

Prof. Dr. Helmut Brückner

Name Brückner
 First names Helmut Karl Christian
 Academic title Prof. Dr. rer. nat. habil.
 Date of birth 25 September 1950
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 University of Cologne
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Special fields of interest

Geomorphology, Geoarchaeology, Geochronology

Publications

Monographs and books: 13 | Articles in peer-reviewed journals: 168 | Book chapters: 61 | Other scientific papers: 127 [as of 1 December 2022]

Scientific qualifications

1989 Postdoctoral lecturing qualification (Habilitation), *Venia Legendi* for “Geography”, Heinrich-Heine-University of Düsseldorf; Habilitation Thesis: *Küsten-nahe Tiefländer in Indien – ein Beitrag zur Geomorphologie der Tropen* [Coastal Lowlands of India – A Contribution to the Geomorphology of the Tropics]

1982–1983 Teachers’ Training (Referendariat) in Erkrath [2nd High School Teacher Examination (*gut*; 2nd best mark)]

1979 Doctorate (PhD, Dr. rer. nat.) in Physical Geography, University of Düsseldorf; PhD Thesis: *Die Morphogenese des Küstenhofes von Metapont (Süditalien) und seiner Umrahmung im Quartär* [The Geomorphological Evolution of the Coastal Area of Metaponto (Southern Italy) during the Quaternary] (*summa cum laude*)

1977–1989 Research Assistant at the Geographical Institute, University of Düsseldorf

1976 First High School Teacher Examination (*mit Auszeichnung*; best mark)

1969–1976 Study of teacher training for high schools (Gymnasium), major subjects: Geography and Mathematics, minor subjects: Philosophy and Educational Sciences, University of Düsseldorf

Scientific positions

Since 2019 Emeritus contract with the University of Cologne, extended for two years by the board of the Institute of Geography (until the end of 2024)

2010–2019 Professorship of Physical Geography (Chair, W3+), Institute of Geography, University of Cologne

11-12/1995 Visiting professor for “Coastal Geomorphology”, Universidad de Concepción (Chile) (with DAAD grant)

1994–2010	Professorship of Physical Geography (C4+), Faculty of Geography, University of Marburg
1992–1994	Professorship of Physical Geography (C3), focused on Geomorphology, Institute of Geography, University of Passau
1991–1992	Lecturer (Hochschuldozent, C2), Faculty of Geography, University of Marburg
1991	Heisenberg Fellow of the DFG (German Research Foundation); at the same time: sabbatical replacement for Prof. Dr. D. Barsch at the University of Heidelberg (Summer Term 1991)

Calls from universities

Cologne (2008, accepted); Heidelberg (1999); Zürich/CH (1993); Marburg (1993, accepted); Erfurt (1993); Passau (1991, accepted)

Academic distinction

Since 2008	Member, German National Academy of Sciences Leopoldina
Since 2007	Corresponding Member, German Archaeological Institute (DAI)
2004–2014	Member, DFG (German Research Foundation) “Senate Commission on Future Directions in Geoscience” (former Senate Commission on Collaborative Research in Geoscience)
2004–2012	Member, DFG (German Research Foundation) committee Fachkollegium No. 317 “Geography” (partly as spokesperson)
Since 1999	Corresponding Member, Austrian Archaeological Institute (ÖAI)
June 1981	Award: “Best Dissertation of the Year 1980”, University of Düsseldorf

Administration

2012–2013	Managing Director of the Institute of Geography, University of Cologne
2006–2008	Dean of the Faculty of Geography, University of Marburg
1996–1997	Dean of the Faculty of Geography, University of Marburg

Additional evidence of qualification

2015–2019	Member, Internal Scientific Advisory Board of the University of Cologne
2012–2019	Vice Director, Geoscience Alliance ABC/J (alliance of the geoscientific institutes of the universities of Aachen, Bonn, Cologne, and Forschungszentrum Jülich)
2011–2018	Member, Scientific Advisory Board of the “Lower Saxony Institute for Historical Coastal Research” (NIhK) (Chairman since 2016)
2011–2019	Member, Scientific Advisory Board of the “Deutsches Bergbau-Museum Bochum” (DBM)
2009–2019	Member, Scientific Advisory Board of the Excellence Cluster Topoi (“The Formation and Transformation of Space and Knowledge in Ancient Civilizations”), FU Berlin and HU Berlin
2003–2016	Member, Reviewing Committee of “Géomorphologie – relief, processus, environnement”, ed. by Revue du Groupe français de géomorphologie, Paris

2001–2007	Speaker, Working Group “Geography of the Oceans and Coasts” of the German Society for Geography
2000–2015	Member, Editorial Board of “GEO-ÖKO”
1999–2015	Member, Editorial Board, “Zeitschrift für Geomorphologie” (Annals of Geomorphology)
1999–2005	Deputy Chairman, Scientific Advisory Board of the VGDH (Association of Geographers at German Universities)
1998–2019	Member, German National Committee for the UNESCO-IGCP Program (“International Geoscience Program”)
1997–2019	German Representative for DGfG (German Society for Geography) at EUGEO (“Association of Geographical Societies in Europe”)
1995–1999	Member, Scientific Advisory Board of “Petermanns Geographische Mitteilungen”
1994–2000	Reviewer, DFG priority program “Wandel der Geo-Biosphäre während der letzten 15.000 Jahre“
1987–1995	Vice-President, Subcommission “Indian Ocean” of the “International Union for Quaternary Research” (INQUA) (1987-1991, 1991-1995)
Since 1982	Member, International Union for Quaternary Research (INQUA) and German Quaternary Association (DEUQUA)
Since 1982	Reviewer for international journals: Palaeo-3, Boreas, Marine Geology, Journal of Coastal Research, Quaternary International, Zeitschrift für Geomorphologie, Journal of Archaeological Science, Quaternary Science Reviews, etc.

