

Lucia R. Profeta

lprofeta@unc.edu

Education

Doctorate in Geological Sciences

University of North Carolina-Chapel Hill

Advisor: Dr. Gilby Jepson

expected May 2028

Certificate in Product Management, Reforge

Nov. 2023

Certificate in Product Management, UC Berkeley

Dec. 2021

M.S. Geoscience

University of Arizona

July. 2017

B.S. Geological Engineering

University of Bucharest, Romania

July 2012

Professional Experience

Senior Research Associate *Aug. 2023 – Jul. 2025*

Lamont – Doherty Earth Observatory, Columbia University

Supervisor: Dr. Kerstin Lehnert

Project: IEDA2 Facility, sponsored by NSF

Research Associate *Sep. 2019 – Jul. 2023*

Supervisor: Dr. Kerstin Lehnert

Project: EarthChem, sponsored by NSF; Astromaterials Data System, sponsored by NASA

Business Data Analyst *Feb. 2019 – Aug. 2019*

Oracle - Bucharest, Romania

Instructor *Sep. 2017 – Jan. 2019*

International House - Bucharest, Romania

Teaching Experience

Instructor

English as a second language courses for adult and young learners, Fall 2017/Spring 2018/Fall 2018 International House, Bucharest, Romania

Teaching Assistant

GEOS 212: *Introduction to Oceanography*, Fall 2012/Spring 2013/Fall 2014 Geosciences Department, University of Arizona

GEOS 306: *Mineralogy* Fall 2015 Geosciences Department, University of Arizona

GEOS 356: *Petrology* Spring 2014/2015/2016/2017 Geosciences Department, University of Arizona

Peer Reviewed Publications

- Ralph, J., Martynov, P., Ma, X., Bargaen, D. V., Li, W., Huang, J., Golden, J., **Profeta, L.**, Prabhu, A., Morrison, S., Que, X., & Zhang, J. (2024). Identifier Service in the Mindat Database: Persistent and Structured Access to Massive Records of Minerals and Other Natural Materials. *Data Intelligence*, 7(3), 692–711. <https://doi.org/10.3724/2096-7004.di.2024.0021>
- **Profeta, L. R.** (2023). Open Data. In *Encyclopedia of Mathematical Geosciences* (pp. 1017–1020). Cham: Springer International Publishing.
- Klöcking, M., Wyborn, L., Lehnert, K. A., Ware, B., Prent, A. M., **Profeta, L.**, Kohlmann, F., Noble, W., Bruno, I., & Lambart, S. (2023). Community recommendations for geochemical data, services and analytical capabilities in the 21st century. *Geochimica et Cosmochimica Acta*.
- Zhang, B., Lehnert, K. A., Rubin, A. E., McKeegan, K. D., Warren, P. H., Mays, J. L., **Profeta, L. R.**, Johansson, A. K., Ni, P., & Young, E. D. (2023). The UCLA Cosmochemistry Database. *Scientific Data*, 10(1), 874.
- Balica, C., Ducea, M. N., Gehrels, G. E., Kirk, J., Roban, R. D., Luffi, P., Chapman, J. B., Triantafyllou, A., Guo, J., Stoica, A. M., Ruiz, J., Balintoni, I., **Profeta, L.**, Hoffman, D., & Petrescu, L. (2020). A zircon petrochronologic view on granitoids and continental evolution. *Earth and Planetary Science Letters*, 531, 116005. <https://doi.org/10.1016/j.epsl.2019.116005>
- Roban, R. D., Ducea, M. N., Mațenco, L., Panaiotu, G. C., **Profeta, L.**, Krézsek, C., Melinte-Dobrinescu, M. C., Anastasiu, N., Dimofte, D., & Apotrosoaei, V. (2020). Lower Cretaceous provenance and sedimentary deposition in the Eastern Carpathians: Inferences for the evolution of the subducted oceanic domain and its European passive continental margin. *Tectonics*, 39(7), e2019TC005780.
- Ducea, M. N., Negulescu, E., **Profeta, L.**, Săbău, G., Jianu, D., Petrescu, L., & Hoffman, D. (2016). Evolution of the Sibișel Shear Zone (South Carpathians): A study of its type locality near Rășinari (Romania) and tectonic implications. *Tectonics*, 35(9), 2131–2157.
- Chapman, J. B., Ducea, M. N., DeCelles, P. G., & **Profeta, L.** (2015). Tracking changes in crustal thickness during orogenic evolution with Sr/Y: An example from the North American Cordillera. *Geology*, 43(10), 919–922.
- **Profeta, L.**, Ducea, M. N., Chapman, J. B., Paterson, S. R., Gonzales, S. M. H., Kirsch, M., Petrescu, L., & DeCelles, P. G. (2015). Quantifying crustal thickness over time in magmatic arcs. *Scientific Reports*, 5(1), 17786. <https://doi.org/10.1038/srep17786>

