

Curriculum Vitae

Name Harrie-Jan Hendricks Franssen
Address Forschungszentrum Jülich GmbH, IBG-3
Leo Brandtstrasse, 52425 Jülich, Germany
E-mail h.hendricks-franssen@fz-juelich.de
Age 47
Citizenship Dutch
Languages Dutch (native), English, German and Spanish (fluent)

Education

- **M.Sc. Climatic and Atmospheric Sciences** (2008), Institute for Atmospheric and Climate Science (IAC) of the ETH Zurich.
- **Ph.D. Hydrogeology** (2001, summa cum laude), Technical University of Valencia, Spain.
- **Specialist Water Resources Management** (1997), Technical University of Valencia, Spain.
- **M.Sc. Soil Science** (1994, cum laude), Wageningen Agricultural University, the Netherlands.

Employments

- **Full Professor (W2) "Scientific computation in terrestrial systems"** at Technical University of Aachen (Germany) and Forschungszentrum Jülich GmbH (Germany). Since September 2009.
- **Senior scientist and lecturer ("Oberassistent")**, Section of groundwater hydrology and hydromechanics, Institute of Environmental Engineering, ETH Zurich. Director: W. Kinzelbach. August 2005- August 2009. From November 2008 onwards also 10% at Section of land-climate interactions, Institute of Atmospheric and Climatic Sciences, ETH Zurich. Director: S. Seneviratne.
- **Postdoc**, Section of groundwater hydrology and hydromechanics, Institute of Hydromechanics and Water Resources Management, ETH Zurich. Director: W. Kinzelbach. February 2001- July 2005.
- **PhD student**, Department of hydraulic and environmental engineering, Technical University of Valencia (Spain). Advisor: J.J. Gómez-Hernández. January 1996- January 2001.
- **Social service**, Department for research methods, Winand Staring Centre, Wageningen, the Netherlands (January 1995- December 1995). Advisor: J.J. de Gruijter.
- **Consulting**, "Witteveen & Bos", Deventer, the Netherlands (September 1994- December 1994).

Awards

- Mülheim Wasserpreis, Germany, 2012. Bi-yearly price focused on cooperations between academia and industry in the area of water resources. 20,000 €, shared among eight persons.
- Supervised PhD-student Sebastian Stoll got price for best PhD-dissertation in area of "water" from ETH Zurich (Otto Jaag Gewässerschutz Preis), 2012.
- Excellence reviewing, Water Resources Research, 2009
- Price for best PhD dissertation in area of civil engineering, Technical University of Spain, 2001.

Teaching / Supervision PhD / PhD-commissions

- Since 2009: three MSc courses per year (RWTH Aachen): “data analysis for geoscientists” (two groups) and “flow and transport processes”.
- 2007-2009: groundwater hydrology for geophysicists (ETH Zurich)
- From 2002-2009 environmental engineering field course (ETH Zurich).
- In 2001 and 2002 environmental engineering lab course (ETH Zurich).
- Sporadic courses since 2000.
- Currently (December 2017) supervising 2 PhD-students and three co-supervisions.
- Principal supervisor of PhD-students who finished dissertation: Sebastian Stoll (2009-2012), Wolfgang Kurtz (2010-2013), Hanna Post (2012-2016), Roland Baatz (2011-2016), Sebastian Gebler (2012-2017), Qi Tang (2012-2017), Hongjuan Zhang (2013-2017).
- Co-promotor of Gero Bauser (2006-2011).
- External PhD-examinator (commission member) of Javier Rodrigo (Valencia, 2004), Peter Salomon (Valencia, 2007), Gijs Janssen (Wageningen, 2008), Laura Stingaciu (Aachen, 2010), Annika Schomburg (Bonn, 2011), Haiyan Zhou (Valencia, 2011), Liangping Li (Valencia, 2011), Bruno Samain (Gent, 2012), Daniel Partington (Adelaide, 2013), Carlos Villareyes (Potsdam, 2014), Daniel Erdal (Hannover, 2014), Marc Ridler (Copenhagen, 2014), Beatrice Marti (Zurich, 2014), Longhui Li (Enschede, 2015), Xin Tian (Enschede, 2015), Jorn Rasmussen (Copenhagen, 2015), Donghua Zhang (Copenhagen, 2016), Theresa Bick (Bonn, 2016), Oliver Schilling (Neuchatel, 2017).