Other matters

Organizer of Meetings Sessions at the EGU 2012 in Vienna, IGC Cologne 2012, etc.

Annual meetings of the Working Group “Geography of Oceans and Coasts” in Cologne (2019, 2013), Marburg (2008, 1998), and Düsseldorf (1990)

“Luminescence and ESR Symposium” in Cologne (2011) and Marburg (2000)

Memberships

in scientific organizations and associations: AK Geomorphology, AK Geography of Oceans and Coasts, AK Geoarchaeology, German Association for Quaternary Research (DEUQUA), International Union for Quaternary Research (INQUA), German Society of Soil Science, Ernst Kirsten Society – International Society for Historical Geography of the Old World, Association of Geographers at German Universities (VGDH), German Association of University Professors (DHV)

Publications (ten most important recent publications)

Please note that in the Natural Sciences first and last authorships are equally ranked.

- Neugebauer, I., Dinies, M., Plessen, B., Dräger, N., Brauer, A., **Brückner, H.**, Frenzel, P., Gleixner, G., Hoelzmann, P., Krahn, K.J., Pint, A., Schwab, V.F., Schwarz, Tjallingii, R. & M. Engel (2022): The unexpectedly short Holocene Humid Period in Northern Arabia. – Nature Communications Earth & Environment, 3, 47. doi:10.1038/s43247-022-00368-y

- Vogel, A., Seeger, K., Brill, D., **Brückner**, H., Khin Khin Soe, Nay Win Oo, Nilar Aung, Zin Nwe Myint, Kraas, F. (2022): Identifying land-use related potential disaster risk drivers in the Ayeyarwady Delta (Myanmar) during the last 50 Years (1974–2021) using a hybrid ensemble learning model. – *Remote Sensing*, 14 (15), 3568. doi.org/10.3390/rs14153568
- Brill, D., May, S. M., Mhammdi, N., King, G., Lehmann, B., Burow, C., Wolf, D., Zander, A. & H. **Brückner** (2021): Evaluating optically stimulated luminescence rock surface exposure dating as a novel approach for reconstructing coastal boulder movement on decadal to centennial timescales. – *Earth Surface Dynamics*, 9: 205-234. doi.org/10.5194/esurf-9-205-2021
- Seeliger, M., Pint, A., Frenzel, P., Marriner, N., Spada, G., Vacchi, M., Başaran, S., Dan, A., Seeger, F., Seeger, K., Schmidts, Th. & H. **Brückner** (2021): Mid- to late-Holocene sea-level evolution of the northeastern Aegean Sea. – *The Holocene*, 31 (10): 1621-1634. doi.org/10.1177/09596836211025967
- Brill, D., Seeger, K., Pint, A., Reize, F., Kay Thwe Hlaing, Seeliger, M., Opitz, S., Khin Mi Mi Win, Win Thuzar Nyunt, Nilar Aye, Aung Aung, Kyaw Kyaw, Kraas, F. & H. **Brückner** (2020): Modern and historical tropical cyclone and tsunami deposits at the coast of Myanmar: Implications for their identification and preservation in the geological record. – *Sedimentology*, 67 (3): 1431-1459. doi.org/10.1111/sed.12586
- Stock, F., Laermanns, H., Pint, A., Knipping, M., Wulf, S., Hassl, A.R., Heiss, A.G., Ladstätter, S., Opitz, St., Schwaiger, H. & H. **Brückner** (2020): Human-environment interaction in the hinterland of Ephesos – As deduced from an in-depth study of Lake Belevi, west Anatolia. – *Quaternary Science Reviews*, 244, 106418. doi.org/10.1016/j.quascirev.2020.106418
- May, S.M., Gelhausen, H., Brill, D., Callow, N., Engel, M., Opitz, S., Scheffers, A., Joannes-Boyau, R., Leopold, M. & H. **Brückner** (2018): Chenier-type ridges in Giralia Bay (Exmouth Gulf, Western Australia) – Processes, chronostratigraphy, and significance for recording past tropical cyclones. – *Marine Geology*, 396: 186-204. doi.org/10.1016/j.margeo.2017.03.005
- Rixhon, G., May, S.M., Engel, M., Mechernich, S., Schroeder-Ritzrau, A., Fohlmeister, J., Frank, N., Boulvain, F., Dunai, T. & H. **Brückner** (2018): Multiple dating approach (¹⁴C, ²³⁰Th/U and ³⁶Cl) of tsunami-transported reef-top megaclasts on Bonaire (Leeward Antilles) – Current achievements and challenges. – *Marine Geology*, 396: 100-113. doi.org/10.1016/j.margeo.2017.03.007
- **Brückner**, H., Herda, A., Kerschner, M., Müllenhoff, M. & F. Stock (2017): Life cycle of estuarine islands – From the formation to the landlocking of former islands in the environs of Miletos and Ephesos in western Asia Minor (Turkey). – *Journal of Archaeological Science: Reports*, 12: 876-894. doi.org/10.1016/j.jasrep.2016.11.024
- Brill, D., May, S.M., Engel, M., Reyes, M., Pint, A., Opitz, S., Dierick, M., Gonzalo, L.A., Esser, S. & H. **Brückner** (2016): Typhoon Haiyan's sedimentary record in coastal environments of the Philippines and its palaeotempestological implications. – *Natural Hazards and Earth System Sciences*, 16: 2799-2822. doi.org/10.5194/nhess-16-2799-2016