

Markus Furger

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Education

1990	PhD in geography (climatology), University of Bern, Switzerland
1984-90	Research assistant at the University of Bern, Institute of Geography, Group for Applied Climatology
1983	Diploma in physics, specialization in atmospheric physics and optics, ETH, Zürich, Switzerland
1978-83	Physics student at the Eidgenössische Technische Hochschule (ETH), Zürich, Switzerland

Training

2006	Introduction to Radiation Protection (PSI Villigen, Switzerland)
1999	Project Management (PSI Villigen, Switzerland)
1998-1999	Writing English for Science (ETH Zürich, Switzerland)

Honors

2003	PSI Preis für Wissenschaftskommunikation (PSI Award for Science Communication)
1990	Meteotest Award (1 st prize) for PhD Dissertation

Research Activities and Areas of Professional Interest

- Elemental analysis of aerosols with synchrotron radiation induced X-ray fluorescence spectrometry (SR-XRF) and a transportable on-line metals monitor (Xact625i)
- Aerosol measurements in Megacities: MEGAPOLI (Paris, France), CalNex-LA (Los Angeles, USA), APICE (Marseille, France), ClearfLo (London, UK), Beijing, PRC, (2017) and New Delhi, India (2018)
- Aerosol measurements in Alpine valleys and other complex terrain: Aerowood (Mesolcina Valley, CH), APART (Zurich, Reiden, CH)
- Participated in various meteorological and atmospheric-chemical field experiments in the Alps during all phases of planning, organization and implementation (ALPEX, Pollumet, VOTALP, Ecomont, MAP, LOOP/PIPAPO, CARBOMONT)
- Worked on the development of remote sensing applications in mountainous

terrain (scintillometer, sodar, radar wind profilers)

- Developed flux and budget estimation techniques for data analyses of composite measurement systems (aircraft, remote sensing instruments, eddy correlation)
- Performed climatological studies of the wind field in the lower troposphere in the vicinity of mountain ranges
- Webmaster for the website of the Laboratory of Atmospheric Chemistry

Professional Affiliations

2007-2013	Member of the Swiss National Committee to the IUGG, Swiss National Correspondent for the IAMAS (2007-2013)
2003-present	Member, European Geosciences Union (EGU, former EGS)
1999-2002	Member, European Geophysical Society (EGS)
1995-present	Member, Swiss Society of Meteorology (SGM), President (2008-2011), Acting President (2007), Vice-President (2004-2007)
1993-present	Member, American Geophysical Union (AGU)
1992-present	Member, American Meteorological Society (AMS)

Experience

2016-2019	SNF Project Leader, 'Trace elements in ambient aerosols and their sources in large Chinese cities'.
2011-2014	SNF Project Leader, 'Sources of trace elements in aerosols using synchrotron radiation induced X-ray fluorescence'
2008-2010	SNF Project Leader, 'Trace elements in aerosols: Quantification and source apportionment'
2001-2006	Editor, Meteorologische Zeitschrift
2001-2004	Project Team Leader, CARBOMONT (Fluxes)
2000-present	Research Scientist at the Paul Scherrer Institute (PSI), Laboratory of Atmospheric Chemistry
2007-present	Head of the Library Commission at PSI
08/1992-07/1993	Adjunct Environmental Scientist at Washington State University, Tri-Cities Campus, spent at Pacific Northwest Laboratory, Richland, Washington
1990-1999	Research Scientist at the Paul Scherrer Institute (PSI), Section for Air Pollution Studies
1984-1986	Consultant in air pollution problems at Sigmaphan Inc., Bern (part time)
1982	Student Staff Member at the ALPEX (Alpine Experiment, WMO) Operations Center in Geneva, Switzerland