

Curriculum Vitae

Prof. Dr. Hans-Martin Henning



University Education and Academic Career

University Education

1979 – 1981	Political sciences and science of history (magister study) at the University of Freiburg, Germany and social sciences (diploma study) at the University of Bremen, Germany
1981 – 1987	Physics (diploma study) at the University of Oldenburg, Germany
1987 – 1993	PhD study at physics department of the University of Oldenburg, Germany

Degrees

11/1988	Diploma in physics (University of Oldenburg, Germany)
10/1993	PhD in physics (Dr. rer. nat.) (University of Oldenburg, Germany; Supervisor Prof. Joachim Luther): Dissertation: “Regenerierung von Adsorbentien mit solar erzeugter Prozesswärme” (Regeneration of Adsorption Materials Using Solar Process Heat)

Professorship Offers

12/2010	Offer of Professorship “Climate Engineering” at the University of Applied Sciences, Stuttgart, Germany (rejected)
09/2013	Offer of Professorship “Technical Energy Systems”, at the Institute of Fluid Machinery (FSM) at Karlsruhe Institute of Technology KIT in conjunction with position at the Fraunhofer Institute for Solar Energy Systems ISE (accepted)
12/2016	Offer of Directorship at the Fraunhofer Institute for Solar Energy Systems ISE in conjunction with Professorship “Solar Energy Systems” at the Department of Sustainable Systems Engineering, Faculty of Engineering, University of Freiburg (accepted)

Associate Editor

10/2011 – 06/2016	Associate Editor of „Solar Energy“, the official journal of the International Solar Energy Society
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Professional Career

Institute for Solar Energy Research ISFH in Hannover/Hameln, Germany and the University of Oldenburg, Germany

1989 – 1992	Researcher at the Institute for Solar Energy Research GmbH (ISFH) Hannover/Hameln, Germany
1992 – 1994	Junior researcher in the physics department at the University of Oldenburg, Germany (lectures on solar thermal energy use in the Renewable Energy masters program)

Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, Germany

1994	Researcher at the Fraunhofer Institute for Solar Energy Systems ISE, Department of Thermal and Optical Systems
1996 – 2005	Head of Group “Thermal Systems and Components”
2005 – 2011	Head of Department “Thermal Systems and Buildings”
2009 – 2016	Deputy Director of the Fraunhofer Institute for Solar Energy Systems ISE
2011 – 2016	Division Director of “Thermal Systems and Buildings”
Since 2017	Institute Director, Fraunhofer Institute for Solar Energy Systems ISE, Freiburg (together with Prof. Dr. Andreas Bett)

Karlsruhe Institute for Technology KIT, Karlsruhe, Germany

01/2014 – 06/2017	Professor of Technical Energy Systems, Dept. of Mechanical Engineering in conjunction with position at the Fraunhofer Institute for Solar Energy Systems ISE; Head of the Institute of Fluid Machinery (FSM) together with Prof. Dr. Martin Gabi and of the group “Energy and Building Technology” within FSM
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University of Freiburg, Germany

Since 07/2017 Professor of Solar Energy Systems at the Institute for Sustainable Systems Engineering, Faculty of Engineering, University of Freiburg in conjunction with the Directorship of the Fraunhofer Institute for Solar Energy Systems ISE

