

# Thomas Rose

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Researcher in the DFG funded project "Implementation of the Global Lead Isotope Database GlobaLID"

Forschungsbereich Archäometallurgie, Deutsches Bergbau-Museum Bochum, Bochum, Germany

✉ [thomas.rose@daad-alumni.de](mailto:thomas.rose@daad-alumni.de) ☎ +49 1522 3176524 🌐 [archaeothommy](https://archaeothommy.com) 🌐 [copper-smelting.com](https://copper-smelting.com)

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## Education<sup>1</sup>

- 2019 – 2023 PhD cum laude in Archaeology, Double degree: Ben-Gurion University of the Negev, Sapienza - University of Rome
- Project ESR5 of the Marie Skłodowska Curie Action Innovative Training Network (MSCA-ITN) European Joint Doctorate in Archaeological and Cultural Heritage Materials Science (ED-ARCHMAT)
  - Thesis title: "The emergence of Copper Pyrotechnology in Western Asia"
  - Supervisors: Yuval Goren (BGU), Francesca Balossi Restelli (Sapienza)
- 2015 – 2018 M. Sc. with distinction in Geosciences (Specialisation: Mineralogy), Goethe University Frankfurt
- Mark: 1.0
  - Thesis title: "Assessment of Fe and O stable Isotope Fractionation in Bog Ores, during Smelting and Corrosion of Iron Objects"
  - Supervisors: Horst R. Marschall (Frankfurt), Sabine Klein (DBM, Bochum)
- 2013 – 2015 B. Sc. in Geosciences, Goethe University Frankfurt
- Mark: 1.4
  - Thesis title: "Copper and Lead Isotopes Analyses of Portuguese Ores"
  - Supervisors: Sabine Klein, H.-Michael Seitz
- 2009 – 2012 B. A. in Pre- and Protohistory and Archaeology of the Middle Ages, University of Tübingen
- Minor subject Science-based archaeology
  - Mark: 1.8
  - Thesis title: "Copper Isotope Fractionation during the Prehistoric Smelting Process with Ores from Cabrières (Southern France)"
  - Supervisor: Ernst Pernicka
- 2001 – 2008 Abitur, Fläming-Gymnasium Belzig
- Mark: 1.3

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<sup>1</sup>In the German system mark 1 is the best achievable and mark 4 equals "pass"

## Research Experience

- since 2024      Deutsches Bergbau-Museum, Bochum, Researcher
- Project "GlobalID - Building an interface between geochemistry and archaeometry to create a new research infrastructure with a global perspective" (DFG Project KL1259/17-1)
- since 2019      ChronochRt - easy plotting of chronological charts with R
- Collaboration with: C. G. M. Girotto
- 2022 – 2024      Goethe University Frankfurt
- NFDI4Earth, Coordinator of the measure 3.3. "NFDI Commons"
- 2021 – 2024      Deutsches Bergbau-Museum Bochum (DBM), Visiting Researcher
- 2021              Metallurgy Laboratory, Dipartimento Ingegneria Chimica Materiali Ambiente, Sapienza - Università di Roma, Research stay (20 weeks, half-time)
- Preparation and Analysis of metallographical sections
- 2018 – 2024      GlobalID (Global Lead Isotope Database): Data infrastructure for lead isotope data in archaeology and interactive textbook
- Preparation of prototypes as side-project
  - Collaboration with: S. Klein, K. J. Westner, Y.-K. Hsu (Core Team Members) and others
- 2018              Deutsches Bergbau-Museum Bochum (DBM), Research Assistant
- Project: "Evaluating copper isotope fractionation in the metallurgical operational chain: an experimental approach" (DFG-Project KL 1259/10-1)
  - Multiple research stays at the Laboratory for Experimental Archaeology, part of the Römisch-Germanisches Zentralmuseum Mainz (RGZM) for organization and conduct of the smelting experiments
- 2017              Laboratoire de Géologie de Lyon, ENS Lyon, Research stay (1 week)
- Iron isotope analysis with MC-ICP-MS
- 2016 – 2018      Goethe University Frankfurt, Student Assistant
- Mineralogical and geochemical characterisation of archaeological materials including isotope analyses
- 2016              Institute for Nonferrous Metallurgy and Purest Materials, Research stay (3 weeks)
- Smelting experiments of oxidic copper ores with an induction furnace
- 2013 – 2015      Goethe University Frankfurt, Student Assistant
- Geochemical characterization of archeological ceramics with pXRF
- 2011              University of Melbourne, Department of Earth Sciences, Research stay (6 weeks)
- Analysis of copper isotopes of ores and smelting products from Cabrières (Southern France)
- 2009              Rhenish State Museum Trier, Excavation worker (full-time position)
- 2008 – 2009      Rhenish State Museum Trier, Alternative Community Service
- Archaeological excavations
  - Re-organization of the internal site archive

