

# Curriculum Vitae

## Personal information

First name(s) / Surname(s) **Klaus Radermacher**  
Address Pauwelsstrasse 20, D-52074 Aachen (Germany)  
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Nationality German  
Date of birth 21 May 1964  
Gender Male



## Occupational field **University Professor**

### Work experience

Dates	1988-1990
Occupation or position held	Assistant researcher
Main activities and responsibilities	research on ergonomics and robotics of dental <i>work places</i>
Name and address of employer	Institute for Human Factors, Darmstadt Technical University, Darmstadt, Germany
Dates	1990-1991
Occupation or position held	Assistant researcher
Main activities and responsibilities	research in the departments for „Ergonomics in Medicine“ and „Biomechanics“
Name and address of employer	Forschungsgesellschaft für Biomedizinische Technik Aachen e.V., Aachen, Germany
Dates	1991-2001
Occupation or position held	Senior researcher and founding head of the department for „Surgical Therapy Technology“
Main activities and responsibilities	research on computer assisted surgery, biomechanics and ergonomics in medicine
Name and address of employer	Forschungsgesellschaft für Biomedizinische Technik Aachen e.V., Aachen, Germany
Dates	2001-2005
Occupation or position held	Senior researcher and head of the „Surgical Therapy Technology Lab“ at the Chair of Applied Medical Engineering, Medical Faculty of the RWTH Aachen University
Main activities and responsibilities	Teaching and research on computer assisted surgery, biomechanics and ergonomics in medicine
Name and address of employer	RWTH Aachen University, Aachen, Germany
Dates	2001-2006
Occupation or position held	Co-Founder and CEO of SurgiTAIX AG, Aachen, Germany
Main activities and responsibilities	Management, R&D
Name and address of employer	SurgiTAIX AG, Aachen, Germany

Dates 2005 -  
Occupation or position held Head of the Chair of Medical Engineering, Full professor (W3)  
Faculty of Mechanical Engineering of the RWTH Aachen University,  
Member of the Board of Directors of the Helmholtz-Institute for Biomedical Engineering of the RWTH Aachen University  
Main activities and responsibilities Teaching and research (about 15 PhD students, 2 Post Docs, more than 30 support assistance staff; about 2 M€ turnover (about 80% third party funding) in 2023)  
Name and address of employer RWTH Aachen University, Aachen, Germany

**Education and training**

Dates 1983-1988  
Title of qualification awarded Dipl.-Ing.  
Principal subjects / occupational skills covered Mechanical Engineering  
Name and type of organisation providing education and training Darmstadt University of Technology, Darmstadt, Germany

Dates 1988-1990  
Title of qualification awarded (Physikum)  
Principal subjects / occupational skills covered Human Medicine  
Name and type of organisation providing education and training Mainz University, Mainz, Germany

Dates 1999  
Title of qualification awarded Dr.-Ing. (Faculty of Mechanical Engineering, RWTH Aachen University)  
Principal subjects / occupational skills covered Biomedical Engineering  
Name and type of organisation providing education and training Chair of Biomedical Engineering, Faculty of Electrical Engineering and Information Technology, RWTH Aachen University, Aachen, Germany

**Personal skills and competences**

Mother tongue(s) **German**

Other language(s)

Self-assessment  
European level (\*)

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
B1	Proficient user	B2	Proficient user	A2	Independent user	A2	Independent user	A2	Independent user

(\*) Common European Framework of Reference (CEF) level

## Additional information

- Other appointments:
  - Editorial Boards J. Comp. Assist. Surgery, J. Engineering in Medicine, J. Biomedical Engineering, J. Comp. Assist. Radiology & Surgery, J. Personalized Medicine
  - Reviewer of the German Research Foundation (DFG), the Klee Foundation, the Israel Science Foundation (ISF), the Austrian Science Fund (FWF), Natural Sciences and Engineering Research Council of Canada (NSERC), Dutch Research Council (NWO) and other international institutions
  - Reviewer for many international journals and conferences
  - Founding member, Past President and (since June 2019) Secretary General Intern. Society for Computer Assisted Orthopaedic Surgery (ISCAOS), Member International Society for Biomechanics (ISB), German Society for Biomedical Engineering (VDE-DGBMT), German Society f. Biomechanics (DGfB), Intern. Society for Hydrocephalus & CSF Disorders, Founding Member ORNET.ORG
  - Founding Member and Chairman of Center for Usability and Risk Engineering of Medical Devices (CeMPEG e.V., CUREMED.EU)
  - Advisory Board Member, SurgiTAIX AG, Aachen
  - Scientific Advisory Board Member Federal Institute for Drugs and Medical Devices (BfArM), Bonn, Germany (2017-2021)
  
- Awards:
  - Holste Award for interdisciplinary research 2004
  - Technology Transfer Award of the State of North-Rhine Westfalia 2004
  - Medical Engineering Innovation Award 2007 of the German Ministry for Education and Research (BMBF)
  - Inventor Award of the State of North-Rhine Westfalia 2007
  - Medical Engineering Innovation Award 2008 of the German Ministry for Education and Research (BMBF)
  - Medical Engineering Innovation Award 2009 of the German Ministry for Education and Research (BMBF)
  - M.E. Müller Award for Excellence in Computer Assisted Surgery 2012
  - multiple paper and poster awards as coauthor of international conference contributions
  
- Teaching:
  - Lecturer in Medical Engineering of the Faculty of Mechanical Engineering of the RWTH Aachen University
  - Lecturer in Biomedical Engineering in the Master-Program of the Medical Faculty of the RWTH Aachen University
  - Coordinator of the Master Program on "Allgemeiner Maschinenbau" (General Mechanical Engineering) of the Faculty of Mechanical Engineering
  - Lecturer in Medical Engineering in several interdisciplinary courses of different faculties of the RWTH Aachen University
  - currently about 15 PhD students, and more than 200 undergraduate students
  
- Research topics:
  - Patientspecific musculo-skeletal Biomechanics and Biomechanics of NPH
  - Surgical planning and simulation
  - Patient specific instruments (PSI) and implants,
  - Surgical navigation and modular cooperative surgical robotics
  - Mechatronic instrumentation, systems and automation
  - Ultrasound and Shockwaves in Medicine
  - Ergonomics and safety in medicine, usability engineering in medicine
  
- Publications:
  - Author and Co-author of > 700 publications, > 20 patent applications
  - ORCID: <https://orcid.org/0000-0003-4395-3197>