

CV of Prof. Dr.-Ing. Axel Bronstert (as of November 2020)

1. Personal data

Born 23. 10. 1959
at Ludwigshafen / Rhein, Germany
legal status married to Charlotte Bronstert, one child
nationality German

2. Education and academic titles

04/1967 - 06/1978 primary school and high school
10/1978 - 06/1986 study of civil engineering and water resources at Karlsruhe University, Germany
12/1985 - 6/1986 Diploma Thesis: "Investigation of water resources management options to improve the flooding conditions in the Schutter-Unditz flooding area"
June 1986 termination of the studies (Diploma)
10/1986 - 12/1987 post graduate research at Kyoto University, Chair of Hydraulics, Faculty of Engineering (numerical modelling; geostatistics)
02/1988 - 03/1995 research assistant at the Institute for Hydrology and Water Resources Management, University of Karlsruhe (hydrological modelling; water resources management)
April 1994 Doctoral Thesis: "Modelling runoff generation and soil moisture dynamics at the hillslope scale", grade: "summa cum laude" (with excellence)

3. Professional situation and occupational activity:

10/1986 - 12/1987 post graduate research at Kyoto University, Chair of Hydraulics, Faculty of Engineering (numerical modelling; geostatistics)
02/1988 - 03/1995 researcher at the Institute for Hydrology and Water Resources Management, University of Karlsruhe (hydrological modelling; water resources management)
04/1995 - 01/2000 researcher at the Potsdam Institute for Climate Impact Research (PIK): (hydrological modelling; impact of climate change on the hydrological cycle; interdisciplinary integrated modelling)
10/1995 - 1999 lecturer at the Technical University Berlin and the Free University of Berlin
since 02/2000 Professor for Hydrology and Climatology at the University of Potsdam (teaching: hydrology, climatology, fluvial hydraulics, hydrological and hydro-ecol. modelling)
since 03/2003 co-chair of the Hydrology Group, Potsdam-Inst. for Climate Impact Research (PIK), Potsdam

12/2000-12/2001 Director of the *Centre for Environmental Research*, 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
04/2005 – 10/2009 Director of the *Interdisciplinary Centre for Pattern Dynamics and Applied Remote Sensing (IMAF)*, University of Potsdam
04/2007 – 02/2009 Director of the *Institute for Geo-Ecology*, University of Potsdam, Germany
10/2014 – 09/2015 Director of the *Institute for Earth and Environmental Sciences*, University of Potsdam, Germany
10/2020 – 09/2021 Director of the *Institute for Environmental Sciences and Geography*, Univ. of Potsdam, Germany

4. Participation in financed projects:

A variety of research projects have been conducted covering the following topics: Hydrological process research; flood research; Hydrology of semi-arid areas; impacts of anthropogenic activities on the hydrological cycle; water management; water quality of surface waters, interdisciplinary & integrated modelling.

5. Publications (journals, chapters of books, etc...) see also orcid.org/0000-0002-6369-8536

Axel Bronstert has written the following publications (as of November 2020):

- 104 Articles in ISI-listed, peer reviewed journals (102 published, 2 in press) (WoS core collection: H-Index: 37)
- 71 other peer reviewed articles or book contributions (70 printed)
- 40 books and book chapters etc: books (3), edited books (8), book chapters (5), institute series (13), special issues (4)
- 63 non-peer reviewed articles and other professional contributions

6. Supervised PhD-Thesis

since 2001 the following number of PhD-Thesis have been supervised (as of November 2020):

- 30 accomplished PhD-Thesis as main supervisor
- 59 accomplished PhD-Thesis as 2nd supervisor or reviewer or reviewer
- 7 currently running PhD-Thesis as main supervisor
- 5 currently running PhD-Thesis as 2nd supervisor or reviewer or reviewer