## Teaching Experience

- 2017 – 2018      Goethe University Frankfurt, Tutor
- Course: "General and Inorganic chemistry for minor subject students and teacher training"
- 2014 – 2018      Goethe University Frankfurt, Tutor
- Course: "Mathematics as minor subject"
- 2014 – 2015      Goethe University Frankfurt, Teaching Assistant
- Self-designed seminar: "Research and use of geoscientific literature"
- 2012 – 2013      University of Tübingen, Tutor
- Support of Science-Based Archaeology freshmen in Mathematics and Chemistry
- 2011 – 2012      University of Tübingen, Tutor
- Support of Science-Based Archaeology freshmen in Mathematics and Chemistry

## Funding

2023	Vereinigung von Freunden und Förderern der Goethe-Universität <ul style="list-style-type: none"><li>• Travel bursary for the summer school 2023 of NADAC, EUR 450</li></ul>
2022 – 2023	NFDI4Earth EduPilot "Teaching lead isotope geochemistry and application in archaeometry (LIGA-A)", Co-PI: Sabine Klein, EUR 5568
2022	German Mineralogical Society <ul style="list-style-type: none"><li>• Travel bursary for the Congress of the Pan African Archaeological Association for Prehistory and Related Studies (PAA), 1000 €</li></ul>
2017	Hermann-Willkomm-Foundation <ul style="list-style-type: none"><li>• Travel bursary for the research stay at the ENS Lyon, EUR 165</li></ul>
2016 – 2017	Federal Ministry of Education and Research <ul style="list-style-type: none"><li>• Lead applicant for the German Geosciences Students Network for Experience and Interests: Conference of the German Student Councils of Geosciences 2016/2017, EUR 27000</li></ul>
2016	Hermann-Willkomm-Foundation <ul style="list-style-type: none"><li>• Travel bursary for the European Mineralogical Conference 2016, EUR 248</li></ul>
2015 – 2018	Studienstiftung des deutschen Volkes (German Academic Scholarship Foundation) <ul style="list-style-type: none"><li>• Living allowance and travel bursaries, EUR 17733</li></ul>
2014 – 2015	Goethe University Frankfurt, Fonds for innovative teaching concepts <ul style="list-style-type: none"><li>• Seminar: "Research and use of geoscientific literature", EUR 5040</li></ul>
2011	German Academic Exchange Service <ul style="list-style-type: none"><li>• RISEworldwide scholarship for the internship at the University of Melbourne, EUR 2550</li></ul>

## Awards

2016	German Society for Pre- and Protohistory, Young Talent Award
2015	Mineralogical Society of America Undergraduate Prize
2013	University of Tübingen, Student Commitment Prize for the SchlossTagung (student-organized interdisciplinary conference)

## Additional Training

since 2023	Alexandria Archive Institute / Open Context (AAI/OC), NEH Institute for Advanced Topics in the Digital Humanities "Networking Archaeological Data and Communities" (NADAC)
2017	Introduction to thermodynamic modeling with Theriak-Domino Software (1 day), Bremen
2016	EMU School on Mineral reaction kinetics (1 week), Vienna

## Scientific and Academic Community Work

### Reviewing activities

- Heritage Science
- Environmental Archaeology: The Journal of Human Palaeoecology
- Narodowe Centrum Nauki (National Science Center, Poland)
- Archaeometry
- Metalla