Third party funding

- KTI-project (industry-university collaboration). Real time modeling of a well field. 916 kCHF, 2005-2008.
- SNF regular project. Impact of climate change on groundwater resources. 156 kCHF, 2009-2011.
- DFG project in Transregional Collaborative Research Centre (with RWTH Aachen, U Cologne, U Bonn). Process-based modeling of regional water fluxes taking into account multi-sensor and multi-scale observation patterns. 313 k€, 2011-2014.
- EU project AGADAPT (climate-KIC) (with INRA, Technical U Valencia, Meteo France). Adapting water use by the agricultural sector. 105 k€, 2011-2014.
- EU project EXPEER (FP7) (lead INRA). Distributed infrastructure for experimentation in ecosystem research. 170 k€, 2012-2015.
- Joint EU-BLE project (FACCE JPI) MACSUR. A model based framework for irrigation management support: Setup and uncertainty assessment. 60 k€, 2013-2015.
- DFG regular project (with RWTH Aachen, Prof. Christoph Clauser). Ensemble Kalman Filter for estimation of rock properties in geothermal reservoirs. 82 k€ (own part), 2013-2017.
- DFG project in Research Unit (with U Bonn, U Hannover, U Hamburg, U Tübingen, KIT, UFZ). Improved characterization of land surface states, parameters and fluxes with multivariate data assimilation. 230 k€, 2014-2017. *Also co-coordinator of the complete research unit (Data Assimilation for Improved Characterization of Fluxes Across Compartmental Interfaces), ca. 2100 k€.*
- DFG project in Transregional Collaborative Research Centre (with RWTH Aachen, U Cologne, U Bonn). Identification of systematic model errors by data assimilation. 254 k€, 2015-2019.
- EU project EoCoE (H2020) (lead CERFACS, France). Energy oriented center of excellence. 0 k€ (participation without own resources), 2015-2018.
- EU project eLTER (H2020) (lead Bundesumweltamt, Austria). European long-term ecosystem and socioecological research infrastructure. 50k€, 2015-2019.
- Four CSC-stipendia (China, 2012, 2013, 2014, 2016) for four PhD-positions of four years each. Ca. 200k€ in total.
- DFG regular project (with U. Stuttgart, Prof. Wolfgang Nowak). Computational framework for modern calibration and validation of mathematical models of subsurface flow – COMPU-FLOW. 130 k€ (own part), 2017-2020.
- DFG project in Research Unit (with U Bonn, U Hannover, U Tübingen, KIT, UFZ). Identifiability of soil and ecosystem states and parameters of integrated subsurface- land surface- atmosphere models with multivariate data assimilation. 240 k€, 2017-2020. *Also co-coordinator of the complete research unit (Data Assimilation for Improved Characterization of Fluxes Across Compartmental Interfaces), ca. 1900 k€.*

Conferences and invited talks

- *Integrated data assimilation for the coupled atmosphere-land surface-subsurface model TerrSysMP*. December 2017. AGU 2017. New Orleans, USA.
- *Improved water resources management by combining integrated terrestrial system modeling, near real time data and data assimilation*. October 2017. WaterScapes Conference. New Delhi, India. **Invited talk (Keynote)**.
- *Data assimilation for fully coupled atmosphere-land surface models*. October 2017. NCMRWF. Noida, India. **Invited talk**.
- *Data assimilation for fully coupled subsurface-land surface-atmosphere models*. September 2017. IIT Delhi. New Delhi, India. **Invited talk funded by DAAD**.
- *TerrSysMP-PDAF: a data assimilation framework in combination with the fully coupled atmosphere-land surface-subsurface model TerrSysMP*. August 2017. CAHMDA VII. Xi'an city, China. **Invited talk (Keynote)**.
- *Improved characterization of root zone soil moisture in land surface models by assimilation of groundwater level data. An example with TerrSysMP*. April 2017. EGU 2017. Vienna, Austria.
- *Data assimilation at IBG-3, Forschungszentrum Julich*. March 2017. Chennai, India. **Invited talk funded by DAAD**.
- *Comparison of actual evapotranspiration estimates by eddy covariance and lysimeter*. Sino-German lysimeter workshop. August 2016. Beijing, China. **Invited talk funded by Federal Ministry of Education and Research**.
- *Comparison of eight different EnKF-variants for subsurface data assimilation: how to achieve sound conclusions?* CMWR2016. June 2016. Toronto, Canada.
- *Improving predictions with large scale high resolution integrated terrestrial system models*. January 2016. Zurich, Switzerland. **Invited talk**.
- *Assimilation of soil moisture data from a regional network of cosmic ray probes in the land surface-subsurface model TerrSysMP*. January 2016. AMS 2016. New Orleans, USA. **Invited talk**.
- *Estimation of ecosystem parameters of the Community Land Model with DREAM: evaluation of the potential for upscaling net ecosystem exchange*. December 2015. AGU 2015. San Francisco, USA.
- *Estimating long term trends in actual evapotranspiration with help of lysimeter data*. September 2015. EMS 2015. Sofia, Bulgaria. **Invited talk**.
- *A data assimilation framework for fully coupled hyperresolution subsurface-land surface models*. July 2015. SIAM 2015, Stanford, USA. **Invited talk**.

