

Curriculum vitae of Karl Schweizerhof

Prof. Dr.-Ing., Institut für Mechanik, University Karlsruhe

born 4. July 1947 in Tübingen, Germany

- Nov. 1971 Diploma in Civil Engineering (Dipl.-Ing.), University Stuttgart (since 1968 scholarship of Studienstiftung des Deutschen Volkes)
- 1971 – 1972 Co-worker in consulting office for structural analysis
- 1972 - 1973 Scholarship at TK Helsinki, Finland (Scholarship of Studienstiftung des Deutschen Volkes)
- 1973 Co-worker in consulting office for structural analysis
- 1974 - 1982 employed at Institute for Structural Analysis, University Stuttgart, Prof. Bornscheuer
- Dissertation 1982 (summa um laude, main advisor Prof. Dr.-Ing. E.Ramm), faculty of civil engineering, University Stuttgart, *Topic of dissertation*: Nonlinear analysis of structures under deformation dependent loading using finite elements
- 1982 - 1984, University of California, Berkeley, Postdoctoral scholarship of DFG
- 1984 - 1986 at Institute for Structural Analysis, University Stuttgart
- Since march 1986 professional activities: General analysis in civil and mechanical engineering, Finite Element software, setting up of a working group in FEM for large deformation analysis until 2001 together with Dr.Müller, CADFEM GmbH
- Dec. 1987 – Sept. 2012 Professor, University Karlsruhe, Faculty for civil engineering and geodesy
1987 – 1993 C3 (Associate) Professor for plate and shell structures, Institute for Structural Analysis,
1993 - 2012 C4 (Full) Professor, head, Institute of Mechanics
- Retired Sept. 2012
- Since 2001 also consulting office for services in analysis and FEM software, **DYNAmore GmbH** (>150 coworkers), Founder, General manager and Technical Director, retired July 2016
- Since July 2016 Chairman of supervisory board of DYNAmore GmbH, since Sept. 2018 DYNAmore Holding GmbH website www.dynamore.de

Appointments

- Liaison Professor (responsible for a student group) for Studienstiftung des Deutschen Volkes 1990 – 2013; Spokesperson for all liaison professors at Karlsruhe 2009 - 2012
- Board of directors of Institute for Scientific Computing and Mathematical Modeling, University Karlsruhe, 1993 – Sept. 2012
- Head of award committee of Fritz-Peter-Müller foundation from 1993 - 2013
- Member of faculty council, Faculty for civil engineering and geodesy, University Karlsruhe 1993 – 2010
- Vice dean of faculty for civil engineering, geo sciences and environmental studies, University Karlsruhe August 2002 – July 2010
- Head of exam commission for students in Civil Engineering of the first 4 Semesters (until the completed Vordiplom) later Bachelor commission 2006 – 2012
- Head of examination committee for the study in Regional Sciences 2004 - 2012
- Member of faculties association (Fakultätentag) (permanent representative of Faculty for civil engineering and geodesy, University Karlsruhe), 1994 - 2012
- Involved in faculties association for civil engineering and geodesy (Fakultätentag) for Germany, Switzerland and Austria, FTBV (from 1.1.2000 until 31.12.2000 vice president; from 1.1.2001 until 31.12.2002 president, from 1.1.2003 until 31.12.2003 vice president), since then member of the advisory group (Ständige Kommission)

- Member of board of Allgemeiner Fakultätentag AFT (general association for all German professors of universities) 2005 - 2013
- Jan.2005 - May 2013 member of governing board of Allgemeinen Deutschen Fakultätentages (general association for all German professors of universities - all study programs)
- Member of steering committee HLRS (Centre for high performance computing University Stuttgart), 1999 - 2012
- Member of commission for civil engineering and geodesy in accreditation agency for engineering studies and informatics (ASIIN) e.V., summer 2000 - 2009
- Member of board of ASBau (Accreditation association for civil engineering studies in Germany) April 2002 – Dec. 2012
- Member of VDI committee 6201 Structural analysis with computer programs" (Department construction engineering) summer 2011 – Dec. 2016
- Member of industrial supervisory board of Institute for Forming Technology and Lightweight Construction, University Dortmund since autumn 2010 (Prof. Kleinert, Prof. Tekkaya)
- Elected Member in Review Board 410 of German National Research Foundation (DFG) April 2012 – April 2016
- Elected Member in Review Board for Medical Engineering German National Research Foundation (DFG) June 2012 – April 2016
- Head of five and member of many other appointment committees in the faculty of civil and environmental engineering
- External reviewer of many appointment committees of German Universities as well as Swiss Universities

Member of scientific and professional organizations

- GAMM - Member
- GACM - Member (German Association of Comput. Mechanics also IACM)
- EUROMECH - Member
- VDI Member
- EASD Member (European Association of Structural Dynamics)
- Member in research association "Scientific computing Baden-Württemberg" (WIR)

Activities for scientific journals (Editorial board)

- Engineering Structures, Elsevier Science Ltd., Oxford, UK, Editorial Board, since 1996
- Computer Methods in Applied Mechanics and Engineering ", Elsevier Science Ltd., Oxford, UK, Editorial Board 2001 – 2005
- Editorial Board, "Computers & Structures", Elsevier Science Ltd., Oxford, UK since 2009
- Editorial Board, "Advances in Engineering Software", Elsevier Sc. Ltd., Oxford, UK since 2009

Referee for scientific journals and research organizations

- Engineering Structures (Editorial Board)
- Structural Eng. Review
- Engineering Computations
- Engineering Mechanics
- Computers & Structures
- Computer Methods in Applied Mechanics and Engineering (Editorial Board)
- Computational Mechanics
- Int. J. Solids and Structures
- Int. J. Numerical Methods in Engineering

- Int. J. Nonlinear Mechanics
- Zeitschrift für Angewandte Mathematik und Mechanik (ZAMM)
- Advances in Engineering Software
- Archive of Applied Mechanics
- Materials Science & Engineering A
- International Journal of Impact Engineering
- Finite Elements in Analysis and Design
- European Journal of Mechanics - A/Solids
- Mechanism and Machine Theory
- International Journal of Space Structures

Acting for some research organizations as referee (DFG, EU, BMFT, GIF, University Hongkong and others).

Working areas

Nonlinear continuum mechanics, numerical methods for solids and structures, plates and shells, nonlinear statics and dynamics, stability, contact, finite elements, solution strategies for strongly nonlinear problems, adaptive FE methods for static and transient problems, nonlinear materials, composite materials, biomechanics, tooth implants, parallelization strategies for FE, crash simulation and metal forming simulations, demolition simulations

Performed on the basis of research grants and university positions.

Actions in doctoral studies

24 PhD dissertations main advisor,

56 PhD dissertations co-advisor, hereby three times as faculty opponent in Sweden, one time as faculty opponent in Norway

1 Habilitation main advisor, 5 Habilitations co-advisor

For further information, lectures, publications, PhDs etc. we refer to the web site of the institute:

<http://www.ifm.kit.edu>

And researchgate: <https://www.researchgate.net>

More than 450 publications, h-index 31, i10-index 73 (Oct. 2018)

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