Further Activities and Functions

Further Activities

1999 – 2004	Operating Agent of Task 25 “Solar-Assisted Air-Conditioning of Buildings” within the Solar Heating & Cooling Program (SHC) of the International Energy Agency (IEA)
05/2002	Co-founder and co-owner of Sortech AG (since 2017 FAHRENHEIT) in Halle, Germany (adsorption cooling company)
05/2002 – 07/2012	Member of the Technical Advisory Committee of Sortech AG in Halle, Germany; technical advice in product development of adsorption heat pumps and R&D strategy
2005 – 2012	Member of the Scientific Advisory Council for the Institute for Renewable Energies of the European Academy (EURAC), Bolzano, Italy
2006 – 2010	Operating Agent of Task 38 “Solar Air-Conditioning and Refrigeration” within the Solar Heating & Cooling Program (SHC) of the International Energy Agency (IEA)
08/2007 – 07/2012	Member of the Board of Directors of Sortech AG in Halle, Germany
11/2009 – 12/2010	Member of the Board of Directors of the VDE-ISE Ptd. Ltd. (Singapore); a joint venture company of the VDE (Offenbach, Germany) and Fraunhofer ISE, offering PV module testing according to IEC standards for the South-East Asian market.
05/2010 – 12/2010	Member of the Board of Directors of CFV Solar Laboratories, Albuquerque, New-Mexico, USA; a joint venture company of Fraunhofer Germany, Fraunhofer USA, VDE and CSA (Canadian Standards Association) which performs PV module testing according to IEC standards and UL standards for the U.S. market.
Since 04/2014	<p>Cooperative work in the project „Energiesysteme der Zukunft“ (Energy Systems of the Future) of acatech – National Academy of Science and Engineering, Leopoldina –the German National Academy of Sciences and the Union of the German Academies of Science and Humanities:</p> <ul style="list-style-type: none">• Head of working group “AG Flexibilitätskonzepte – Fachgruppe Demand-Side-Management Wärme“ (AG Flexibility Concepts – Expert Group on Demand Side Management – Heat) together with Prof. Dr. Dirk-Uwe Sauer, RWTH Aachen (04/2014 – 11/2015)• Joint head of working group “Sektorkopplung“ (Sector Coupling) together with Prof. Dr. Eberhard Umbach (03/2015 – 11/2017)• Member of the Board of Directors of the academy project "Energy Systems of the Future (ESYS)" (since 03/2019)
12/2016 – 06/2024	Speaker of the Fraunhofer Alliance Energy of the Fraunhofer-Gesellschaft

Since 01/2017	Member of the Board of Directors of PSE AG, Freiburg, Germany, a company that performs services for solar industry and institutions in the fields of equipment testing, software development and conference management
Since 07/2017	Member of the Board of Trustees of the Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW)
Since 10/2018	Member of acatech (German National Academy of Science and Engineering)
Since 01/ 2019	Speaker of the Fraunhofer Cluster of Excellence „Integrated Energy Systems CINES“
2020	Deputy Spokesman of the Renewable Energies Research Association (FVEE)
Since 2020	Member of the Board of Directors of the Fraunhofer Chile Research Foundation
04/2020 – 12/2023	Member of the Scientific Advisory Board of the „Roadmap Effizienzstrategie 2050" (Federal Ministry for Economic Affairs and Energy, BMWi)
08/2020 – 07/2021	Member of the Scientific Board of the "Citizen Assembly On Climate"
Since 09/2020	Member of the Expert Council on Climate Issues (appointed by the German Government), Chairman since 10/2020
2021	Spokesman of the Renewable Energies Research Association (FVEE)
Since 2021	Chairman of the Fraunhofer Group for Energy Technologies and Climate Protection and Member of the Presidential Council of the Fraunhofer-Gesellschaft
Since 10/2024	Member of the Advisory Board for the Energy Research Program of the Federal Ministry for Economic Affairs and Climate Action

Member of Scientific Committees of Conferences

2005 – 2015	Permanent member of the scientific committee of the bi-annual international conference "Solar Air-Conditioning", until 2017 organized and owned by OTTI Technologie-Kolleg (Regensburg, Germany)
2008, 2010	Member of the Scientific Committee of the International Conference on Solar Heating and Cooling and Buildings EuroSun
2009 – 2015	Permanent Scientific Committee Member of the Energy Forum, an annual international conference on solar energy use in buildings in Bressanone, Italy
2009 – 2019	Permanent Scientific Committee Member of the annual symposium "Thermische Solarenergie" (Solar Thermal Energy), until 2017 organized and owned by the OTTI Technologie-Kolleg (Regensburg, Germany)
2011	Scientific Committee Member of the international ISES Solar World Congress, owned and organized by the International Solar Energy Society ISES
2011, 2013	Scientific Committee Member of CISBAT, the International Conference on Cleantech for Sustainable Buildings
2012 – 2014	Permanent Scientific Committee Member of the International Conference on Solar Heating and Cooling for Buildings and Industry SHC (Conference Chair in 2013)

2013	Scientific Committee Member of the ISES Solar World Congress (International Solar Energy Society, Cancun/Mexico); Topic Chair for Solar Heating and Cooling
2018	Member of the Advisory Board of the International Sustainable Energy Conference ISEC
2021	Member and Conference Chair of the Scientific Advisory Board of the International Renewable Energy Storage Conference IRES

Publications

110 in periodicals and journals

23 books

Editor of two handbooks on solar energy

175 conference proceedings

303 talks

Participation in several patent registrations (single patents and patent families)