

Curriculum vitae

ORCID: <https://orcid.org/0000-0003-4620-575X>

Name: Markus Disse
 Birthday and place: 07th January 1963, Paderborn
 Marital status: married, 3 children
 Languages: German, English, Spanish



Education:

1995 PhD (Dr.-Ing.) at the University of Karlsruhe (TH)
 (Score: Summa cum laude)
 Title of the dissertation: *Modelling of Evapotranspiration and Groundwater Recharge in Flat Catchments*

1985 - 1990 Studies of Civil Engineering at the University of Karlsruhe (TH) /
 Specialisation in Water Management / Hydraulic Engineering;
 Degree: Diploma

1983 - 1985 Studies of Civil Engineering at the University of Hannover (TU);
 Degree: Pre-Diploma

1982 A levels (German university entrance qualification)

Career:

Since July 2013 Full Professor and Chair for *Hydrology and River Basin Management* at the Technical University of Munich (Technische Universität München)

2011 Sabbatical at the University of Arizona, Tucson (USA), *Department of Hydrology and Water Resources* (01.08. – 31.12.)

2003 – 2013 Full Professor and Chair for *Water Management and Resources Engineering* at the Universität der Bundeswehr München

1996 – 2002 Research assistant at the Federal Institute of Hydrology (BfG), Koblenz, Germany

1996 - 1998 leading the department *River Morphology*

1998 - 2002 leading the department *Water Management and Statistics*

1990 - 1996 Research assistant at the Institute of Hydrology and Water Management, University of Karlsruhe (TH),
 Chair of Prof. Dr.-Ing. Erich Plate

1990 Research assistant at the Institute of Hydraulic Engineering and Land Management, University of Karlsruhe (TH),
 Chair of Prof. Dr. techn. Larsen

1990 Free consultant (Ingenieurbüro Herzog+Partner)

Main research topics

Physically based hydrological modeling
Nature based solutions for flood and drought mitigation
Integrated water resources management
Soil water processes and evapotranspiration

Supervised Dissertations (1st supervisor)

Dipl.-Ing. Alpaslan Yörük (2008)

Hydrodynamische Modellierung von Überschwemmungsflächen unter Berücksichtigung von Unsicherheiten

Dipl.-Ing. Joachim Schütter (2010)

Wissensmanagement in der Wasserwirtschaft am Beispiel der Planung und Umsetzung des integrierten Hochwasserschutzkonzeptes Obere Iller

Timo Heinisch, M. Eng. (2010)

Anpassungsstrategien an den Klimawandel - Entwicklung eines übertragbaren Entscheidungsunterstützungssystems am Beispiel der Wasserwirtschaft

Dipl.-Ing. Sabine Pakosch, M. Sc. (2011)

Development of a fuzzy rule based expert system for flood forecasts within the meso-scale Upper Main basin

Dipl.-Ing. Wolfgang Rieger (2012)

Prozessorientierte Modellierung dezentraler Hochwasserschutzmaßnahmen

Dipl.-Hydr. Florian Winter (2012)

Einfluss unterschiedlicher Bewirtschaftungsmaßnahmen auf die Abflussbildung und -konzentration in landwirtschaftlich genutzten Einzugsgebieten

Dipl.-Ing. Martin Lisson (2013)

Ganzheitliche Projektbewertung – Entwicklung eines Modells zur Nachhaltigkeitsbewertung von Hochwasserschutzmaßnahmen

Abdella Kemal, M.Sc (2013)

The Effect of Climate Change on Water Resources Potential and Flood Regimes of Omo-Gibe River Basin

Patrick Keilholz, M. Eng (2014)

Nachhaltige Wasserbewirtschaftung der Oasen im Tarim-Becken, Nordwest-China

Elena S. Bekri, M.Sc. (2015)

Watershed Management in the Context of Sustainable Development – Application from Erymanthos River to Alfeios River Mouth

Yu Yang, M.Sc. (2017)

Large-scale hydrological modelling and decision-making for sustainable water and land management along the Tarim River

Giorgia Marcolini, M.Sc. (2017)

Variability in snow depth time series in the Adige catchment

Erwin Isaac Polanco, M.Sc. (2017)

Simulating Hydrogeomorphological Processes to Assess Land Degradation in the Upper Blue Nile Basin in Ethiopia Using SWAT

Ye Tuo, M.Eng (2018)

Application of the Soil Water Assessment Tool (SWAT) in alpine catchments: pitfalls and solutions

Punit Kumar Bhola, M.Sc. (2019)

Dynamic flood inundation forecasting in real-time including associated uncertainties for operational flood risk management

Dagnenet Fenta Mekonnen, M.Sc. (2019)

Impacts of changes in Climate, Land Cover and Water Management on Water Availability of the Upper Blue Nile

Sonja Teschemacher, M.Sc. (2021)

Gebietsübergreifende Retentionspotenzialanalyse agrarwirtschaftlicher und konstruktiver Maßnahmen des dezentralen Hochwasserrückhalts

Michael Neumayer, M.Sc. (2021)

Gebietsübergreifende Retentionspotenzialanalyse einer naturnahen Gewässer- und Auengestaltung als Beitrag zum dezentralen Hochwasserrückhalt

Maria Kaiser, M.Sc. (2021)

Data-driven modeling of areas prone to heavy rain-induced floods

Leonardo Francisco Arias Rodríguez (2022)

Monitoring Water Quality of Inland Waters by Remote Sensing and Machine Learning: From Local to Global Applications

Muhammad Fraz Ismail (2022)

Snow and glacier melt runoff forecasting under current and climate change scenarios and improved degree-day factor estimation

Qing Lin (2022)

Multistep Flood Inundation Forecast with Artificial Neural Network

Soham Adla (2022)

Low-cost soil moisture measurement and parsimonious crop modeling to assist agricultural water management

Francesca Perosa (2023)

Decision-Making Integrating Ecosystem Services for Floodplain Management in the Danube River Basin

Activities in associations and working groups

Member of the “Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V. (DWA)”, www.dwa.de

Member of the “International Association of Hydrological Sciences (IAHS)”

Member of the “Fachgemeinschaft Hydrologische Wissenschaften (professional community in the DWA)”, www.fghw.de

Member of the “Deutsche Hydrologische Gesellschaft e.V.”, www.dhydrog.de

Since 2022 Member of the Scientific Advisory Board of the Earth System Sciences Program at the Austrian Academy of Sciences

2017-2022 President of the “Fachgemeinschaft Hydrologische Wissenschaften (professional community in the DWA)”



- 2011-2016 Member of the extended presidium of the “Deutsche Hydrologische Gesellschaft”
- 2011-2015 Member of the scientific advisory board of the German Weather Service (DWD)
- 2010-2014 Head of the committee “*Hydrologie und Wasserbewirtschaftung*” in the DWA
- since 2001 Member of the scientific advisory board of the German “IHP/HWRP-National Committees “

Invited reviewer

- Water Resources Research
- Journal of Hydrology
- Water Resources Management
- Journal of Hydrological Sciences (IAHS Press)
- Hydrology and Earth System Science
- Journal of River Basin Management
- Environmental Modelling and Software
- Journal of Flood Risk Management
- Hydrologie und Wasserbewirtschaftung (Editor)
- Korrespondenz Wasserwirtschaft (Editor)

Munich, 12.10.2023