



PROF. H.C. DR.-ING.

JOACHIM KNEBEL

PERSONAL PROFILE

As Head of Division III – Mechanical and Electrical Engineering, I worked for more than 10 years in the science management of KIT, being The Research University in the Helmholtz Association.

With trust, transparency and subsidiarity, I enable the KIT faculties, the Helmholtz programmes and the scientific institutes with all their staff to perform at their best in order to create and impart knowledge for the society and the environment.

As engineer, I look forward to shape and develop key innovations, overall systems and implemented technologies, especially in the topics of energy, mobility, production, automation, human-machine interaction, information technology and medical technology.

PERSONAL DETAILS

Prof. h.c. Dr.-Ing. Joachim U. Knebel
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LANGUAGES

English	Business fluent
French	Very good
Japanese	Basic knowledge

PROFESSIONAL EXPERIENCE

since 01/2014	Head of Division, Division 3 – Mechanical and Electrical Engineering Responsibilities: KIT-Faculty of Mechanical Engineering (MACH) and KIT-Faculty of Electrical Engineering and Information Technology (ETIT) and the corresponding 32 institutes, Helmholtz Research Field Energy and Helmholtz Programmes 'MTET: Materials and Technologies for the Energy Transition', 'FUSION: Nuclear Fusion' and 'NUSAFE: Nuclear Waste Management, Safety and Radiation Research'.
10/2010 – 12/2013	Chief Science Officer (CSO-4), and Member of the Enlarged Executive Board Responsibilities: Faculty of Electrical Engineering and Information Technology (ETIT), KIT Mobility Systems Center, Helmholtz Programmes: 'Storage and Cross-linked Infrastructures', 'Fusion Research' and 'Nuclear Safety Research' and institutes: Institute for Pulsed Power and Microwave Technology (IHM), Institute for Nuclear and Energy Technologies (IKET), Institute for Nuclear Waste Disposal (INE), Institute for Neutron Physics and Reactor Technology (INR), and Institute for Technical Physics (ITEP).
06/2009 – 11/2010	Acting Head of Institute of Radiation Research (ISF), KIT
10/2007 – 05/2009	Acting Head of Institute of Neutron Physics and Reactor Technology (INR), KIT
05/2002 – 09/2010	Head of Nuclear Safety Research Programme (NUKLEAR), KIT
05/1997 – 04/2002	Head of Group "Studies of Accelerator Driven Systems (ADS) for Transmutation of High Level Nuclear Waste", Institute for Nuclear and Energy Technologies (IKET)
01/1997 – 04/1997	Delegation to JAEA Tokai Japan, "Flow Instabilities in Boiling Water Reactors (experiment and theory)"
02/1993 – 12/1996	Head of Group "Long-term Containment Cooling" within European Pressurized Water Reactor (EPR) project, Institute for Nuclear and Energy Technologies (IKET)
12/1992	Scholar of the German Academic Exchange Service (DAAD) at the University of Manchester, UK, on "Liquid Metal Flow Measurement Techniques"
02/1989 – 01/1993	Scientist at the Institute for Reactor Components (IRB), Kernforschungszentrum Karlsruhe (KfK), now KIT

PERSONAL INTERESTS

To me, a service to the community is a basic principle. As member of the Rotary Club Bruchsal-Schönborn I deliver my fair share to the society. In 2014 I was awarded as a Paul Harris Fellow.
<https://bruchsal-schoenborn.rotary.de/>

Member of the board of trustees of the Dr.-Bertold-Moos Foundation
<https://dr-bertold-moos-stiftung.de>

As the team captain of the KIT team at CITY CYCLING I encourage people annually to cycle as many daily journeys as possible in an environmentally-friendly manner using the bike over a 21-day competition.

www.stadtradeln.de

ACADEMIC BACKGROUND AND EDUCATION

12/2013	Professor Honoris Causa of St. Petersburg University, Faculty of Applied Mathematics and Control Processes
01/1993	Ph.D. Thesis: "Experimental Studies in Turbulent Buoyant Jets in Sodium for Fast Reactors", Grade: 'Summa Cum Laude', University of Karlsruhe (TH)
10/1983 – 01/1989	Studies of Theoretical Mechanical Engineering, University of Karlsruhe (TH)

HELMHOLTZ ASSOCIATION

since 2011	Member of the Research Field Platform and Management Board of Helmholtz Energy
05/2015 – 12/2020	Contact Person of the Helmholtz Initiative "Energy System 2050"
07/2012 – 12/2020	Spokesperson of the Helmholtz Cross-Programme Activity "Electromobility"
03/2011 – 03/2018	Member of the Think Tank to the President of the Helmholtz Association (HGF)
09/2009 – 12/2014	Member of the Steering Committee of the Research Field "Energy" of the Helmholtz Association (HGF)
08/2003 – 07/2007	Coordinator of Helmholtz Virtual Institute VI-VH-036 "Competence Preservation in Nuclear Technology"
05/2002 – 12/2014	Spokesperson of Helmholtz "Nuclear Waste Management and Safety" Programme
07/1999 – 06/2002	Coordinator of Helmholtz Strategy Fund project, "Innovative Technology for Radiotoxicity Reduction" No. 99/16

