



Curriculum Vitae

EDUCATION

08/2006 – 11/2015	Habilitation in natural sciences (PD Dr. rer. nat)	EQF Level 8
10/2001 – 07/2006	PhD in natural sciences (Dr. rer. nat)	EQF Level 8
10/1995 – 01/2001	Diploma in Physical Geography (Dipl. Geogr.)	EQF Level 7

ACADEMIC RECORD

since 12/2015	Associate Professor at the Paris-Lodron University Salzburg
03/2014 – 11/2015	Assistant Professor at the Paris-Lodron University Salzburg
03/2013 – 08/2013	Research stay in New Zealand
10/2001 – 02/2014	Scientific staff member University of Salzburg
01/2009 – 03/2011	Scientific staff member Austrian Academy of Sciences
05/2001 – 10/2001	Freelancer

SCIENCE

Platforms and Indexes	Google Scholar Scopus Web of Science Researcher ID ORCID Research Gate PLUS Academia
Supervision and reviews	Supervision of BSc, MSc, and (international) PhD students Conference Board member within AGIT, GI_Forum (Poster session), IALE Europe 2009 Proposal evaluator in European and national programmes Reviewer of >100 journal articles and publisher of special issues

SELECTED RESEARCH PROJECTS

A total of 26 [research grants](#) on [international projects](#) have been received, amounting to over 3.9 million Euros for the Paris-Lodron University of Salzburg. Some key research projects are as follows:

01/2025 – 12/2028 (48 month)	DANSER : DANube SEdiment Restoration: towards the deployment and upscaling of sustainable management of the sediments across the Danube catchment basin. Total Budget: 8.7 mio EUR
01/2024 – 06/2026 (30 month)	SpongeCity : Improving urban climate change adaptation capacities by testing and promoting the 'sponge city' methodology on transnational level. Total Budget: 2 mio EUR
06/2022 – 05/2027 (60 month):	SELINA : Science for Evidence-based and sustainabLe decIsions about NATural capital. Total Budget: 13 mio EUR
02/2015 – 08/2018 (42 month):	ESMERALDA : Enhancing ecosystem sERVICES mApping for poLicy and Decision mAking. Total Budget: 2 mio EUR
07/2011 – 06/2017 (72 month):	SMART : Smart Characterisation of New Zealand's Aquifers. Total Budget: 5.0 mio EUR (8.80 mio NZ\$)
01/2012 – 12/2014 (36 month):	ThermoMap : Area mapping of superficial geothermic resources by soil and groundwater data. Total Budget: 1.9 mio EUR
01/2012 – 12/2014 (36 month):	C3-Alps : Capitalising Climate Change Knowledge for Adaptation in the Alpine Space. Total Budget: 3.1 mio EUR

RESEARCH INTEREST

Dr. Klug's special interests cover the further integration of GIS, remote sensing, and environmental modelling. The focus is on risk assessments, including climate change, which is assumed the main driving force and human security problem of the 21st century. He intends to strengthen further his present experience in the holistic and integrated view of system components from the Earth's surface and the connected climate-hydrology-soil boundary layer. He is interested in using transdisciplinary approaches to provide adequate and applied GI tools for decision support for stakeholders and politicians. This includes joining web-based participatory approaches and visualisation techniques with process-based scientific analyses for repetitive and transparent scenario modelling, incorporating (big) real time spatial-temporal datasets. The SMART Hydro in situ measurements help understanding spatial processes in the dimension of time, while these will aid modelling approaches to become more automated in future. Up- and downscaling opportunities in GIS frameworks link multi-spatial and multi-temporal scenarios to support decision making at different political levels. Linking environmental modelling from different disciplines with online visualization tools enable an applied access to science at the interface of purely scientific (value-free) and anthropogenic (norm- and standard-based) working environments. Enabling stakeholders to analyse the present environmental status based on state-of-the-art Spatial Data Infrastructures enhances communication and decision making across disciplines such as landscape planning.

SELECTED PUBLICATIONS

>90 Peer-Reviewed journal articles with a total citation of >1240; i10-index:26; h-Index:18. The list of publications is kept current on the website: <https://www.hermannklug.com/publications>

1. Leditznig, T. , Klug, H. (2024): Estimating Carbon Stock in Unmanaged Forests Using Field Data and Remote Sensing. *Journal of Remote Sensing*. <https://www.doi.org/10.3390/rs16213926>
2. Mirzad, M. Z., Kazemi, H., Sheikh, F., Klug, H., Gharekhloo, J. (2023): Assessment and quantification of some short term ecosystem services in garden pea field. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2023.137464>
3. Wohnner, C., Peterseil, J., Klug, H. (2022): Designing and implementing a datamodel for describing environmental monitoring and research sites. *Ecological Informatics*. <https://doi.org/10.1016/j.ecoinf.2022.101708>
4. Wohnner, C., Ohnemus, T., Zacharias, S., Mollenhauer, H., Ellis, E.C., Klug, H., et al. (2021): Assessing the biogeographical and socio-ecological representativeness of the ILTER site network. *Ecological Indicators*. <https://doi.org/10.1016/j.ecolind.2020.107061>
5. Wohnner, C., Peterseil, J., Genazzio, M.A., Guru, S., Hugo, W., Klug, H. (2020): Towards interoperable research site documentation – Recommendations for information models and data provision. *Ecological Informatics*. <https://doi.org/10.1016/j.ecoinf.2020.101158>
6. Klug, H., Reichel, S. (2019): Regional Climate Regulation Capacities. *Landscape Series. Landscape Planning with Ecosystem Services. Theories and Methods for Application in Europe. Chapter 13.* p. <https://doi.org/10.1007/97894-024-1681-7>
7. Albert, C., von Haaren, C., Klug, H., Weber, R. (2019): Leitbilder and Scenarios in Landscape Planning. *Landscape Series. Landscape Planning with Ecosystem Services. Theories and Methods for Application in Europe*. <https://doi.org/10.1007/978-94-024-1681-7>
8. Kazemi, H., Klug, H., Kamkar, B. (2018): New services and roles of biodiversity in modern agroecosystems: A review. *Ecological Indicators*. <https://doi.org/10.1016/j.ecolind.2018.06.018>
9. Liptay, Z. Á., S. Czirány, E. Pirkhoffer, Klug, H. (2018): Hydrological modelling of small alpine watersheds with the NAM model. *Carpathian Journal of Earth and Environmental Sciences*. <http://dx.doi.org/10.26471/cjees/2018/013/021>
10. Kmoch, A., Uuemaa, E., Klug, H., Cameron, G.S. (2018): Enhancing Location-Related Hydrogeological Knowledge. *ISPRS International Journal of Geo-Information*. <https://doi.org/10.3390/ijgi7040132>

ADDITIONAL INFORMATION

Memberships	since 2014 ICA-OSGeo lab and the Geo for All initiative
	since 2012 Open Geospatial Consortium (OGC), 2nd Groundwater Interoperability Experiment (GW2IE)
	since 2012 Long Term Ecosystem Research (LTER) Network
	since 2011 active in the Mountain Research Initiative (MRI)
	since 2011 Ecosystem Service Partnership
	since 2009 Landscape Europe, European Association for Landscape Ecology
	since 2002 International Association for Landscape Ecology (IALE) and member in the working groups "Landscape Structure", "Geoökologische Kartierung und Leistungsvermögen des Landschaftshaushalts", "Landscape Ecology Education Network" (LE-Net)