## Conferences

- 2023 Many LIDs, but none matching the vessel: Developing a community standard for the publication and long-term archiving of lead isotope data in the archaeological sciences – A brainstorming workshop, Bochum
- Co-Organizer
- 2023 Historical Metallurgy Society Research in Progress Meeting 2023
- Organizer
- 2023 Goldschmidt2023
- Session Chair: "Geoscientists' Little Helpers – small software tools with big impact" (Session 14c)
- 2023 MinWien2023
- Leading Session Chair: "Archaeometry"
  - Organiser and moderator of panel discussion "The Digital Future of Mineralogical Data"
- 2023 6th Workshop for Young Researchers in Archaeometry, Tübingen
- Member of the organizing committee
- 2023 Historical Metallurgy Society Research in Progress Meeting 2023-2
- Organizer
- 2022 28th Annual Meeting of the European Association of Archaeologists
- Leading Session Chair: "Isoscapes, Foodwebs and Provenance: Isotope Archaeology beyond Materials and Specialisations" (Session 217)
- 2022 5th Workshop for Young Researchers in Archaeometry, online
- Member of the organizing committee
- 2022 GeoMinKöln2022
- Leading Session Chair: "Shaping the future of geoscientific data: The path to FAIR data" (session 11)
- 2021 Archäometrie und Denkmalpflege 2021
- Organiser of the forum "Science Communication"
- 2021 4th Workshop for Young Researchers in Archaeometry, Évora/hybrid
- Member of the organizing committee
- 2021 27th Annual Meeting of the European Association of Archaeologists
- Leading Session Chair: "How can metal corrosion products contribute to archaeological research? Archaeometallurgy@EAA Part 1" (Session 318)
  - Session Chair: "Lost in translation? Interplay of archaeological theory and scientific practice as key for modern archaeological reasoning" (Session 245)
- 2020 26th Annual Meeting of the European Association of Archaeologists
- Session chair: "How to promote inter- and transdisciplinarity in Mediterranean Archaeology?" (Session 480)
- 2019 5th International Young Earth Scientist Congress 2019, Berlin
- Head of the organizing committee
- 2019 3rd Workshop for Young Researchers in Archaeometry, Nanterre
- Member of the organizing committee
- 2018 "Mehr als Erz schmelzen: Wie wird ein Experiment Wissenschaft?" (More than smelting ore: Turning an experiment into science), Bochum
- Organizer
- 2018 24th Annual Meeting of the European Association of Archaeologists
- Leading session chair: "Archaeometallurgy in the 21st century" (Session 520)
- 2018 2nd Workshop for Young Researchers in Archaeometry, Berlin
- Member of the organizing committee
- 2017 1st Workshop for Young Researchers in Archaeometry, Frankfurt
- Co-organizer

## Professional Associations

since 2023	forschungsdaten.info ( <a href="https://forschungsdaten.info">https://forschungsdaten.info</a> ), editor
since 2022	Historical Metallurgy Society, Joint Hon. Editor (Technical)
2022 – 2024	ELN Finder ( <a href="https://eln-finder.ulb.tu-darmstadt.de/home">https://eln-finder.ulb.tu-darmstadt.de/home</a> ), editor
2022 – 2024	NFDI Section Metadata, Workgroup "Cookbooks, Guidance and Best Practices", Co-head
2022 – 2023	German Mineralogical Society (DMG), Accounting Officer
2021 – 2022	Digitalisation of "Historical Metallurgy" back issues
2017 – 2020	German Young Earth Scientists Chapter, President
2017 – 2019	German Geosciences Students Network for Experience and Interests, Treasurer
2017 – 2018	German Mineralogical Society (DMG), Student member of the advisory board
2015 – 2017	German Geosciences Students Network for Experience and Interests, Secretary
2014 – 2018	Student Accreditation Pool, external assessor
2014 – 2017	ASIIN (Agency for the accreditation of courses), Technical committee 11 (Geosciences, Geography), student representative
2014 – 2016	Student Accreditation Pool, deputy member of the Board of Appeal

## University

2019 – 2022	MSCA ITN ED-ARCHMAT, ESR representative
2015 – 2018	Departmental Academic Council, Institute for Geosciences, Goethe University Frankfurt, student representative
2015 – 2016	Students Parliament, Goethe University Frankfurt, assistant secretary and member
2014 – 2015	Institute's Board of Directors, Institute for Geosciences, Goethe University Frankfurt, student representative
2013 – 2018	Board of Examiners, Institute for Geosciences, Goethe University Frankfurt, student representative
2013 – 2016	Internal Accreditation Commission, Goethe University Frankfurt, student representative
2011 – 2012	Board of Examiners, Institute for Archaeological Sciences, University of Tübingen, student representative
2011 – 2012	Departmental Academic Council, Department of Geosciences, University of Tübingen, student representative

## Memberships

- Geowissenschaftliches Studentisches Erfahrungs- und Interessensnetzwerk (German Geosciences Students Network for Experience and Interests), honorary member
- Deutsche Mineralogische Gesellschaft (German Mineralogical Society)
- Gesellschaft für Naturwissenschaftliche Archäologie ARCHAEOMETRIE (German Society of Natural Scientific Archaeology and Archaeometry)
- European Association of Archaeologists
- Historical Metallurgy Society
- Marie Curie Alumni Association
- Society for Archaeological Sciences
- Society for American Archaeology