

CURRICULUM VITAE



PERSONAL DATA

Prof. Dr. Ingmar Björn Unkel

Date of birth: 16.05.1978
Place of birth: Heidelberg, Germany
Family status: married, 1 child (born 2008)
Nationality: German

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PROFESSIONAL EXPERIENCE

- Since 09/2015 **Associate Professor (W2) for Environmental History, Kiel University,** Institute for Ecosystem Research.
- 09/2009-08/2015 **Junior Professor for Environmental History, Kiel University,** Graduate School "Human Development in Landscapes" and Institute for Ecosystem Research.
08/2012 positive evaluation (Zwischenevaluation)
- 02/2009-08/2009 **Parental Leave (Elternzeit)**
- 05/2008-08/2009 **Postdoc – Lund University,** Department of Physics, Division of Nuclear Physics
Research topic: AMS-¹⁴C analysis of occupational contamination in modern human tissues from people working at nuclear facilities and laboratories
- 06/2006-08/2009 **Postdoc – Lund University (Sweden),** GeoBioSphere Science Centre, Quaternary Geology
Research topic: AMS-¹⁴C dating and age-depth-modelling, geochemical (XRF, CNS, LOI) analyses of lake sediments and peat bogs from Isla de los Estados (Tierra del Fuego, Argentina) to reconstruct the deglacial and Holocene climate record of the region in the context of interhemispheric climate relations
- 03/2006-05/2006 **Postdoc – Heidelberg Academy of Sciences,** research centre for radiometric dating, ¹⁴C-laboratory

EDUCATION

- 02/2003-02/2006 **PhD Studies**
 Heidelberg Academy of Sciences, research centre for radiometric dating,
¹⁴C-laboratory
- Title of the PhD thesis:** AMS-¹⁴C analyses for the reconstruction of the
 geomorphological and cultural development of the Palpa region (S-Peru)
 Supervisors: Prof. Günther Wagner, Prof. Bernhard Eitel, Dr. Bernd Kromer
 Dissertation mark: 0.0 – **summa cum laude** (excellent)
- Academic degree:** Dr. rer. nat.
- 10/1997-09/1999 **Studies of Geology**
 University of Heidelberg, Germany
 10/1999-12/2002 University of Karlsruhe (TU), Germany
 Main subjects: hydrogeology, engineering/applied geology,
 tectonics, water chemistry
- Title of diploma thesis:** European seismic zone Gulf of Corinth: Geological-
 hydrogeological investigations of the Aigion area, in connection with the
 international continental deep drilling project (ICDP) AIG 10 (NW-Peloponnese,
 Greece)
 Supervisors: Prof. Heinz Hötzl, Dr. Vlad Giurgea (mark: 1.5 – very good)
- Academic degree:** Diplom-Geologe (Dipl.-Geol.) – Geologist
- 1997 **Abitur (A-level)** Secondary school – Gymnasium Sandhausen

COMPETITIONS AND AWARDS

- 1998 “Wilke-Award” for the scientific publication of a young author
 1997 “Jugend forscht” – German „Young Researchers Contest“, 4th prize at the all-
 German finals, section geo- & space-sciences. Contribution title: „The micro-
 mammal fauna of the Mauer Sands – investigations on the environment of the
 Homo heidelbergensis“
- 1997 Award of the foundation “Humanismus Heute” for excellent knowledge in Latin
 1994/95 “Bundeswettbewerb Deutsche Geschichte um den Preis des Bundespräsidenten“
 „Students contest on German History - Award of the Federal President“, 6th prize

SCHOLARSHIPS

- 2003-2006 Scholarship of the „International Postgraduate Programme (IPP) - "Geofluids,
 Gases and Aerosols in System Earth", funded by DAAD and DFG at the
 University of Heidelberg
- 1999-2002 Scholarship of a political foundation

LANGUAGE SKILLS

- German (native speaker)
- English (very good skills, written and oral)
- Spanish (language certificate of the University of Heidelberg)
- Swedish (good skills, written and oral)
- Latin (Latinum Magnum)
- Modern Greek (very basic skills)

ACTIVITIES

Reviewer

Journals:

- Quaternary Science Reviews
- Quaternary Research
- Quaternary International
- Ecological Indicators
- Latin American Antiquity
- Environment. Earth Sciences
- Journal X-Ray Spectrometry
- Journal of Archaeol. Science

Organizations:

- ANR (French Research Funding Agency) – Equipex call 2011
- DFG (German Research Foundation)
- Jugend forscht (German Young Researchers competition, reviewer in geosciences for the state Schleswig-Holstein)

