

Johanna Anjar

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Employment history

- 2014 - **Postdoctoral Fellow, Norwegian University of Science and Technology**
Postdoc at the National Laboratories for Age Determination at the University Museum.
- 2014 **Associate professor, Norwegian University of Life Sciences, Ås**
Primary teacher on the course “Kvartærgeologi”, a bachelor course in Quaternary Geology.
- 2013 - 2014 **Laboratory assistant in the ¹⁴C-laboratory, Lund University**
Pre-treatment of commercial samples (wood, charcoal, macrofossils, bones and shells) for radiocarbon dating at Lund University AMS ¹⁴C-laboratory.
- 2008 - 2013 **PhD-student in Quaternary Geology, Lund University**
Thesis: “The Weichselian in southern Sweden and the southwestern Baltic Sea: glacial stratigraphy, palaeoenvironments and deglaciation chronology”.
Main supervisor: Nicolaj Krog Larsen, Aarhus University.
Co-supervisors: Lena Adrielsson, Svante Björck, Helena L. Filipsson & Per Möller, Lund University.

Education

- 2008 - 2013 **PhD in Quaternary Geology, Lund University**
For details, see “Employment history”.
- 2004 - 2008 **Master of Science (1 year) in Geology, Lund University**
Master's degree (*Magisterexamen*, a 4-year education corresponding to at least 240 ECTS) in Geology with Quaternary Geology as main subject and Mathematics as a secondary subject (82.5 ECTS).

Ongoing research projects

- ³⁶Cl dating of Late Weichselian and Holocene glacier fluctuations on Jan Mayen.
- ¹⁰Be dating of the deglaciation along a N-S transect through northernmost Norway (Finnmark) and Finland.
- Stratigraphic and chronological constraints on a pre-LGM sediment succession in western Norway.
- Introducing ¹⁰Be dating at the National Laboratories for Age Determinations in Trondheim.

The projects are done together with collaborators from the Norwegian University of Science and Technology, Norwegian Geological Survey, University of Bern, Lund University and Stockholm University.

Expedition experience

- 2012 **Taymyr, SWEDARCTIC 2012**
A seven weeks long expedition to Taymyr as part of the fieldwork for the project: “Taymyr revisited – a quest for former Eurasian Ice Sheet margins and mega-fauna extinction during the last glacial cycles”.

Exchange periods

- 2014 -2015 **University of Bern**
Visited the Institute of Geological Sciences, University of Bern (two months).
- 2011 **Aarhus University**
Visited the Department of Geoscience, Aarhus University (four months).

Teaching experience

- 2014 **Quaternary Geology, bachelor course, Norwegian University of Life Sciences**
- Primary teacher, responsible for all lectures and seminars, supervised semester reports and graded exercises and reports. 10 ECTS.
- 2008 - 2013 **Glacial sedimentology, processes, sediments and landform systems, master course, Lund**
- Led a six-day excursion to Hardangervidda, Norway (2013).
 - Lectured (7 hours) and led exercises (8 hours) in glaciology (2013).
 - Jointly led excursions in Norway and Sweden (2008-2011).
 - Led exercises in glacial sedimentology (2008-2011, 2013) and air-photo interpretation (2008, 2011).
- 2013 **Environmental geology, master course, Lund University**
- Jointly led a two-day field exercise in Quaternary mapping and graded field reports.
- 2008 - 2009 **Hydrogeology, master course, Lund**
- Jointly led laboratory exercises in hydrogeology and graded reports.

Grants awarded

- 2011 Royal Physiographic Society in Lund, 50000 SEK, for the project "Ice advances and ice dynamics in southwest Skåne".
- 2009 Royal Physiographic Society in Lund, 60000 SEK, for the project "From sea to land – The development of the Baltic Sea during the last ice age".
- 2008 - 2011 Four travel grants amounting to a total of 38000 SEK.

Selected courses

- 2010 Learning and teaching in higher education, Lund University, 3 ECTS.
- 2010 Writing for Scientific Publication, Lund University, 3 ECTS.
- 2009 Arctic Terrestrial Quaternary Stratigraphy, UNIS, 10 ECTS.
- 2009 Glaciology, UNIS, 10 ECTS.
- 2006 Glacial sedimentology - processes, sediments and landform systems, Lund University, 15 ECTS.
- 2006 Physical Geography: GIS in Society, 7.5 ECTS.

Publication list

Dissertation

2012 **Anjar, J.** 2012: The Weichselian in southern Sweden and southwestern Baltic Sea: glacial stratigraphy, palaeoenvironments and deglaciation chronology. LUNDQUA Thesis 67.

