Curriculum Vitae

Prof. Dr. rer. nat. habil. Markus Biesalski

W3-Professor
Laboratory of Macromolecular Chemistry and Paper Chemistry

Department of Chemistry
Technische Universität Darmstadt
Alarich-Weiß-Str. 8
64287 Darmstadt
Germany

www.chemie.tu-darmstadt.de/map
Email: biesalski@tu-darmstadt.de

Employment

since **09/2008**: **Full-Professor** (W3, Macromolecular Chemistry & Paper Chemistry), Technische Universität Darmstadt, Department of Chemistry, Germany
2007 – 2008: **Substitute Professor** (W3), Dept. of Microsystems Eng., Univ. Freiburg, Germany
2002 – 2008: **Assistant Professor** (C1); Dept. of Microsystems Eng., Univ. Freiburg,Germany
2002 – 2007: **Head of Emmy-Noether Research Group**, DFG, Univ. Freiburg, Germany
2000 – 2002: **Postdoctoral Assistant**, Dept. of Chem. Eng. & Materials Research Lab, UC Santa Barbara, USA.
1996 – 1999: **Scientific Coworker** Max-Planck-Institute for Polymer Research, Mainz, Germany

Education

University of Freiburg, Germany
06/2008: **venia legendi** (Microsystems Engineering; Chemistry & Physics of Interfaces),

University of California, Santa Barbara, USA
2000 – 2002: **Postdoctoral Associate** with Prof. Matt Tirrell

Max-Planck-Institute for Polymer Research, Mainz, Germany
1997 – 1999: **Ph.D. in Chemistry**, with Prof. Jürgen Rühe

University of Mainz, Germany
1990 – 1996: Chemistry Studies, **Diploma in Chemistry**

Activities, Fellowships, Affiliations

since **2018**: Elected chair of the Zellcheming Hauptausschuss, Zellcheming e.V., Germany
since **2016**: Elected Referee of AiF (German Federation of Industrial Research Association)
2016: Best presentation award, Tappi Paper Physics Conference, Darmstadt
2016: First Price Entrepreneurship (Highest Gründerpreis, TU Darmstadt)
since **2013**: Vice spokesperson, Cluster *From Materials to New Products*, TU Darmstadt
since **2013**: Mentor, *Highest Innovation-Center*, TU Darmstadt
2010-**2014**: Director, Institute of Technical and Macromolecular Chemistry
since **2011**: Principle Investigator, DFG Excellence Cluster *Smart Interfaces* (CSI), TU Darmstadt
since **2010**: Coordinator and spokesperson, Excellency Research Center *Soft Control*, TU Darmstadt.

since **2009**: Editorial Board Member, Soft Materials
since **2008**: Member, Cluster Paper & Fiber, CPF Munich
2007-2011: Editorial Board Member, Open J. Macromolecules
2004-2006: Fellow of Landesstiftung Baden-Württemberg gGmbH
2002–2007: Emmy-Noether Fellow of the DFG
2000–2002: Postdoctoral Fellowship of the DFG
1999: Ph.D. with distinction ("summa cum laude")

member of: ACS, GDCh, DGM, DHV, CPR

Research Core-Expertise
Paper Chemistry & Paper Engineering
Functional Paper
Paper Microfluidics
Functional Biopolymers
Surface Modification using Polymer thin films
Advanced analytics with paper based materials

Publications & Patents (as of July 2018, google scholar, web of science)
Publications: > 90
Patents: 6
h-index: 24

Selected Publications

A. Böhm, M. Biesalski, *Paper-based microfluidic devices: A complex low-cost material in high-tech applications*, MRS Bulletin, 42(5), 356-364 (2017).

M. Jocher, M. Gattermayer, HJ. Kleebe, S. Kleemann, M. Biesalski, *Enhancing the wet-strength of lignocellulosic fibrous networks using photo cross-linkable polymers*, Cellulose 22(1), 581-591 (2015).

S. Bump, A. Böhm, L. Babel, S. Wendenburg, F. Carstens, S. Schabel, M. Biesalski, and T. Meckel – *Spatial, spectral, radiometric, and temporal analysis of polymer-modified paper substrates using fluorescence microscopy. Cellulose*, 22 (1),73-88 (2015).

A. Böhm, F. Carstens, C. Trieb, S. Schabel, M. Biesalski, *Engineering microfluidic paper: effect of fiber source and paper sheet properties on capillary driven fluid flow*, Microfluid Nanofluid 16, 789-799 (2014).

A. Böhm, M. Gattermayer, C. Trieb, S. Schabel, D. Fiedler, F. Miletzky, M. Biesalski, *Photo-attaching functional polymers to cellulose fibers for the design of chemically modified paper*, Cellulose 20(1), 467-483 (2013).