Editor

Open Journal of Archaeometry – Editor-in-Chief (since 04/2010)

Conferences

Organization Committee or Session Chair

- 2015 AK Geoarchäologie – annual meeting in Kiel (Conference chair)
- 2014 AK Geomorphologie - 40th annual meeting in Kiel (Conference committee)
- 2013 Session 12 “Social and Environmental Change in Pre-Hispanic Latin America”;
International Open Workshop “Socio-Environmental Dynamics over the Last
12,000 Years: The Creation of Landscapes III” (Session chair)
- 2004 5th German Young Researchers Congress in Heidelberg (Conference committee)

MEMBERSHIPS

- Since 2014 International Water History Association (**IWHA**)
- Since 2013 **Institute of Andean Studies**
- Since 2012 **AK Geomorphologie**
Since 2014 Member of the advisory board
- Since 2010 German Association of University Professors and Lecturers (**DHV**)
- Since 2009 European Society for Environmental History (**ESEH**)
- Since 2009 **AK Geoarchäologie**
- Since 2004 **Society for Archaeometry (GNAA)**
- Since 2003 German Young Researchers Network „JuFORUM e.V.“,
- Since 2001 Founding member of the society „Homo heidelbergensis von Mauer e.V.“,
2003/04 Member of the advisory board
- Since 2000 German Quaternary Association (**DEUQUA**)

PUBLICATIONS AND TALKS

PUBLICATIONS (PEER-REVIEWED)

1. Xue, J., Zhong, W., Xie, L., Huang, X., and Unkel, I. (2015). Millennial-scale variability in fire activity during the last glacial period in the tropical Leizhou Peninsula (south China). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 438, 344–351. doi: 10.1016/j.palaeo.2015.08.037
2. Unkel, I., Schimmelmann, A., Shriner, C., Forsén, J., Heymann, C., and Brückner, H. (2014). The environmental history of the last 6500 years in the Asea Valley (Peloponnese, Greece) and its linkage to the local archaeological record. *Zeitschrift Für Geomorphologie, Supplementary Issues*, 58(2), 89–107. doi:10.1127/0372-8854/2014/S-00160
3. Haenssler, E., Unkel, I., Dörfler, W., and Nadeau, M. (2014). Driving mechanisms of Holocene lagoon development and barrier accretion in Northern Elis, Peloponnese, inferred from the sedimentary record of the Kotychi Lagoon. *Quaternary Science Journal*, 63(1), 60–77. doi:10.3285/eg.63.1.04
4. Fernández, M., Björck, S., Wohlfarth, B., Maidana, N. I., Unkel, I., and van der Putten, N. (2013). Diatom assemblage changes in lacustrine sediments from Isla de los Estados, southernmost South America, in response to shifts in the southwesterly wind belt during the last deglaciation. *Journal of Paleolimnology* 50 (4), 433-446. doi:10.1007/s10933-013-9736-4
5. Unkel, I., Ehret, D., and Rohn, J., (2013). Recurrence analysis of the mass movement activity at Stambach (Austria) based on radiocarbon dating. *Geomorphology* 190, 103-111, doi:10.1016/j.geomorph.2013.02.020.
6. Heymann, C., Nelle, O., Dörfler, W., Zagana, H., Nowaczyk, N., Xue, J., and Unkel, I., (2013). Late Glacial to mid-Holocene palaeoclimate development of Southern Greece inferred from the sediment sequence of Lake Stymphalia (NE-Peloponnese). *Quaternary International* 302, 42-60, doi:10.1016/j.quaint. 2013.02.014.
7. Haenssler, E., Nadeau, M.J., Vött, A., and Unkel, I., (2013). Natural and human induced environmental changes preserved in a Holocene sediment sequence from the Etoliko Lagoon, Greece: New evidence from geochemical proxies. *Quaternary International* 308, 89-104, doi:10.1016/j.quaint.2012.06.031.
8. Unkel, I., Reindel, M., Gorbahn, H., Isla Cuadrado, J., Kromer, B., and Sossna, V., (2012). A comprehensive numerical chronology for the pre-Columbian cultures of the Palpa valleys, south coast of Peru. *Journal of Archaeological Science* 39, 2294-2303, doi:10.1016/j.jas.2012.02.021.
9. Björck, S., Rundgren, M., Ljung, K., Unkel, I., and Wallin, Å., (2012). Multi-proxy analyses of a peat bog on Isla de los Estados, easternmost Tierra del Fuego: a unique record of the variable Southern Hemisphere Westerlies since the last deglaciation. *Quaternary Science Reviews* 42, 1-14, doi:10.1016/j.quascirev. 2012.03.015.
10. Unkel, I., Fernandez, M., Björck, S., Ljung, K., and Wohlfarth, B. (2010). Records of environmental changes during the Holocene from Isla de los Estados (54.4°S), southeastern Tierra del Fuego. *Global and Planetary Change* 74, 99-113, doi:10.1016/j.gloplacha.2010.07.003.
11. Stenström, K., Unkel, I., Nilsson, C., Rääf, C., and Mattsson, S. (2010). The use of hair as an indicator of occupational 14C contamination. *Radiation and Environmental Biophysics* 49, 97-107, doi:10.1007/s00411-009-0245-9.
12. Mächtle, B., Unkel, I., Eitel, B., Kromer, B., and Schiegl, S. (2010). Molluscs as evidence for a Late Pleistocene and Early Holocene humid period in the northern Atacama desert, southern Peru (14.5°S). *Quaternary Research* 73, 39-47 doi:10.1016/j.yqres.2009.05.007.
13. Unkel, I., Björck, S., and Wohlfahrt, B. (2008). Deglacial environmental changes on Isla de los Estados (54.4°S), southeastern Tierra del Fuego. *Quaternary Science Review* 27, 1541-1554, doi:10.1016/j.quascirev.2008.05.004.