- *Data assimilation for high resolution coupled subsurface- land surface models. April 2015. Enschede, Netherlands. **Invited talk.***
- *Towards large scale high resolution hydrological predictions with reduced uncertainty: the role of data assimilation. February 2015. Workshop on "Quantification and reduction of uncertainties in hydrological inferences". Coorg, India. **Invited talk (Keynote).***
- *Land Surface Data Assimilation: Improved Results with Multivariate Assimilation Including Parameter Estimation. December 2014. AGU 2014, San Francisco, USA. **Invited talk.***
- *Real-time control of irrigation by assimilating measured soil moisture contents into CLM: A case study in Spain. September 2014. CAHMDA VI- HEPEX-DAFOH III, Austin, USA.*
- *Sequential data assimilation for parameter estimation of subsurface hydrological models: an overview and new developments. April 2014. EGU 2014. **Invited talk (Keynote).***
- *Assimilation of cosmic ray neutron counts for updating of soil moisture and soil properties with application to irrigation scheduling. March 2014. Indo-German workshop on "Near real-time forecasting of soil moisture for water resources management". Bangalore, India. **Invited talk funded by Federal Ministry of Education and Research.***
- *Data assimilation in terrestrial system models. March 2014. Indo-German workshop on "Near real-time forecasting of soil moisture for water resources management". Bangalore, India. **Invited talk funded by Federal Ministry of Education and Research.***
- *Data assimilation in terrestrial systems modelling. January 2014. Wageningen, Netherlands. **Invited talk.***
- *Operational optimization of irrigation scheduling for citrus trees using an ensemble based data assimilation approach. December 2013, AGU 2013. San Francisco, USA. Poster presentation.*
- *Joint conditioning to piezometric head and groundwater temperature data with augmented state Ensemble Kalman Filter. September 2013. IAMG2013, Madrid. Spain.*
- *About the importance of small scale spatial variability in coupled surface-subsurface simulations and how it can be characterized. December 2012. AGU2012, San Francisco, USA. **Invited talk.***
- *Geostatistical characterization of spatially variable riverbed properties and its importance for parameter updating with data assimilation procedures. September 2012. GeoENV2012, Valencia, Spain.*
- *Why improved predictions with hyperresolution models are possible: a data assimilation viewpoint. June 2012. Catchment Change Network International Conference, Lancaster, UK.*

