

CV of Prof. Stephan Barcikowski

Head of Chemical Technology I
Faculty of Chemistry and
Center for Nanointegration Duisburg-Essen (CENIDE)
University of Duisburg-Essen (UDE)
Universitätsstraße 7, 45141 Essen, Germany
stephan.barcikowski@uni-due.de / Tel: +49 201 18 - 33150
www.uni-due.de/barcikowski
Researcher ID: [I-4754-2012](https://orcid.org/0000-0002-9739-7272)
ORCID ID: [0000-0002-9739-7272](https://orcid.org/0000-0002-9739-7272)
Scopus ID: [56219696600](https://scopus.com/authid/detail.url?authorID=56219696600)



Short Bio

Stephan Barcikowski studied chemistry in Braunschweig and Hannover, and made his PhD in Materials Science and Engineering. At the Laser Zentrum Hannover, Barcikowski built up the Nanomaterials group, and later led the institute's Materials Processing department. In 2010, he co-founded the company Particular GmbH. Since 2011, he chairs the Institute of Chemical Technology I at the University of Duisburg-Essen. Stephan Barcikowski has more than 300 reviewed papers and patents, cited over 9,000 times, including an open access handbook that has been downloaded several thousand times. He launched the scientific video channel 'nanofunction' on youtube with more than 85,000 viewings, and served editing and guest-editing several journals. His research addresses laser synthesis and processing of particles for catalysis, biomedicine, and additive manufacturing.

Postgraduate Professional Career

since 2011	Full Professor, Chemical Technology, Faculty of Chemistry, UDE
2010–2011	Head of Department Materials and Processes, with 25 scientific staff, Laser Zentrum Hannover e.V.
2004–2010	Head of Group Nanomaterials, with 12 scientific staff, Laser Zentrum Hannover e.V.
1998–2004	Scientific Employee, Laser Zentrum Hannover e.V.
1998	Scientific Employee, Rofin Sinar Laser AG

Advanced Academic Qualifications

2011	Habilitation and Venia legendi (Chemical Technology, Mentor Prof. T. Scheper), Leibniz University of Hannover
2004	PhD with honors (Dr.-Ing., mit Auszeichnung, Mechanical Engineering, Supervisor: Prof. Dr. Ing. Dr.-Ing. E.h. mult. Dr. med. h.c. H. Haferkamp), Leibniz University of Hannover

Academic Education

1999–2000	Accreditation Studies of Engineering (Promotionszulassungsstudium), Leibniz University of Hannover
1995–1998	Studies of Chemistry (Diplom), Leibniz University of Hannover
1991–1995	Studies of Chemistry (Vordiplom), Technical University of Braunschweig

Research Experience Abroad

2017	Visiting Professor (6 months), Chemistry Department, University of Padua, Italy
2003–2007	Guest Scientist (10 weeks, several visits), Commonwealth Scientific and Industrial Research Organisation (CSIRO), Geochemistry Group, Sydney, Australia

Awards and Recognition (selection)

2021	Berthold Leibinger Innovation Award
2019	Call for W3 Professorship, Leibniz University Hannover, declined
2013	Best Faculty Teacher (Lehrpreis), Faculty of Chemistry, Universität Duisburg-Essen
2009	1st price of national business plan competition "Medical Technology", Hannover
2006	1st price for scientific work (dissertation), Foundation of Industrial Research

Coordinated Research Programs (selection)

- since 2020 Member and Steering Committee, DFG CRC/TRR 247 *Hysteresis Design of Magnetic Materials for Efficient Energy Conversion*
- since 2020 Member and Steering Committee, MERCUR Research Training Group *Präzisionsprotonentherapie*
- since 2018 Coordinator, DFG SPP 2122 *New materials for laser-based additive manufacturing*
- since 2018 Member, DFG CRC/TRR 247 *Heterogeneous Oxidation Catalysis in the Liquid Phase*
- 2007–2012 Member, DFG Excellence Cluster REBIRTH - *From Regenerative Biology to Reconstructive Therapy*
- 2007–2011 Member, DFG CRC/TRR 37 *Micro and Nano Systems in Medicine*
- 2011–2017 Member, DFG Priority Research Program (SPP) 1313 *Nano-Bio-Responses*
- 2009–2015 Member, DFG Priority Research Program (SPP) 1327 *Optically generated nanostructures*

Technology Transfer

- 2020 Spin-Off AutoProNano, NRW Start-Up Funds, Mentor & Host (www.autopronano.eu)
- 2009 Co-founder of the company Particular GmbH (www.particular.eu)

Service to the Scientific Community

- 2014 -2022 Editor, Applied Surface Science
- since 2011 Guest editorships for J.PhysChemC, J.Coll.Int.Sc, ChemPhysChem, Mat. Des.
- since 2020 Steering committee, PhD Course in Materials Science and Nanotechn., Univ. of Catania, Italy
- since 2020 Advisory Board, DFG RTG 2610 *Innovative Retinal Interfaces for Optimized Artificial Vision*

Activities in Scientific and University Organizations

- since 2019 Member, International Max Planck Research School SurMat
- since 2019 Head, Senate Commission of Finance and Development Planning, UDE
- since 2019 Advisory senate member, UDE
- since 2016 Scientific Board Member, Materials Chain, Strategic Research Programme of the University Alliance Ruhr (Bochum, Dortmund, Duisburg-Essen)
- 2016–2018 Deputy Senate Member, UDE
- 2015–2018 Scientific Director, Center for Nanointegration Duisburg-Essen (CENIDE), UDE
- 2014–2015 Deputy Scientific Director, Center for Nanointegration Duisburg-Essen (CENIDE), UDE
- 2014–2020 Board Member, Center for Nanointegration Duisburg-Essen (CENIDE), UDE
- since 2011 Member, Center for Nanointegration Duisburg-Essen (CENIDE), Zentrum für Medizinische Biotechnologie (ZMB), and Zentrum für Wasser- und Umweltforschung (ZWU), UDE