14. Unkel, I., Kadereit, A., Mächtle, B., Eitel, B., Kromer, B., Wagner, G. A., and Wacker, L. (2007). Geomorphic evidence of palaeo-environmental changes at the eastern margin of the South Peruvian coastal desert (14°30' S) before and during the Little Ice Age. *Quaternary International* 175, 3-28, doi:10.1016/j.quaint. 2007.1003.1006.
15. Unkel, I., Kromer, B., Reindel, M., Wacker, L., and Wagner, G. A. (2007). A chronology of the pre-Columbian Paracas- and Nasca-culture in South Peru based on AMS-14C-dating. *Radiocarbon*, 49(2), 551-564.
16. Mächtle, B., Eitel, B., Kadereit, A., and Unkel, I. (2006). Holocene environmental changes in the northern Atacama desert, southern Peru (14°30'S) and their impact on the rise and fall of Precolumbian cultures. *Zeitschrift für Geomorphologie Suppl.* Vol. 142, 47-62.
17. Eitel, B., Hecht, S., Mächtle, B., Schukraft, G., Kadereit, A., Wagner, G., Kromer, B., Unkel, I., and Reindel, M. (2005). Geoarchaeological evidence from desert Loess in the Nasca-Palpa Region, Southern Peru: Palaeoenvironmental changes and their impact on pre-Columbian cultures. *Archaeometry* 47, 137-158.
18. Giurgea, V., Rettenmaier, D., Pizzino, L., Unkel, I., Hötzl, H., Förster, A., and Quattrocchi, F. (2004). Preliminary hydrogeological interpretation of the Aigion area from the AIG10 borehole data. *CR Geoscience* 336, 467-475.
19. Lemeille, F., Chatoupis, F., Fouvelis, M., Rettenmaier, D., Unkel, I., Micarelli, L., Moretti, I., Bourdillon, C., Guernet, C., and Müller, C. (2004). Recent syn-rift deposits in the hangingwall of the Aigion Fault (Gulf of Corinth, Greece). *CR Geoscience* 336, 425-434.
20. Löscher, M., and Unkel, I. (1997). Zur Kleinsäugerfauna der Mauerer Sande. *Jh. geol. Landesamt Baden-Württemberg* 36, 199-204.

h-index: 8 (Scopus, ISI Web of Knowledge; accessed: Sep. 2015)

PUBLICATIONS (BOOK CONTRIBUTIONS AND NON-PEER-REVIEWED)