- *Ensemble Kalman filter in subsurface hydrology: operational implementation and non-Gaussianity.* June 2011. 6th International EnKF Workshop, Ulvik, Norway. **Invited talk (Keynote).**
- *Conditioning data for physically based hydrological models: the complex link between data and the unknown “reality”.* June 2011. Water Science Horizon Conference, Berlin, Germany. **Invited talk (Keynote).**
- *Sequential data assimilation for improved identification of aquifer, soil and river bed properties.* May 2011. Tübingen, Germany. **Invited talk as external expert.**
- *An improved procedure for determining random errors of eddy covariance measurements for data assimilation.* April 2011. EGU 2011, Vienna, Austria.
- *Issues concerning the assimilation of eddy covariance data in landsurface models.* February 2011. Leipzig, Germany. **Invited talk as external expert.**
- *Operational management of a groundwater well field with data assimilation techniques.* November 2010. International Workshop on Data Assimilation for Operational Hydrologic Forecasting and Water, Delft, The Netherlands.
- *Echtzeitmodellierung des oberen Limmattalaquifers mit Aktualisierung räumlich verteilter Parameterfelder.* May 2010. Fachtagung FH-DGG, Tübingen, Germany. **Invited talk (Keynote).**
- *Simultaneous updating of spatially distributed hydraulic conductivities and leakage coefficients with the Ensemble Kalman Filter. Application: Zurich, Switzerland.* May 2010. Vienna, Austria.
- *The difficulty of proving the existence of weekly cycles in meteorological variables.* March 2010. Garmisch, Germany. **Invited talk as external expert.**
- *Sequential data assimilation: a fast, alternative way to estimate parameters of hydrological models?* June 2009. Stuttgart, Germany. **Invited talk as external expert**
- *Freezing of lakes on the Swiss Plateau 1901-2006.* Accepted for oral presentation at “Ice, water and snow in the alpine region”. June 2009. Interlaken, Switzerland. **Invited talk (Keynote).**
- *A comparison of seven inverse methods for modeling groundwater flow in mildly to strongly heterogeneous aquifers.* EGU 2009, Vienna, Austria.
- *Analysis of the energy balance closure as function of atmospheric stability and wind velocity at 27 European FLUXNET sites.* EGU 2009, Vienna, Austria.
- *Strategies for improved predictions of subsurface flow and transport predictions.* February 2009. Copenhagen, Denmark. **Invited talk related to associate professorship position on “hydrogeology”.**

- *How can the predictive capacity of integrated hydrological models be improved?* December 2008. Aachen, Germany. **Invited talk related to W2 professorship position on “scientific calculation in terrestrial systems”.**
- *Towards improved hydrological predictions: the importance of optimally combining field data and physical models.* October 2008. Potsdam, Germany. **Invited talk related to W2 professorship position on “water and solute transport in land scapes”.**
- *Fast and improved flow and transport predictions in real-time with the Ensemble Kalman Filter for the gravel aquifer in Zurich (Switzerland).* Hydropredict 2008, Prague, Czech Republic.
- *Pumping groundwater of drinking water quality in a city with the presence of multiple pollution sources: the role of modelling and optimization.* August 2008. CHYN, Neuchatel, Switzerland. **Invited talk as external expert**
- *Improved flow and transport predictions in real-time with the Ensemble Kalman Filter.* June 2008. IAHR 2008, Istanbul, Turkey.
- *Studying the impact of climate change on groundwater resources: a critical review.* June 2008. IAHR 2008, Istanbul, Turkey.
- *The Ensemble Kalman Filter for real-time Groundwater Flow Modeling of the upper Limmat aquifer in Zurich (Switzerland).* April 2008. EGU 2008, Vienna, Austria.
- *Climate change and groundwater: Is it an issue?* January 2008. Workshop Climate & Water. EAWAG, Dübendorf, Switzerland. **Invited talk as external expert**
- *Real-time groundwater modelling of the upper Limmat aquifer in Zurich (Switzerland) with real-time control of the Hardhof well field.* December 2007. Danish Technical University. Lyngby, Denmark. **Invited talk as external expert.**
- *Data assimilation in groundwater modelling.* December 2007. Danish Hydraulic Institute. Copenhagen, Denmark. **Invited talk as external expert.**
- *Real time modelling of dynamic groundwater systems with Ensemble Kalman filtering.* November 2007. Hydrology seminar ETH Zurich. Zurich, Switzerland.
- *The potential of data assimilation methods for modelling groundwater flow systems: Review and synthetic examples.* September 2007. ModelCARE 2007, Copenhagen, Denmark.
- *Field evidence of a dynamic leakage coefficient for the Limmat river (Zurich).* April 2007. Kick-off meeting for the project RECORD: “Assessment and modeling of coupled ecological and hydrological dynamics in the restored corridor of a river (Restored corridor dynamics)”. **Invited talk as external expert.**

