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**IDENTIFYING INFORMATION:**

NAME: Erhardt, Andrea

ORCID: 0000-0002-5213-986X

POSITION TITLE: Associate Professor

**ORGANIZATION AND LOCATION:** University of Kentucky, Lexington, KY, United States**Professional Preparation:**

ORGANIZATION AND LOCATION	DEGREE (if applicable)	DATE RECEIVED	FIELD OF STUDY
Stanford University, Stanford, CA, United States	PHD	06/2013	Isotope Geochemistry
Colorado School of Mines, Golden, CO, United States	MS	12/2005	Geology
Northwestern University, Evanston, IL, United States	BS	06/2001	Environmental Engineering and Geological Sciences

**Appointments and Positions**

- 2022 - present Associate Professor, University of Kentucky, Department of Earth and Environmental Sciences, Lexington, KY, United States
- 2023 - present Associate Chair, University of Kentucky, Department of Earth and Environmental Sciences, Lexington, KY, United States
- 2022 - present Anna Boysken Fellow, Technical University of Munich, Institute for Advanced Study, Munich, Not Applicable, N/A, Germany
- 2022 - 2023 Global Visiting Fellow, Technical University of Munich, Department of Chemistry, Munich, Not Applicable, N/A, Germany
- 2016 - 2022 Assistant Professor, University of Kentucky, Department of Earth and Environmental Sciences, Lexington, KY, United States
- 2015 - 2016 Postdoctoral Research Associate, University of Cambridge, Department of Earth Sciences, Cambridge, Not Applicable, N/A, United Kingdom
- 2013 - 2015 Canadian Institute for Advanced Research Postdoctoral Research Fellow, University of Cambridge, Department of Earth Sciences, Cambridge, Not Applicable, N/A, United Kingdom
- 2007 - 2015 Research Fellow, University of California Santa Cruz, Institute for Marine Sciences, Santa Cruz, CA, United States
- 2005 - 2013 Doctoral Student, Stanford University, Department of Geological and Environmental Sciences, Stanford, CA, United States

2002 - 2005 Masters Student, Colorado School of Mines, Department of Geology, Golden, CO, United States

## **Products**

### *Products Most Closely Related to the Proposed Project*

1. Avery E, Samonina O, Vyshenska I, Fryar A, Erhardt A. Variation of tap-water isotope ratios and municipal water sources across Kyiv city, Ukraine. *Discover Water*. 2022 November 07; 2(1):- . Available from: <https://link.springer.com/10.1007/s43832-022-00021-x> DOI: 10.1007/s43832-022-00021-x
2. Lyon E, McGlue M, Erhardt A, Kim S, Stone J, Zimmerman S. Late Holocene hydroclimate changes in the eastern Sierra Nevada revealed by a 4600-year paleoproduction record from June Lake, CA. *Quaternary Science Reviews*. 2020 August; 242:106432-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0277379120303942> DOI: 10.1016/j.quascirev.2020.106432
3. de Wet C, Erhardt A, Sharp W, Marks N, Bradbury H, Turchyn A, Xu Y, Oster J. Semiquantitative Estimates of Rainfall Variability During the 8.2 kyr Event in California Using Speleothem Calcium Isotope Ratios. *Geophysical Research Letters*. 2021 February 03; 48(3):- . Available from: <https://onlinelibrary.wiley.com/doi/10.1029/2020GL089154> DOI: 10.1029/2020GL089154
4. Avery E, Samonina O, Kryshstop L, Vyshenska I, Fryar A, Erhardt A. Use of isotopes in examining precipitation patterns in north-central Ukraine. *Isotopes in Environmental and Health Studies*. 2022 October 14; 58(4-6):380-401. Available from: <https://www.tandfonline.com/doi/full/10.1080/10256016.2022.2131781> DOI: 10.1080/10256016.2022.2131781
5. Reis A, Fichtner V, Erhardt A. Changing Sub-Surface Chemistry Resulting From a 26-Million-Year Unconformity: Porewater Chemistry From IODP Site U1553 in the South Pacific. *Paleoceanography and Paleoclimatology*. 2023 July 14; 38(7):- . Available from: <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2022PA004561> DOI: 10.1029/2022PA004561

### *Other Significant Products, Whether or Not Related to the Proposed Project*

1. Erhardt A, Turchyn A, Bradbury H, Dickson J. The calcium isotopic composition of carbonate hardground cements: A new record of changes in ocean chemistry?. *Chemical Geology*. 2020 May; 540:119490-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0009254120300292> DOI: 10.1016/j.chemgeo.2020.119490
2. Yao W, Markovic S, Paytan A, Erhardt A, Wortmann U. Quantifying pyrite oxidation on continental shelves during the onset of Antarctic glaciation in the Eocene-Oligocene transition. *Earth and Planetary Science Letters*. 2021 August; 568:117015-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0012821X21002740> DOI: 10.1016/j.epsl.2021.117015
3. Erhardt A, Pälke H, Paytan A. High-resolution record of export production in the eastern equatorial Pacific across the Eocene-Oligocene transition and relationships to global climatic records. *Paleoceanography*. 2013 March; 28(1):130-142. Available from:

<http://doi.wiley.com/10.1029/2012PA002347> DOI: 10.1029/2012PA002347

4. Erhardt A, Turchyn A, Dickson J, Sadekov A, Taylor P, Wilson M, Scott P, Schrag D. Chemical Composition of Carbonate Hardground Cements as Reconstructive Tools for Phanerozoic Pore Fluids. *Geochemistry, Geophysics, Geosystems*. 2020 March 10; 21(3):- . Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1029/2019GC008448> DOI: 10.1029/2019GC008448
5. Erhardt A, Douglas G, Jacobson A, Wimpenny J, Yin Q, Paytan A. Assessing Sedimentary Detrital Pb Isotopes as a Dust Tracer in the Pacific Ocean. *Paleoceanography and Paleoclimatology*. 2021 April 08; 36(4):- . Available from: <https://onlinelibrary.wiley.com/doi/10.1029/2020PA004144> DOI: 10.1029/2020PA004144

### **Synergistic Activities**

1. I am currently an Anna Boysken Fellow for the Institute for Advanced Study at the Technical University of Munich (TUM), Germany. This 2-year fellowship is for “outstanding top-level female professors who intend to explore gender- and/or diversity-relevant topics in the context of the TUM subject portfolio.” I am both executing and designing a research project to evaluate the impact of male-lead gender advocate training. Early results have been presented at the Goldschmidt Geochemistry Conference, and the project is ongoing.
2. I led the University of Kentucky URGE (Unlearning Racism in Geoscience) pod and have initiated the follow-up program with the department. I recruited 26 geoscientists from all ranks at UK to participate, cumulating in a department seminar, a talk to the alumni board and the Dean, and plans for future interventions.
3. During my sabbatical at TUM I have led diversity workshops for the postdoctoral scholars as part of the Postdoc 101 Series to prepare postdoctoral researchers for both their positions at TUM and future faculty positions.
4. I lead the Outstanding Student Presentation Award program for the Paleoceanography and Paleoclimatology section of AGU from 2017-2021. This entailed managing and finding 3 judges for 50-70 presentations a year, working as an Advisory Board member to consider evaluation rubrics, moderate comments, and determine winners based on a holistic evaluation.
5. I serve as a mentor, both formal and informal, to ~10 students at the University of Kentucky and at the Technical University of Munich. In particular, I am the first contact for most women and students from diverse backgrounds in these departments.

### **Certification:**

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Erhardt, Andrea in SciENCv on 2023-07-19 05:20:04