

Curriculum Vitae Prof. Dr.-Ing. habil. Manfred Krafczyk

General Information

Name: Krafczyk, Manfred

Date of birth: 24.02.1965

Address: Institut für rechnergestützte Modellierung im Bauingenieurwesen
Institute for Computational Modeling in Civil Engineering
TU Braunschweig, Pockelsstr. 3, 38106 Braunschweig, Germany

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Position: Full Professor (C4), Head of Institute

Education

1987 – 1991 TU Dortmund, Physics Diploma, Advisor Prof. Dr. Mario Markus,
Max-Planck-Institut für molekulare Physiologie

Degrees

Ph.D. Dr.-Ing. (with honors) „Simulation von Strömungen mit Gittergasmethoden“,
TU Dortmund, 1995, Advisor: Prof. Dr. rer. nat. Ernst Rank

Professorial thesis Bauinformatik (Computer Science in (Civil) Engineering), TU München, 2001,
Reviewers: Prof. Dr. rer. nat. Ernst Rank TU München
Prof. Dr.-Ing. Rainer Helmig, U. Stuttgart

Professional Career

1991-1994 Ph.D. scholarship Siemens AG

1995-1997 PostDoc, Chair for Numerical Methods, TU Dortmund

1997-2001 Assistant Prof. (tenure), Chair Bauinformatik, TU München

since 2001 Full Professor and Head of Institute for Computational Modeling in Civil Engineering,
TU Braunschweig

Academic Administrative Activities

2002-2020 Speaker of the international Master program *Computational Sciences in Engineering*
(CSE) at TU Braunschweig

2003-2006 Member of Public Relations Committee of Civil Engineering Department

2003-2006 Member of Infrastructure Committee of Civil Engineering Department

2003-2011 Member of Sports Committee of TU Braunschweig

since 2003 Head of four Professorial Appointment Committees and member of thirteen more

2014-2015 Member of Sports Committee of TU Braunschweig

2003-2004 Member of Infrastructure Committee of TU Braunschweig

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| 2004-2006 | Member of IT & Communication Committee of TU Braunschweig |
| 2006-2007 | Provisional head of Gauss-Computing Center at TU Braunschweig |
| 2005-2017 | Member of Department Council |
| since 2006 | Head of departmental IT-Committee |
| 2006-2016 | Organizer of Double-Degree-Master Program between department of Civ. Eng. and University of Rhode Island |
| 2007-2013 | Department representative for International Affairs |
| 2007-2009 | Speaker of Gauss-Center for Modelling and Simulation at TU Braunschweig |
| 2011-2018 | Member of tubs.CITY |
| 2009-2013 | Member of IT-Commission at TU Braunschweig |
| since 2013 | Member IT-Steering Committee at TU Braunschweig |
| 2011-2019 | Member of Senate of TU Braunschweig |
| 2011-2013 | Member of advisory council for the Language Center of TU Braunschweig |
| 2012-2014 | Senator of Niedersächsische Technische Hochschule (NTH) |
| 2012-2013 | Member of advisory Council for Energy Awareness at TU Braunschweig |
| 2011-2012 | Dean of the department of Architecture, Civil Engineering and Environmental Sciences |
| 2011-2012 | Member Board of Trustees <i>Vereinigte Stiftung der Technischen Universität Carolo-Wilhelmina zu Braunschweig</i> |
| 2013-2014 | Vice-Dean of the Department of Architecture, Civil Engineering and Environmental Sciences |
| 2015-2019 | Vice-Speaker DFG-network of TU Braunschweig |
| 2016-2019 | Vice-Speaker of MUSEN-Center (Mechanics, Uncertainty and Simulation in Engineering) at TU Braunschweig (https://www.tu-braunschweig.de/en/musen) |
| since 2020 | Speaker of MUSEN-Center |
| 2016-2020 | Speaker of HPC-User Council of TU Braunschweig |
| since 2020 | Vice-President Digital Affairs and Technology Transfer TU Braunschweig |
| since 2020 | Head of Advisory Committee University Library TU Braunschweig |
| since 2020 | Head of IT-Steering Committee TU Braunschweig |
| since 2020 | Member Supervisory Board Energie-Forschungszentrum Niedersachsen (EFZN) |
| since 2020 | Member Steering Committee ForschungRegion Braunschweig |
| since 2020 | Member LHK-Work Group Digital Affairs (LHK= State University Conference Lower Saxony) |
| since 2020 | Member LHK-Work Group Third Mission |
| since 2020 | Member Administrative Board Braunschweiger Hochschulbund |
| since 2020 | Member of Steering Committee NFDI4Ing (https://nfdi4ing.de) |
| since 2021 | Member CIO-Board TU9 (https://www.tu9.de/) |
| since 2021 | Task Force Infrastructures in CESAER (Conference of European Schools for Advanced Engineering Education and Research) |
| since 2021 | Member AG IT-Organisation und Strategy LANIT (Landesarbeitskreis Niedersachsen für Informationstechnik / Computing Centers Lower Saxony) |
| since 2021 | Member of Strategy Board National High-Performance Computing NHR (Gem. Wiss. Kommission des Bundes und der Länder GWK) |

