

# 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  
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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

- 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 *Vereinigte Stiftung der Technischen Universität Carolo-Wilhelmina zu Braunschweig*
- 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
- 2020-2022 Vice-President Digital Affairs and Technology Transfer TU Braunschweig
- Since 06/2022 Vice-President Digital Affairs and Sustainability 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 Member Task Force Infrastructures in CESAER (Conference of European Schools for Advanced Engineering Education and Research)
- since 2022 Member Task Force Sustainability in CESAER
- 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)
2020-2022	Board Member Research Airport Braunschweig
2020-2022	Board Member Metropolregion
2020-2022	Board Member TU9-Council Innovation & Transfer
2020-2022	Board Member ForschungRegion Braunschweig
since 2022	Board Member EUA Digital Transformation Steering Committee
since 2022	permanent guest Ständige Kommission Digitalisierung Hochschulrektorenkonferenz (HRK)

### Activities in Teaching & Research

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) ( <a href="http://www.icmmes.org">www.icmmes.org</a> )
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 &amp; 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> ( <a href="https://www.inggrid.org/">https://www.inggrid.org/</a> )
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 *Fakultätentag für Bauingenieurwesen, Geodäsie und Umweltingenieurwesen* (FTBGU)

2013-2021 Vice-Chair National Committee *Computational Sciences and Engineering (CSE)*

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>