7. Contracts of research and development with companies and institutions

- Studie zur Erstellung von Bewässerungssystemen in Kamerun (pre-feasibility study for irrigation systems in Kamerun) (Hydroplan GmbH, Herdecke, 1981);
- Durchführbarkeitsstudie zur Wasserkraftnutzung in der Region um Kikwit, Provinz Bandundu, Zaire (pre-feasibility study for hydro power use in Zaire) (Hydroplan GmbH, Herdecke, 1981)
- Untersuchung des Wasserversorgungsnetzes von Lusaka, Sambia (Investigation of water supply network in Lusaka, Zambia) (Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Eschborn und Lusaka, 1984)
- Durchführbarkeitsstudie zur verbesserten Nutzung der wasser- und landwirtschaftlichen Ressourcen eines kleinen Einzugsgebietes in Mali/Westafrika (feasibility study for an improved use of agricultural resources in a small catchment in Mali) (Institut für Wasserbau und Kulturtechnik der Universität Karlsruhe, 1985);
- Wasserwirtschaftliche Untersuchungen zur Verbesserung der Hochwassersituation im Schutter-Unditz Gebiet, Oberrheingraben bei Offenburg (investigation of options to improve flood protection in the Schutter-Unditz, SW-Germany) (Institut für Hydrologie und Wasserwirtschaft (IHW) der Universität Karlsruhe and Wasserwirtschaftsamt Offenburg, 1986);
- Auswirkungen eines Neubaugebiets auf die Hochwassersituation auf der Gemarkung Untereisesheim (Impact of a new built-up area in the municipality of Untereisesheim on the flood situation) (IHW of Univ. of Karlsruhe and town Untereisesheim, 1988);
- Untersuchung der Abflussverhältnisse auf der Gemarkung Au am Rhein (Investigation of runoff conditions in the municipality of Au am Rhein, SW-Germany) (IHW of Univ. of Karlsruhe and Town Au am Rhein, 1988 - 1989);
- Hydraulische Untersuchung zur Hochwassersituation des Triefenbaches in Edenkoben (Hydraulic study about the flood conditions of the Triefenbaches in Edenkoben, SW Germany) (IHW of Univ. of Karlsruhe and town Edenkoben, 1989);
- Hydraulische Untersuchung zur Hochwasserführung der Selz in Gau-Odernheim (Investigation of flood situation of the Selz in Gau-Odernheim) (IHW of Univ. Karlsruhe und Landesamt für Wasserwirtschaft Rheinl.-Pfalz, 1989);
- Studien über den Einfluss von Flurbereinigungsmaßnahmen auf die Hochwassersituation ländlicher Einzugsgebiete (Impact of land consolidation measures on flood generation in rural areas) (IHW der Universität Karlsruhe, Landesanstalt für Umweltschutz Baden-Württemberg und Landesamt für Flurbereinigung Baden-Württemberg, 1990-1992);
- Cooperation with the Division of Water Resources at the Asian Institute of Technology (AIT) in Bangkok, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) and AIT, Bangkok, 1991
- Hydrologische Untersuchung der Sondermülldeponie Malsch (hydrological investigation of the special waste dump site Malsch) (WAT GmbH, Karlsruhe, 1992);
- Simulation des hydrologischen Untersuchungs- und Forschungseinzugsgebietes Ringelbach in den Südvogesen (Physically based simulation of a small catchment Ringelbach in the Vosges mountains, France, in co-operation with the Centre d'Études et de Recherches Éco-Géographiques at the Université Louis Pasteur Strasbourg, 1994-95);
- Numerische Simulation der Bodenwasserdynamik in der Oberflächenabdichtung der Deponie-West in Karlsruhe-Knielingen /numerical simulation of the sub-surface water dynamics of the landfill cover of the waste dumping site Karlsruhe Knielingen) (Institut für Angewandte Geologie der University of Karlsruhe and City of Karlsruhe, 1994);
- Wasserwirtschaftliche Untersuchung des Elbe-Havel-Kanals (water resources analysis of the Elbe-Havel-Channel) (IHW der University of Karlsruhe and Directorate for Water and Navigation, Berlin 1994/95);
- Expert Report on Global Change effects on the hydrological cycle. German Advisory board for Global Change (WBGU) of the Federal German Government (1995);
- Exemplarische Computersimulation der Veränderung des Bodenwasserhaushaltes an Hängen infolge von Versiegelung und Regenwasserversickerung (simulation of hillslope water dynamics and the impacts of surface sealing) (expert report for the State administration water resources of Rheinland-Pfalz State, Mainz, 1997).
- Übersichtsstudie: Die Rolle der Hangneigung und Hangform auf Prozesse des Abflusses und der Bodenerosion und deren Bedeutung für den Wasser- und Stofftransport in Fließgewässern (expert report for the „Industrieverband Agrar, IVA“ (industry association for agrochemicals), Frankfurt am Main, 2007 - 2009