- *Field evidence of a dynamic leakage coefficient. Studies with a 3D transient groundwater flow model of the upper Limmat valley (Switzerland).* April 2007. EGU 2007, Vienna, Austria.
- *Real time modelling of flow and transport in the upper Limmat aquifer.* February 2007. EFLUM-EPFL. Lausanne, Switzerland. **Invited talk related to assistant professorship position.**
- *Reconstruction of the freezing of lakes on the Swiss Plateau in the 20th century.* February 2007. VAW-ETHZ. Zurich, Switzerland. **Invited talk as external expert.**
- *Freezing of lakes on the Swiss plateau in the period 1901-2006.* 2006. Hydrology seminar ETH Zurich. Zurich, Switzerland.
- *Inclusion of remote sensing information to improve groundwater flow modelling at the Kavimba (Botswana) site.* 2005. ModelCARE2005, Scheveningen, the Netherlands. **Invited talk (Keynote).**
- *Use of a digital elevation model, satellite images and airborne geophysical data in groundwater modelling of the Kavimba region (Botswana).* 2005. EGU2005, Viena, Austria.
- *Inverse stochastic estimation of well capture zones with application to the Lauswiesen site (Tübingen, Germany).* 2004. GeoENV 2004, Neuchatel, Switzerland.
- *Characterisation of well capture zones by inverse modelling.* 2004. EGU2004, Nice, France. **Invited talk (Keynote).**
- *Influence of uncertainty of mean transmissivity, transmissivity variogram and boundary conditions on estimation of well capture zones.* 2002. GeoENV2002, Barcelona, Spain.
- *Reducing the uncertainty of well capture zones by inverse conditioning.* 2002. CMWR2002, Delft, The Netherlands.
- *The impact of spatio-temporal variable recharge on the characterisation of well capture zones.* 2002. ModelCARE2002, Prague, Czech Republic.
- *Inverse stochastic modelling of groundwater flow and mass transport.* 2002. UPV, Valencia, Spain. **Invited talk related to price for Ph.D. dissertation.**
- *Joint estimation of spatial variable recharges and transmissivities.* 2002. EGS2002, Nice, France. **Invited talk (Keynote).**
- *The worth of concentration data for aquifer characterisation.* 2001. EGS 2001, Nice, France.
- *Multiple equally likely solutions to the inverse problem.* 2000. IHW-ETHZ. Zurich, Switzerland. **Invited talk related to vacant postdoc position.**

- *Multiple simulations of a 3-D fractured medium conditioned to various types of data.* 2000. Accuracy 2000, Amsterdam, the Netherlands.
- *Stochastic inverse modelling of groundwater flow and mass transport.* 2000. Delft Technical University. Delft, The Netherlands. **Invited talk related to vacant postdoc position.**
- *Multiple solutions to a 3-D inverse groundwater flow problem in fractured rock.* 2000. EGS2000, Nice, France.
- *Computational aspects of the coupled inversion of groundwater flow and mass transport.* 1999. ModelCARE´99, Zurich, Switzerland.
- *Inverse modeling of groundwater flow in a 3-D fractured medium.* 1998. GeoENV II, Valencia, Spain.
- *Case study on the inverse modelling of groundwater flow (in Spanish).* 1998. First Spanish-Portuguese Congress of Geodesy and Geophysics - IX National Congress of Geodesy and Geophysics, Almeria, Spain.
- *Stochastic inverse modelling of transient groundwater flow.* 1997. IAMG´97, Barcelona, Spain.
- *Comparison of two geostatistical methods with respect to modelling the stationary mean (in Spanish).* 1997. XXIII National Congress Statistics and Operations Research, Valencia, Spain.
- *Impact of Random Function Model Choice on Groundwater Mass Transport Modelling.* 1996. GeoENV I, Lisbon, Portugal.
- *The use of the Knowledge Based System Approach for the optimisation of sampling schemes. Casestudy Fleverwaard (in Dutch).* 1995. Bodembreed, Lunteren, the Netherlands.

