

Research interests

Quaternary dynamics and paleoclimatology, caves and speleothems, stable isotopes, sedimentary geochemistry, karst hydrogeochemistry

Education/positions

2004-	Professor of Quaternary research at LFUI (Department of High-Alpine Research, subsequently at the Institute of Geology)
2000	Associate professor at the Institute for Geology and Paleontology, LFUI
1999	START award (highest scientific award for young scientists in Austria)
1998-2000	Principal investigator of a research project on speleothems and paleoclimate (funded by the FWF)
1997	Venia docendi (Habilitation) at LFUI
1994-1997	APART Research fellow of the Austrian Academy of Sciences
1992-1993	Postdoctoral research fellow, U.S. Geological Survey, Branch of Energy and Marine Geology, National Center in Reston, Virginia
1991-1992	Postdoctoral research fellow and adjunct professor at the University of Missouri, Columbia
1988-1991	Ph.D. Geology, University of Bern, Switzerland
1982-1987	Diploma Earth Sciences, LFUI

Publications

see *Publication_list.pdf*

and

<https://quaternary.uibk.ac.at/People/Staff/Christoph-Spotl.aspx>

Ten most important publications

- SPÖTL, C. & MANGINI, A. (2002): Stalagmite from the Austrian Alps reveals Dansgaard-Oeschger events during isotope stage 3: Implications for the absolute chronology of Greenland ice cores. – *Earth and Planetary Science Letters*, 203, 507-518. DOI: 10.1016/S0012-821X(02)00837-3
- SPÖTL, C. & VENNEMANN, T.W. (2003): Continuous-flow IRMS analysis of carbonate minerals. – *Rapid Communications in Mass Spectrometry*, 17, 1004-1006. doi.org/10.1002/rcm.1010
- SPÖTL, C. & MANGINI, A. (2007): Speleothems and paleoglaciery. – *Earth and Planetary Science Letters*, 254, 323-331. DOI: 10.1016/j.epsl.2006.11.041
- MOSELEY, G.E., EDWARDS, R.L., WENDT, K.A., CHENG, H., DUBLYANSKY, Y., LU, Y., BOCH, R., SPÖTL, C. (2016): Reconciliation of the Devils Hole climate record with orbital forcing. – *Science*, 351, 165-168. DOI: 10.1126/science.aad4132
- WENDT, K.A., DUBLYANSKY, Y.V., MOSELEY, G.E., EDWARDS, R.L., CHENG, H., SPÖTL, C. (2018): Moisture availability in the southwest United States over the last three glacial-interglacial cycles. – *Science Advances*, 4: eaau1375, DOI: 10.1126/sciadv.aau1375.
- WILCOX, P.S., HONIAT, C., TRÜSSEL, M., EDWARDS, R.L., SPÖTL, C. (2020): Exceptional warmth and climate instability occurred in the European Alps during the Last Interglacial period. – *Communications Earth & Environment (Nature)*, 1:57, <https://doi.org/10.1038/s43247-020-00063-w>.
- SPÖTL, C., KOLTAI, G., JAROSCH, A., CHENG, H. (2021): Increased autumn and winter precipitation during the Last Glacial Maximum in the European Alps. – *Nature Communications*, 12:1839, <https://doi.org/10.1038/s41467-021-22090-7>
- SPÖTL, C., JAROSCH, A., SAXER, A., KOLTAI, G., ZHANG, H. (2023): Thermoelasticity of ice explains widespread damage in dripstone caves during glacial periods. – *Scientific Reports*, 13:7407, <https://doi.org/10.1038/s41598-023-34499-9>
- SPÖTL, C., BAKER, J.L., SKIBA, V., HONIAT, A., FOHLMEISTER, J., LUETSCHER, M., TRÜSSEL, M. (2024): Speleothems in subglacial caves: An emerging archive of glacial climate history and mountain glacier dynamics. – *Quaternary Science Reviews*, 333, 108684, <https://doi.org/10.1016/j.quascirev.2024.108684>

SPÖTL, C., FOHLMEISTER, J., REIMER, P., ZHANG, H. (2024): First insights into the age of the giant ice deposits in the Eisriesenwelt cave (Austria). – Scientific Reports, 14:11001, <https://doi.org/10.1038/s41598-024-61668-1>

Additional research and professional achievements

2024	Main organizer of the 10th International Workshop on Ice Caves (IWIC-X)
2023-	Editor-in-Chief of The Innovation Geoscience
2020	Honorary member of the Geological Society of Austria
2020	Tiroler Landespreis für Wissenschaft
2019	Weiss award (FWF)
2013	Full member of the Austrian Academy of Sciences
2022	Main organizer of the symposium “Highlights of geoscientific cave research”, Austrian Academy of Sciences, Vienna
2022	Co-organizer of the KR-IX conference, Innsbruck
2021	Organizer of the symposium “Caves: The geoscientific exploration of the last white spots on earth”, Natural History Museum, Vienna
2015-2018	Member of the ICDP Science Advisory Group
2010-2014	Vice President of the German Quaternary Association
2009-2014	Member of the Scientific Advisory Council of the GFZ German Research Centre for Geosciences, Potsdam
2008-2024	President of the Association of Austrian Speleologists
2006-2010	President of the Austrian Geological Society
2004-	Co-editor of <i>Die Höhle</i> (Vienna)
2002-2004	Co-editor of <i>Sedimentology</i> (Blackwell, Oxford)