21. Unkel, I., Heymann, C., Nelle, O., and Zagana, H. (2011). Climatic influence on Lake Stymphalia during the last 15 000 years. *In "Advances in the Research of Aquatic Environment."* (N. Lambrakis, G. Stournaras, and K. Katsanou, Eds.), pp. 75-82. Springer, Berlin, Heidelberg. (peer-reviewed)
22. Unkel, I. and Kromer B. (2008). The clock in the corn cob - on the development of a chronology of the Paracas and Nasca period based on radiocarbon. *In: New Technologies for Archaeology: Multidisciplinary Investigations in Palpa and Nasca, Peru.* (Reindel M, Wagner G, Eds.), 231-244, Heidelberg: Springer.
23. Löscher, M., Maul, L.C. and Unkel, I., (2008). Kleinsäugerfaunen in frühmittel-pleistozänen Flussablagerungen an Neckar, Main und Rhein. *In Der erste Mensch in Mitteleuropa. 600 000 Jahre Zeitgeschichte am Neckar* W. Hansch and W. Rosendahl (Eds.), museo 24. Heilbronn.
24. Unkel, I. (2008). Klimaküche Feuerland. *Spektrum d. Wissenschaft* 02/2008, 14-19.
25. Schreiber, D., Löscher, M., Maul, L.C., and Unkel, I. (2007). Die Tierwelt der Mauerer Waldzeit. *In "Homo heidelbergensis - Schlüsselfund der Menschheits-geschichte."* (G. A. Wagner, H. Rieder, L. Zöller and E. Mick, Eds.), 127-159, Theiss, Stuttgart.
26. Unkel, I. (2006). "AMS-14C-Analysen zur Rekonstruktion der Landschafts- und Kulturgeschichte in der Region Palpa (S-Peru)." HGA volume 121, Universität Heidelberg, 226 p. - <http://www.ub.uni-heidelberg.de/archiv/6311>
27. Unkel, I. (1998a). Die Kleinsäugerfauna der Mauerer Sande - Untersuchungen im Umfeld des Homo erectus heidelbergensis. *Aufschluss* 48, 34-47.
28. Unkel, I. (1998b). Von Mäusen und Menschen aus Mauer. *Junge Wissenschaft* 49, 33-38.

PUBLICATIONS (IN REVIEW)

29. Heymann, C., Unkel, I., Manning, S. W., Bintliff, J., Dörfler, W., Nelle, O., and Zagana, H. (2015, submitted). Climate change as contributing factor to collapse of Mycenaean civilization and rise of Classical Greece. *Submitted to: Quaternary Science Reviews*.
30. Xue, J., Zhong, W., Xie, L., and Unkel, I. (2015, accepted). Vegetation responses to the last glacial and early Holocene environmental changes in the northern Leizhou Peninsula, South China. *Submitted to: Quaternary Research*.
31. Dietre, B., Walser, C., Reidl, D., Unkel, I., Warnk, T., Hajdas, I., Lambers, K., Reitmaier, T., Haas, J.-N. (2015, in review). Major pastoral livestock impact on the subalpine vegetation of the Urschai Valley (Lower Engadine, Switzerland) since the Early Bronze Age (2200 BC). *Submitted to: Vegetation History and Archaeobotany*.

CONFERENCE CONTRIBUTIONS (SELECTED)

Session chairs

- Unkel, I., Contreras, D., Gorbahn, H. (2013) Session 12 “Social and Environmental Change in Pre-Hispanic Latin America”; International Open Workshop “Socio-Environmental Dynamics over the Last 12,000 Years: The Creation of Landscapes III”, 15-18 April, 2013, Kiel (Germany).

Talks

- Unkel, I., Heymann, C., & Zagana, E. (2015). Lakes in Southern Greece and their potential as archaeohydrological archives. *In: Water History 2015 - Biannual conference of the International Water History Association (IWHA)*, 24-26 June 2015, Delft (The Netherlands).
- Unkel, I., Heymann, C., and Hänßler, E. (2014). Lakes and lagoons in Southern Greece and their potential as archives for environmental and cultural history. *In: DEUQUA: 37. Hauptversammlung der deutschen Quartärvereinigung*, 24-29 September 2014, Innsbruck (Austria).
- Unkel, I., Brückner, H., Dörfler, W., Filley, T., Forsén, J., Heymann, C., Murray, H.H., Nelle, O., Schimmelmänn, A., Shriner, C., Zagana, H., (2013). The impact of environmental change on past human societies in the Central Peloponnese (Greece). *In: 2nd PAGES Young Scientists Meeting (YSM) & 4th PAGES Open Science Meeting (OSM)*, 11-16 February 2013 Goa (India).
- Unkel, I., Brückner, H., Dörfler, W., Filley, T., Forsén, J., Heymann, C., Murray, H.H., Nelle, O., Schimmelmänn, A., Shriner, C., Zagana, H., (2012). Environmental change and its impact on human culture in the Central Peloponnese – a comparison of two ~8ka lake records from Stymphalia and Asea, Greece. *In: 32nd International Geographical Congress*, 26-30 August 2012, Cologne (Germany).
- Unkel, I., Hänßler, E., Heymann, C., Christanis, K., Käppel, L., Nadeau, M.J., Nelle, O., Nowaczyk, N., Zagana, H., (2011). Tracking Heracles - Environmental change on the Northern Peloponnese driven by climate and culture. *In: XVIII. INQUA*, 21-27 July 2011, Bern (Switzerland).
- Unkel, I., Hänßler, E., Heymann, C., Christanis, K., Käppel, L., Nadeau, M.-J., Nelle, O., Nowaczyk, N., and Zagana, H. (2011). StymphaCore – Reconstructing the Climate History of the Northern Peloponnese, Greece. *In: MedCLIVAR Final Conference - Mediterranean Climate: From Past to Future (6-9 June 2011)*. (P. Lionello, U. Ulbrich, J. Luterbacher, M. Tsimplis, and P. Alpert, Eds.), Lecce (Italy).
- Unkel, I., Eitel, B., Kromer, B and Mächtle, B. (2007). Reading between the (Nasca) Lines – palaeo-environmental changes in the northern Atacama Desert. *In “International Workshop on environmental changes and sustainable development in arid and semi-arid regions, 10-13 September 2007.”* Alashan, Inner Mongolia (China).