Stay abroad

- *MIT, Boston, MA, USA. June-July 2015. With Prof. Dennis McLaughlin and Prof. Dara Entekhabi.*

Visiting scientists

- *Prof. Hamid Moradkhani, Portland State University, Oregon, USA. Stays of one month in 2011, 2012, 2013 and 2014.*
- *Prof. Jasper Vrugt, University of California- Irvine, USA. Stay of two months in 2013.*
- *Prof. Valentijn Pauwels, Monash State University, Monash, Australia. Stay of two months in 2012, stays of one month in 2013, 2014, 2015, 2016 and 2017.*
- *Prof. Abhijit Chaudhuri, IIT Madras, India. Stay of two months in 2016.*
- *Prof. Dhanya C.T., IIT Delhi, India. Stay of two months in 2017.*

Services to the community: Review activities / Editorial Boards

- **Associate Editor** *Advances in Water Resources* (since August 2016)
- **Editor** of *Hydrology Earth System Sciences (HESS)* (since May 2011).
- **Member of Editorial Board** of *Hydrology* (since April 2015)
- **Associate editor** of *Hydrogeology Journal* (2007-2012).
- **Guest editor** *Advances in Water Resources*, special issue *data assimilation* (2015)
- **Ad hoc reviewer** for the following journals:
 - Journal of Contaminant Hydrology (since 1997)
 - Advances in Water Resources (s. 2000)
 - Stochastic Environmental Research and Risk Assessment (s. 2000)
 - Journal of Hydrology (s. 2002)
 - Water Resources Research (s. 2004)
 - Hydrogeology Journal (s. 2007)
 - Geoderma (s. 2007)
 - Hydrological Processes (s. 2007)
 - Hydrological Sciences Journal (s. 2007)
 - Soil Science Society of America Journal (s. 2008)
 - Archives of Industrial Hygiene and Toxicology (s. 2008)
 - Ground Water (s. 2008)
 - Environmental Science & Technology (s. 2009)
 - Remote Sensing (s. 2009)
 - Theoretical & Applied Climatology (s. 2009)
 - Geophysical Research Letters (s. 2010)
 - Computers & Geosciences (s. 2010)
 - Applied mathematical modelling (s. 2010)
 - Journal of Hydroinformatics (s. 2010)
 - HESS (s. 2010)
 - Journal of Environmental Management (s. 2010)
 - Vadose zone journal (s. 2010)
 - Climatic change (s. 2011)
 - Atmospheric Chemistry and Physics (s. 2011)
 - Environmental modelling and software (s. 2011)
 - Atmospheric Environment (s. 2011)
 - Journal of Geophysical Research- Atmospheres (s. 2011)
 - Atmospheric Science Letters (s. 2012)
 - Science of the Total Environment (s. 2012)
 - International Journal of Climatology (s. 2012)
 - IEEE Geoscience and Remote sensing Letters (s. 2012)
 - Mathematical Geosciences (s. 2013)
 - Hydrological Processes (s. 2013)
 - Earth Science Reviews (s. 2013)
 - Engineering Geology (s. 2013)
 - IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (s. 2014)
 - Monthly Weather Review (s. 2014)
 - Water (s. 2014)
 - Biogeosciences (s. 2015)
 - Soil (s. 2015)
 - Agricultural and Forest Meteorology (s. 2015)
 - Sensors (s. 2015)
 - Hydrology Research (s. 2017)

- Journal of Hydrometeorology (s. 2017)
- Review of several conference papers.
- **Review of research proposals from:**
 - National science foundation of Chile (Fondecyt)
 - National science foundation of Germany (DFG)
 - BMBF (Applied science, Germany)
 - Research Foundation Flanders
 - EU (KIC)
 - National science foundation of Israel