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| since 2020 | Board Member Research Airport Braunschweig |
| since 2020 | Board Member Metropolregion |
| since 2020 | Board Member TU9-Council Innovation & Transfer |
| since 2020 | Board Member ForschungRegion Braunschweig |
| since 4/2022 | Board Member EUA Digital Transformation Steering Committee |

Activities in Teaching & Research

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|-----------------|--|
| 08/1997-11/1997 | Guest lecturer at Inst. for Biomechanics (Prof. Dr. Miguel Cerrolaza, Universidad Central de Venezuela, Caracas, Venezuela) |
| 09/1999-11/1999 | Guest lecturer at Inst. für Terrestrische Ökologie (Prof. Dr. Hannes Flühler, ETH Zürich) |
| 06/2000-08/2000 | Visiting scientist at the Institute for Computer Applications in Science and Engineering (ICASE), NASA Langley, Virginia, USA |
| since 2001 | Reviewer for DFG, EU (e.g. H2020-FETOPEN 2016-2021), BMBF, FFG, WWTF, NSF, PRACE and other institutions |
| 2008 - 2017 | Member of ISAP-reviewer board of DAAD |
| since 2004 | Co-chairman and Scientific Committee member of <i>Int. Conference on Mesoscopic Methods in Engineering and Science</i> (ICMMES) (www.icmmes.org) |
| 2006-2008 | Member of Technical Committee <i>Civil Engineering and Surveying</i> at ASIIN (Accreditation agency for Ba and Ma study programs in physical sciences, mathematics and engineering) |
| 2008-2010 | Chairman of Technical Committee <i>Civil Engineering and Surveying</i> at ASIIN |
| since 2011 | Ass. Editor <i>Computers & Mathematics with Applications</i> |
| 2011-2021 | Ass. Editor <i>Computers and Fluids</i> |
| 2012-2020 | Ass. Editor <i>Mathematical Problems in Engineering</i> |
| since 2017 | Editorial Board Member <i>J. of Applied and Computational Mechanics</i> |
| 2017-2020 | Editorial Board Member <i>Computation</i> |
| since 2017 | Editorial Board Member <i>Advances in Engineering Software</i> |
| since 2021 | Editorial Board Member <i>ing.grid</i> (https://www.inggrid.org/) |
| 2011-2019 | Board member (Fachkollegiat) of DFG-Fachkollegium 410 (National Research Funding Agency, Chapter Civil Engineering and Architecture) |
| 2011-2017 | Member of Standing Committee of <i>Fakultätentag für Bauingenieurwesen, Geodäsie und Umweltingenieurwesen</i> (FTBGU) |
| 2013-2021 | Vice-Chair National Committee <i>Computational Sciences and Engineering (CSE)</i> |

In addition, I serve as a reviewer for more than forty national and international scientific journals and funding agencies.

Memberships

- since 2008 Braunschweigische Wissenschaftliche Gesellschaft
 (BWG, Academy of Science Lower Saxony)
- since 2009 Windtechnologische Gesellschaft (WtG, Society of Wind Technology)
- since 2010 Working committee Numerical Methods in Wind engineering (WtG)
- since 2012 Gesellschaft für Angewandte Mathematik und Mechanik (GAMM)
- since 2002 German Association for Computational Mechanics (GACM)

Publications

> 100 reviewed journal- und book contributions, h-index (Google Scholar): 46

<https://scholar.google.de/citations?user=yPfq77cAAAAJ&hl=de>

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SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=6603418597>