Posters

- Unkel, I., Heymann, C., Nelle, O., and Zagana, H. (2014). Climate's potential influence on the Bronze Age / Iron Age transition in Mainland Greece. In: International Workshop "Mediterranean Holocene Climate and Human Societies", 23-25 April 2014, Pylos (Greece).
- Unkel, I., Schimmelmann, A., Shriner, C., Forsén, J., and Brückner, H., (2012). Zum Wandel der Landschaft im Tal von Asea (Peloponnes, Griechenland) unter dem Einfluss von Klima und Kulturen. In: Jahrestagung des AK Geomorphologie, 11-13 Oktober 2012, Freising (Germany).
- Unkel, I., Hänßler, E., Heymann, C., Christanis, K., Erkul, E., Käppel, L., Nadeau, M.-J., Nelle, O., Nowaczyk, N., and Zagana, H. (2010). StymphaCore – Reconstructing the Environmental History of the Northern Peloponnesus, Greece. In: 35. Hauptversammlung der Deutschen Quartärvereinigung DEUQUA, 13-17 September 2010, Greifswald (Germany).
- Unkel, I., Heymann, C., Hoffmann, S., Christanis, K., Erkul, E., Käppel, L., Nelle, O., Nowaczyk, N., and Zagana, H. (2010). Approaching the environmental history and landscape perception of Stymphalos (Northern Peloponnesus, Greece). In "16th Annual Meeting of the European Association of Archaeologists (EAA), 1–5 September 2010." Den Haag (Netherlands).
- Unkel, I., Björck, S., Wohlfahrt, B., and Fernandez, M. (2007). Isla de los Estados (Patagonia) - island at the end of the world, preliminary palaeoclimate data over the last 15 ka based on 14C and XRF analyses. In: ESF-Research conference 'Ocean Controls in Abrupt Climate Change', 19-24 May 2007, Obergurgl (Austria).
- Unkel, I., Kromer, B., Wagner, G. A., and Eitel, B. (2006). Humidity changes in the Northern Atacama around Palpa-Nasca (14°30'S) during the Holocene. In: PAGES-symposium: Reconstructing Past Regional Climate Variations in South America over the late Holocene, 04-07 Oktober 2006, Malargüe (Argentina).

INVITED TALKS

30/05/2013	University of Stockholm (Sweden), Geographical Colloquium Title: "Tracking Hercules – on the environmental history of the Northern Peloponnes, Greece"
18/12/2012	University of Bamberg (Germany), Archaeological Colloquium Title: "Herkulesarbeit am Stymphalos: eine Umweltgeschichte des Peloponnes"
31/10/2012	Patras University (Greece), Geological Colloquium Title: "Environmental History and Landscape Perception of the N' Peloponnes"
19/09/2012	Wuhan Universität (China). Symposium on "Mass Movements in the Three Gorges Area - from Recognition to Mitigation", 19-23 September 2012, Title: „Age determination of mass movements“
14/03/2011	Kiel University (Germany), Conference "Socio-Environmental Dynamics over the Last 12,000 Years: The Creation of Landscapes II, 14-18 March 2011", plenary key note lecture: "Stymphalos - Environmental History and Landscape Perception"
10/11/2009	University of Cambridge (UK), Quaternary Discussion Group at Christ's College Title: "Palaeoenvironmental reconstructions on Isla de los Estados, Patagonia"
30/11/2009	University of Erlangen (Germany), Geozentrum Nordbayern, Geokolloquium Title: "Palaeoenvironmental reconstructions on Isla de los Estados, Patagonia"