Services to the community: Conferences / Workshops

- **Part of Scientific Advisory Board of the conferences:**
 - GeoENV II (1998)
 - GeoENV V (2004)
 - ModelCARE (2005)
 - GeoENV VI (2006)
 - GeoENV VII (2008)
 - IAHR (2010)
 - Tag der Hydrologie (2011)
 - IAMG (2013)
 - MEME (2014)
 - CMWR (2014)
 - GeoENV (2014)
 - Workshop on Data Assimilation in Terrestrial Systems (2016)
 - X International Conference on Geostatistics (2016)
 - International Conference on Monitoring and Prediction of Terrestrial System States and High Performance Computing in Terrestrial Systems Research (2018)
- **(Co-)organization of conference sessions:**
 - *Weekly weather cycles of meteorological variables*, EGU2011, co-chair.
 - *Parameter estimation, inverse modelling and data assimilation in subsurface hydrology*, EGU2012, co-chair.
 - *Linking advances in hydrological forecasting with real-time control techniques for multiple applications across temporal scales*, EGU2012, co-chair.
 - *Estimation, inverse modelling and data assimilation in subsurface hydrology*, EGU2013, co-chair.
 - *Hydrogeology*, IAMG2013, chair (invited).
 - *Estimation, inverse modelling and data assimilation in subsurface hydrology*, EGU2014, co-chair.
 - *Data assimilation*, CMWR2014, chair (invited).
 - *Geomodeling: integration of multiple source data, parameterization and forecasting*, MEME2014, chair (invited).
 - *Monitoring and data assimilation: predicting states and fluxes*, TERENO International Conference 2014, chair (invited).
 - *Evapotranspiration: advances in in situ and remote sensing approaches*, AGU2014, co-chair.
 - *Estimation, inverse modelling and data assimilation in subsurface hydrology*, EGU2015, co-chair.
 - *Evapotranspiration: advances in in situ and remote sensing approaches*, AGU2015, co-chair.
 - *Model Uncertainties, Parameter Estimation, and Data Assimilation in Subsurface Hydrology*, EGU2016, co-chair.

- *Data Assimilation for integrated hydrological models and Earth System Models*, EGU2016, chair.
 - *Evapotranspiration: advances in in situ and remote sensing approaches*, AGU2016, co-chair.
 - *Data Assimilation for integrated hydrological models and Earth System Models*, EGU2017, chair.
 - *Evapotranspiration: advances in in situ and remote sensing approaches*, AGU2017, co-chair.
 - *Data Assimilation for integrated hydrological models and Earth System Models*, EGU2018, chair.
 - *Data assimilation*, CMWR2018, chair (invited).
- **(Co-)organization of workshops:**
 - On real-time modelling, real-time management and river-aquifer interaction. January 2008. Zurich, Switzerland.
 - On real-time modelling and real-time management. July 2008. Together with Water Works Zurich, TK Consult AG, Danish Technical University, Danish Hydraulic Institute and Water Works Copenhagen. Zurich, Switzerland.
 - Qualitätsorganisiertes Grundwassermanagement. Einsatz neuer Technologien. 15th of January 2009. Zurich, Switzerland.
 - Data assimilation. Bi-lateral workshop between the university of Gent (Belgium) and Forschungszentrum Jülich (Germany). September 2010. Jülich, Germany.
 - Multi-scale ecosystem modelling tools including data assimilation. September 2014. Paris, France.
 - Lysimeter workshop II. December 2014, Davis CA, USA.
 - Workshop "Data assimilation in terrestrial systems". September 2016. Bonn, Germany.
 - Indo-German workshop on "Two-water worlds: Coupling and decoupling mechanisms of surface and groundwater". May 2017. Porz/Cologne, Germany
 - **Professional memberships:**
 - NVWS (the Dutch Association of Astronomy and Meteorology). Working group hobby meteorologists. Since 1985.
 - EGU (European Geophysical Union). Since 2006.
 - IAH (International Association of Hydrogeologists). 2007-2014.
 - IAHS (International Association of Hydrological Sciences). 2007-2010.
 - AGU (American Geophysical Union). Since 2007.
 - AMS (American Meteorological Society). Since 2008.

Commissions

- Institute Coordination, IBG-3, Forschungszentrum Jülich (biweekly meetings), since 2009.
- Fachgruppe Geography & Geosciences, RWTH Aachen (monthly meeting in semesters), since 2009.
- VSR-Commission, Granting of high performance computing projects on supercomputing infrastructure Forschungszentrum Jülich (two meetings / year), since 2012.
- Land and Water Management Engineering Platform, Climate KIC, 2013-2015.
- W3 "Berufungskommission", Terrestrial Modelling, KU Leuven / Forschungszentrum Jülich, 2013.
- W1 "Berufungskommission", Reservoir Engineering, RWTH Aachen, 2013.

- W3 "Berufungskommission", Geological Engineering and Environmental management", RWTH Aachen, 2015.

Other information

Hobbies: Sports (hiking, jogging, ice skating) and travelling.