

Bronstert, Axel, Prof. Dr.

Date of birth: 23.10.1959

Sex: male

Children: 1 child (age 11)

Contact details:

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Present academic position(s):

11/2002 – today: Professor (W3) for Hydrology & Climatology at the University of Potsdam

03/2003 – today: co-chair, Hydrology Group, Potsdam-Inst. for Climate Impact Research (PIK)

Previous positions

09/05 - 02/06 Visiting Professor, Dept. for Geosc. & Geoeng. TU Catalunya, Barcelona, Spain

02/00 - 10/02 Professor (C3) at the Institute for Geoecology, University of Potsdam

1995 - 2000 Research assistant at the Potsdam Institute for Climate Impact Research (PIK)

1995 - 1999 Conjoint lecturer at the Technical University Berlin and the Free University of Berlin

01/95 - 02/95 Guest Scientist and Lecturer: CSIRO for Land and Water; Canberra, Australia

10/91 - 01/92 Visiting Lecturer at the Asian Institute of Technology (AIT), Bangkok, Thailand

1988 - 1995 Research assistant at the Institute for Hydrology and Water Resources Management, University of Karlsruhe (hydrological modelling; water resources management)

Teaching and Education

Introduction in hydrology (lectures and seminar), Introduction in climatology (lectures), Introduction in geoecology (lecture and seminar), Advanced surface hydrology (lectures), Hydrological and geoecological modelling (seminar); Open channel hydraulics (lectures); Water management (seminar); Global water resources (seminar); Riverine landscape (Seminar); Hydrological processes (lectures and seminar)

No of supervised doctoral students during the last 5 years (as main supervisor): 15 (7 of them pending)

No of supervised MSc students during the last 2 years (as main supervisor): 11 (1 of them pending)

No of supervised BSc students during the last 5 years (as main supervisor): 12

Academic training

04/1994 Dissertation: "*Modelling runoff generation and soil moisture dynamics at the hillslope scale*" (Supervisor: Prof. Erich Plate; Grade: "with excellence")

1986 - 1987 Post graduate scholarship at Kyoto University, Japan: Chair of Hydraulics, Faculty of Engineering (numerical modelling; geostatistics)

6/1986 Diploma Thesis: "*Investigation of water resources management options to improve the flooding conditions in the Schutter-Unditz flooding area*" (Supervisor: Joachim Wald)

1979 – 1986 Student of civil engineering and water resources at Karlsruhe University,

Other academic expertise and activities

Member of editorial boards:

- Hydrology and Earth System Sciences (since 2008)
- International Journal of Flood Risk Management (2009-2013)
- Hydrological Processes (since 01/2010)
- Hydrologie und Wasserbewirtschaftung HyWa (since 2010)
- Journal of Hydrology (since 01/2011)

Positions in scientific committees and academic units:

Since 10/2014	Director of the Institute for Earth and Environmental Sciences, University of Potsdam, Germany
since 02/2013	Member of the governing board of the <i>Water Science Alliance (WSA)</i>
since 03/2012	Member of the <i>DFG Review Board 318 (Water Research)</i>
09/2011– 09/2014	President of the <i>German Hydrological Society (DHG)</i>
since 03/2011	Member of the <i>DFG Senate Commission on Water Research (KOWA)</i>
since 05/2010	Vice-Chair, <i>Potsdam-Berlin Consortium for Research in GeoSciences (Geo.X)</i>
04/2007 – 02/2009	Director of the Institute for Geo-Ecology, University of Potsdam, Germany
2005 – 2010	Head of the <i>Graduate School for Natural Disasters</i> , Potsdam University
04/2005 – 10/2009	Director of the <i>Interdisciplinary Centre for Pattern Dynamics and Applied Remote Sensing (IMAF)</i> , University of Potsdam
04/2002–03/2004	Director of the Institute for Geo-Ecology, University of Potsdam, Germany
2001 – 2005	Member of the Commission for Research, University of Potsdam, Germany
12/2000–12/2001	Director of the <i>Centre for Environmental Research</i> , University of Potsdam
1999 – 2005	Chairman of the <i>International Working Group on Development and Calibration of Coupled Hydro-Ecological/Atmospheric Models</i> of IHP/UNESCO
1998 – 2003	International Scientific Advisory Committee of the IRMA/SPONGE-Programm of the European Union (European Flood Research)
1997 – 2004	Chairman of the <i>Working Group Runoff</i> of DVWK (German Water Society)
1996 – 2000	Steering Committee for Flood Mitigation of the European Commission

Academic awards:

February 1995	"Ehrensator Huber Prize 1995" of Karlsruhe University for an excellent dissertation
10/1986 - 12/1987	research scholarship of the Japanese Ministry for research and Education (MONBUSHO) at Kyoto University, Japan
February 1987	"Ehrensator Huber Prize 1987" of Karlsruhe University for outstanding studies

10 Most Relevant Publications

- Bronstert, A.**, Plate, E.J. (1997): Modelling of Runoff Generation and Soil Moisture Dynamics for Hillslopes and Micro-Catchments. *Journal of Hydrology*, 198, 177-195.
- Bronstert, A.**, Bárdossy, A. (1999): The role of spatial variability of soil moisture for modelling surface runoff generation at the small catchment scale: *Hydrology and Earth System Sciences*, 3(4), 505-516.
- Bronstert, A.**, Carrera, J., Kabat, P., Lütke-meier, S. (2005): Coupled Models for the Hydrological Cycle - Integrating Atmosphere, Biosphere and Pedosphere. Springer 2005, 348pp.
- Bronstert, A.**, Bárdossy, A., Bismuth, C., Buiteveld, H., Disse, M., Engel, H., Fritsch, U., Hundecha, Y., Lammersen, R., Niehoff, D., Ritter N. (2007): Multi-scale modelling of land-use change and river training effects on floods in the Rhine basin. *River Res. and Applications*, 23, 1102-1125.
- Bronstert, A.**, de Araújo, J.C., Batalla, R.J., Costa, A.C., Delgado, J.M., Francke, T., Foerster, S., Güntner, A., Lopez-Tarazon, J., Mamede, G.L., Medeiros, P.A.H., Müller, E.N., Vericat, D.(2014): Process-based modelling of erosion, sediment transport and reservoir siltation in mesoscale semi-arid catchments. *Journal of Soils and Sediments*, 14(12), 2001-2018.
- Bürger, G., **Bronstert, A.**, (2014): Towards Subdaily Rainfall Disaggregation via Clausius-Clapeyron. *Journal of Hydrometeorology*, 15(3), 303-131
- Güntner, A., **Bronstert, A.** (2004): Representation of landscape variability and lateral redistribution processes for large-scale hydrological modelling in semi-arid areas. *Journal of Hydrology*, 297(1-4), 136-161.
- Hattermann, F. F., Krysanova, V., Habeck, A., **Bronstert, A.** (2006) Integrating wetlands and riparian zones in river basin modelling; *Ecological Modeling*, 199, 379-392.
- Krause, S., **Bronstert, A.**, Zehe, E. (2007) Groundwater-surface water interactions in a North German lowland floodplain - Implications for the river discharge dynamics and riparian water balance. *Journal of Hydrology*, 347(3-4), 404-417.
- Niehoff, D., Fritsch, U., **Bronstert, A.** (2002): Land-use impacts on storm-runoff generation: Scenarios of land-use change and simulation of hydrological response in a meso-scale catchment in SW-Germany. *Journal of Hydrology*, 267(1-2), 80-93.