

Dr. Horst Herbert Gerke

Position: Head of WG Hydropedology



Academic education and scientific degrees

2016	Venia Legendi, <i>Soil Science</i> , Christian-Albrecht-University of Kiel, Germany
2004	Habilitation, <i>Environmental Sciences</i> , Brandenburg Technical University Cottbus
1981 – 1985	<i>Forest Science</i> , University Göttingen; 1987: Ph.D. in Forestry
1974 – 1980	<i>Agricultural Sciences</i> , University Göttingen; 1980: Dipl.-Ing. Agronomy

Professional experience

2018 – 2022	Scientist & Head of Working Group “Hydropedology”, ZALF Müncheberg
1996 – 2017	Research Scientist, ZALF-Institute of Soil Landscape Research, Müncheberg
1993 – 1995	Research Scientist, ZALF-Institute of Forest Ecology, Eberswalde
1990 – 1992	Post-doctoral Researcher, US. Salinity Lab., USDA-ARS, Riverside, CA, U.S.A.
1986 – 1989	Post-doctoral Researcher, SFB 179 DFG, Technical University of Braunschweig
1986 – 1989	Research Assistant, Ph.D. student in Soil Physics, University of Göttingen

Research Profile

Background

- Agriculture
- Soil Science and soil physics
- Forest hydrology

Research Activities

- Water flow and solute transport in structured soil
- Preferential flow experiments and numerical modeling
- Soil water balance quantification
- Macropore-matrix mass exchange properties

Functions and memberships

2018 – 2020	Associate Editor Journal of Hydrology and Hydromechanics
2016 – 2022	Chair of Working Group 3-4D Soil Model of DBG
2016 – 2018	<i>Co-Editor</i> Journal of Hydrology and Hydromechanics, Bratislava
2015 – 2017	Vice chair and Chair EGU Soil Systems Science Subdivision: Soil Physics
Since 2013	Associate Editor Journal of Plant Nutrition and Soil Science
2012 – 2015	Vice-President German Soil Science Society (DBG)
2010	Guest Editor Vadose Zone Journal (VZJ)

2003 – 2009 Associate Editor Soil Science Society America Journal (SSSAJ)
2002 – 2005 Vice-Chair and Chair, Commission I (Soil Physics) of DBG
Since 1985, 1987 Memberships DBG, ISSS, GfÖ, AGU, ASA; SSSA, EGU

Other

Award "Associate Editor of Excellence" SSSAJ (2010), VZJ (2017)

Award "Editor's Citation for Excellence, Reviewer" VZJ (2021)

Teaching University of Technology at Cottbus, Germany (2005-2016)

Teaching Christian-Albrecht-University at Kiel (2016-2019)

Visiting Scientist Earth and Environmental Sciences Dept, University of Waterloo, Canada (1996)

Supervision of postdocs, 15 PhD students: 13 Diplom- or Masterstudents, reviewer of external PhD.

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