8. Long-term stay in research institutes

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|------------------------------------|---|
| 05/2014 - 06/2014 | Visiting Professor at Universidade Federal des Minas Gerais (Belo Horizonte, Brazil) and Universidade Federal do Ceará (Fortaleza, Brazil) |
| 09/2005 - 02/2006 | Visiting Professor at Technical University of Catalonia (UPC), Barcelona, Spain, Dept for Geosciences and Geo-Engineering, School of Civil Engineering |
| 01/1995 - 02/1995 | Guest Scientist and Lecturer: CSIRO for Land and Water; Canberra, Australia |
| 10/1991 - 01/1992 | Guest Scientist and Lecturer: Division of Water Resources Engineering, Asian Institute of Technology, Bangkok, Thailand |
| 10/1986 - 12/1987 | Research scholarship of the Japanese Ministry for Education and Research (MONBUSHO) at Kyoto University, Japan |
| since 1985, intensified since 1991 | Short visits (up to several weeks) as technical/scientific consultant and/or lecturer in Brazil, Chile, India, Mali, Spain, Thailand, UK, Zaire, Zambia |

9. Affiliations and Honours

Academic awards and scientific offers:

February 2019	Best Paper Award: Climate Change and Natural Hazards, University of Padova, Italy
February 2011	Offer Full Professor (C4) at the Technical University of Dresden, Chair for hydrology, (offer rejected in June 2011)
November 2002	Offer Full Professor (C4) at the University of Potsdam; Chair for Hydrology and Climatology (offer realised at March 1, 2003)
February 2002	Offer Full Professor (C4) at the Technical University of Braunschweig, Chair for hydrology, Water Resources and Water Pollution Control (offer rejected in September 2002)
July 1999	Offer Full Professor (C3) at the University of Potsdam; Chair for Hydrology and Climatology (offer realised at February 1, 2002)
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

Member of professional organisations:

AGU, EGU, IAHS, IAHR, DWA, DHG (German Hydrological Society, presidential board), VGÖD

Memberships in scientific committees etc.:

1998 – 2003	Chairman of the <i>Working Group Runoff</i> of the ATV-DVWK (German Water Society)
1996 – 2000	Steering Committee for Flood Mitigation of the European Commission
1998 – 2003	International Scientific Advisory Committee of the IRMA/SPONGE-Programm of the European Union (European Flood Research)
1999 – 2005	chairman of the <i>International Working Group on the Development and Calibration of Coupled Hydro-Ecological/Atmospheric Models</i> of the IHP/UNESCO programme
2011 – 2014	German Hydrological Society, President
2011 – today	German Commission on Water Research (KOWA) of German Science Foundation (DFG)
2012 – 2020	Water science review board (FK 318) of DFG
2014 – today	German Hydrological Society, presidential board
2014 – today	Water Science Alliance (presidential board)
2015 – 2020	DFG-Research and Training Group <i>Natural Hazards and Risks in a Changing World</i> , NatRiskChange (Spokesperson)
2015 – 2023	Scientific Advisory Board of the German Weather Service
since 2019	Scientific Advisory Board (SAB) of the Research Field "Earth and Environment" at KIT

10. Editorial boards and review activities

Member of an editorial board:

- Hydrological Processes (from 01/2010)
- Hydrology and Earth System Sciences (HESS)
- Hydrologie und Wasserbewirtschaftung (HyWa)

Reviewer for the following research institutions:

Alexander von Humboldt Foundation (AHF), Germany; Austrian Science Fund (FWF), Austria; Baden-Württemberg Programm (BW-PLUS); Deutsche Bundesstiftung Umwelt (DBU); Deutsche Forschungsgemeinschaft (German Research Council), DFG; Dutch Scientific Society (TNO), The Netherlands; Dutch Technology Foundation (STW), The Netherlands; European Commission: DG XII (Research) and XVI (Regional Development); Forschungsfonds der ETH-Zürich; German Academic Exchange Service (DAAD); German Federal Environment Agency (UBA); German federal Ministry for Education and Research (BMBF); Grant Agency of the Academy of Sciences of the Czech Republic; Italian National Research Council (CNR); National Environmental Research Council (NERC, UK); Nordic Research Board (NordForsk), Scandinavia; Swiss National Fund (SNF), Switzerland

Reviewer for the following journals:

Ecological Modelling, Hydrology and Earth System Sciences, Hydrology Research, Hydrological Sciences Journal, IAHS Publications, Journal of Applied Ecology, Journal of Ecological Engineering, Journal of Hydrology, Nordic Hydrology, Physics & Chemistry of the Earth, Science of the Total Environment, Water Resources Research, et al.