Peer reviewed articles

- 2014a **Anjar, J.**, Adrielsson, L., Larsen, N. K., Möller, P. & Barth, K. 2013: Weichselian glaciation history of the Fennoscandian Ice Sheet in southern Sweden and the southwestern Baltic Basin. *Boreas* DOI: 10.1111/bor.12048.
- 2014b **Anjar, J.**, Larsen, N. K., Håkansson, L., Möller, P., Linge, H., Fabel, D. & Xu, S. 2014: A ¹⁰Be based reconstruction of the Fennoscandian ice sheet's deglaciation in southern Sweden. *Boreas* 43, 132-148.
- 2013 Möller, P., **Anjar, J.** & Murray, A. S. 2013: An OSL-dated sediment sequence at Idre, west-central Sweden, indicates ice-free conditions in MIS 3. *Boreas* 42, 25-42.
- 2012 **Anjar, J.**, Adrielsson, L., Bennike, O., Björck, S., Filipsson, H. L., Groeneveld, J., Knudsen, K. L., Larsen, N. K. & Möller, P. 2012: Palaeoenvironments in the southern Baltic Sea Basin during Marine Isotope Stage 3: a multi-proxy reconstruction. *Quaternary Science Reviews* 34, 81-92.
- 2010 **Anjar, J.**, Larsen, N. K., Björck, S., Adrielsson, L. & Filipsson, H. L. 2010: MIS 3 marine and lacustrine sediments at Kriegers Flak, southwestern Baltic Sea. *Boreas* 39, 360-366.

Book chapter

2011 Andrén, T., Björck, S., Andrén, E., Conley, D., Lambeck, K., Zillén, L. & **Anjar, J.** 2011: The development of the Baltic Sea basin during the last 130 ka. In: Harff, J, Björck, S. & Hoth, P. (eds.): *The Baltic Sea Basin as a natural laboratory*. Springer-Verlag, Berlin, Heidelberg, pp 75-97.

Invited talk

- 2015 Kwartärgeologiska metoder för att rekonstruera isavsmältning och seneglacial landskapsutveckling i Skandinavien. *Det norske arkeologmøtet*.
- 2013 The Weichselian in the southwestern Baltic Sea: glacial stratigraphy and palaeoenvironmental reconstructions. *Greifswald University*.

Conference abstracts

- 2016 **Anjar, J.**, Alexanderson, H., Larsen, E. & Lyså, A. 2016: OSL dating of Weichselian ice-free periods at Skorgenes, western Norway. *Nordic Geological Winter Meeting*. Oral presentation.
- 2016 **Anjar, J.**, Akçar, N., Larsen, E. & Lyså, A. 2016: Cosmogenic surface exposure dating with ³⁶Cl on Jan Mayen. *Nordic Geological Winter Meeting*. Poster presentation.
- 2016 Lyså, A., Larsen, E., Akçar, N. & **Anjar, J.** 2016: Jan Mayen - The Pleistocene-Holocene glacial history of an active volcanic island. *Nordic Geological Winter Meeting*.
- 2016 Svarva, H. L., **Anjar, J.**, Larsen, E., Nadeau, M. J., Seiler, M. & Værnes, E. 2016: Trondheim radiocarbon laboratory –performance results and future plans. *Nordic Geological Winter Meeting*.
- 2014 **Anjar, J.**, Adrielsson, L., Björck, S., Filipsson, H. L., Larsen, N. K. & Möller, P. 2014: Weichselian glaciation history and palaeoenvironmental development of the SW Baltic Sea. *Nordic Geological Winter Meeting*. Oral presentation.
- 2012 **Anjar, J.**, Larsen, N. K. & Adrielsson, L. 2012: Weichselian stratigraphy and glacial history of Kriegers Flak in the southwestern Baltic Sea. *Nordic Geological Winter Meeting*. Oral presentation.

- 2011 **Anjar, J.**, Larsen, N. K., Adrielsson, L., Bennike, O., Björck, S., Filipsson, H. L., Groeneveld, J., Knudsen, K. L. & Möller, P. 2010: Paleoenvironmental reconstruction of the Middle Weichselian in the southwestern Baltic Basin. *XVIII INQUA-Congress*. Oral presentation.
- 2010 **Anjar, J.**, Larsen, N. K., Adrielsson, L., Bennike, O., Björck, S., Filipsson, H. L., Knudsen, K. L. & Möller, P. 2010: Reconstructing the pre-late Weichselian history of the southwestern Baltic basin based on sediment cores from Kriegers Flak. *Annual Conference of the INQUA PeriBaltic WG*. Oral presentation.
- 2010 Barth, K., Adrielsson, L., Larsen, N. K. & **Anjar, J.** 2010: Late Weichselian Landscape History of South-Western Scania, Sweden. *Annual Conference of the INQUA PeriBaltic WG*.
- 2010 **Anjar, J.**, Larsen, N. K., Filipsson, H. L., Björck, S., Adrielsson, L. & Möller, P. 2010: Reconstruction of the relative sea level and palaeoenvironmental history of the southwestern Baltic Sea during MIS 3. *Nordic Geological Winter Meeting*. Poster presentation.
- 2009 **Anjar, J.**, Larsen, N. K., Björck, S. & Adrielsson, L. 2009: Lacustrine sediments at Kriegers Flak, southwestern Baltic Sea, and its implications for the MIS 3 glaciation history in southwest Scandinavia. *EGU General Assembly, abstract #EGU2009-8609*. Poster presentation.