OTHER DUTIES AND HONORARY FUNCTIONS

since 08/2024	Member of the Board of Trustees Stiftung Energie & Klimaschutz (Energy & Climate Protection Foundation). https://www.energie-klimaschutz.de/ueber-uns/
since 08/2024	Member of the MYRRHA Independent Review Team (MIRT), by BE Government to OECD/NEA
since 10/2022	Member of the Executive Committee (ExCo) of the European Energy Research Alliance (EERA) https://www.eera-set.eu/
since 2021	Representative of KIT in the Coordination Group of the Research Alliance Karlsruhe (FPSKA) on Energy. https://www.energie.kit.edu/fps-ka-energie.php
since 12/2017	Member of the Board of Directors of the German Renewable Energy Research Association (FVEE) and the Program Committee of the FVEE Annual Meeting, since 2024 Vice Spokesperson. https://www.fvee.de/en/
since 11/2015	Member of the Jury Symposium „Energie-Campus“ of the Stiftung Energie & Klimaschutz (Energy & Climate Protection Foundation). https://www.energie-klimaschutz.de/projekte/energiecampus/
09/2015– 12/2024	Co-Founder and Co-Director of the international Initiative 'Affordable Energy for Humanity' (AE4H). https://uwaterloo.ca/waterloo-institute-sustainable-energy/ae4h
since 2013	Council Member of the European Atomic Energy Society (EAES), President of the EAES 2019 – 2021
10/2013 – 10/2021	Member of the Project Council Wendelstein W7-X
since 10/2010	Member of the German Fusion Development Agreement
03/2011 – 04/2014	Spokesperson of the Working Group on Fukushima, set up by the Federal Ministry of Education and Research (BMBF)
since 11/2010	German Contact Person for Joint Implementation of Broader Approach (BA) Activities in the field of Fusion Energy Research

06/2010 – 05/2013	Member of the Nuclear Science and Technology Peer Review Committee, Idaho National Laboratory (INL) USA; Chair in 2011
03/2010	Member of the International Evaluation Panel "European Centres of Excellence" for the Ministry of Education, Youth and Sports of the Czech Republic
05/2009	Member of the OECD MYRRHA International Review Team (MIRT)
09/2008 – 08/2016	Member of the Board of Trustees, University of Applied Sciences, Karlsruhe – re-nominated in September 2012
07/2008 – 06/2011	Member of Scientific Advisory Board, Helmholtz-Centre Dresden-Rossendorf (HZDR)
06/2008 – 12/2014	Chairperson of Steering Committee, International MEGAPIE Initiative
01/2008 – 12/2011	Vice President of European Nuclear Society (ENS) - re-elected in 2010
10/2007 – 03/2013	CEO of Southwest German Research and Teaching Alliance Nuclear Technology
05/2007 – 12/2010	Member of Administrative Council, German Atomic Forum (DAfF)
08/2006 – 12/2017 2006 – 2011	Member of Editorial Board of Journal "Kerntechnik" Member of Scientific Board, KIT-CEA Frederic Joliot – Otto Hahn Summer School
2006 – 2012	Member of the German Nuclear Committee (KTA)
05/2006 – 04/2012	Member of Federal Executive Board, German Nuclear Society (KTG) – re-elected in 2009
2004 – 2007	Member of Energy Advisory Board, Jülich Research Center (FZJ)
01/2001 – 12/2004	Elected member of the Supervisory Board of Forschungszentrum Karlsruhe (FZK)

SELECTED THIRD-PARTY FUNDED PROJECTS

06/2021 – 12/2025	Coordinator of the "SEKO" Project Stages 1 to 4 funded by the Federal Ministry of Education and Research (BMBF) focusing in "Energy system integration & sector coupling using the example of the research infrastructures Energy Lab and Living Lab Energy Campus" (total amount of project funding: 35.445 k€)
since 09/2016	Representative of the KIT in the Board of Directors of the national Kopernikus project New Power Grid Structures for the Energy Transition (ENSURE), Phase I, II & III. https://www.kopernikus-projekte.de/en/projects/ensure
04/2005 – 03/2010	European Coordinator of "EUROpean Research Program for the TRANsmutation of High Level Nuclear Waste in an Accelerator Driven System (EUROTRANS)" FP6 project (the largest EURATOM project in the 6th European Framework Programme: total amount of project funding: 23.000 k€)

HONOURS AND AWARDS

05/2011	European Science-Culture-Award of the European Foundation for Culture PRO EUROPA, awarded on May 17, 2011 in Berlin, for merits in "Partitioning & Transmutation Research"
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PUBLICATIONS

since 1993	Author or co-author of more than 150 scientific publications More than 140 invited talks at scientific conferences, public hearings and interviews, press events, specialist and project meetings in Europe, Russian Federation, Japan, Canada, USA, India, PR China, South Korea and Malaysia. Organizer and co-organizer of conferences in the field of energy and mobility systems.
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