innovation price (2004), Freiburger Innovationspreis (2017), Innovationspreis Baden-Württemberg (2019).