Select Conference Proceedings

- Profeta, L., Jepson, G., George, S. W. M., & Tanski, N. M. (2025). Apatite fission-track as a potential proxy for changes in paleo-erosion during paleoclimatic excursions. 57(6).

- Profeta, L., Jepson, G., George, S. W. M., & Tanski, N. M. (2025). Testing detrital apatite fission-track as a tool for quantifying erosion rates during the Paleocene-Eocene Thermal Maximum, Pyrenees, Spain. 19th International Conference on ThermoChronology.
- Profeta, L., Lehnert, K. A., Wörner, G., Klöcking, M., Richard, S., Kallas, L., Luzi-Helbing, M., Ji, P., Willbold, M., & Sturm, A. (2024). Providing analysis-ready data for computational geochemical modeling through geochemical data syntheses. Goldschmidt 2024 Conference.
- Profeta, L., Lehnert, K. A., Mays, J., Downs, R., Danninger, G., Ji, P., Celnick, M., Figueroa, J. D., Johansson, A., & Richard, S. (2024). Astromat: Future-proofing astromaterials research. Goldschmidt 2024 Conference.
- Profeta, L., Lehnert, K., Ji, P., Ustunisik, G., Nielsen, R., Vieglais, D., Walker, D., Block, K., & Grossberg, M. (2023). Open and FAIR sample based data sharing through the IEDA2 facility. EGU 2023.
- Profeta, L. R., Lehnert, K. A., Klöcking, M., Richard, S., Ji, P., Johansson, A., Sweets, H. A., Sarbas, B., Hezel, D. C., & Sturm, A. (2023). What is your unit? Building integrated data experiences for community use and meta-analysis. Goldschmidt 2023 Conference.
- Profeta, L., Lehnert, K., Ramdeen, S., Ji, P., Nielsen, R. L., Ustunisik, G. K., Walker, J. D., Block, K. A., & Grossberg, M. (2022). The IEDA2 Facility—Harmonizing FAIR Sample (Meta)Data for VGP Research. AGU Fall Meeting 2022.
- Profeta, L., Ramdeen, S., Sweets, H. A., & Lehnert, K. A. (2022). Community-specific Best Practices for FAIR Data and Samples. Examples from the Tephra EarthChem Community. Goldschmidt 2022 Conference.
- Profeta, L., Ji, P., & Lehnert, K. (2021). Improving Machine-Readability of Geochemical Data and Sample Metadata in Earthchem/lepr/traceds/astromat and Sesar. Geological Society of America Abstracts, 53, 368618.
- Profeta, L., Lehnert, K., Ji, P., Figueroa, J. D., Johansson, A., Mays, J., Morrison, S. M., & Ostroverkhova, A. (2021). Bringing cosmochemistry data into the Big-Data Era: The AstroMaterials Data System. AGU Fall Meeting 2021.
- Profeta, L., Lehnert, K., Song, L., & Figueroa, J. D. (2021). EarthChem Communities: Building Geochemical Data Best Practices with Researcher Engagement. EGU General Assembly Conference Abstracts, EGU21-16459.
- Profeta, L., Lehnert, K., Figueroa, J., Ji, P., Johansson, A., Shane, N., Song, L., & Sweets, H. (2020). Enhancing Access to Data through EarthChem to Augment Volcano Science. AGU Fall Meeting Abstracts, 2020, V015-0005.
- Profeta, L., Ducea, M. N., & Gehrels, G. E. (2016). Melting depths associated with Jack Hills zircons crystallization as revealed by in situ trace element measurements. AGU Fall Meeting Abstracts, 2016, V11D-04.
- Profeta, L., & Ducea, M. (2015). Using trace element proxies for crustal thickness of magmatic arcs: La/Yb. Proceedings of the 2015 Goldschmidt Conference, Prague. Goldschmidt 2015 Conference.
- Profeta, L. R., Ducea, M. N., & Jianu, D. (2013). Sibişel Shear Zone: A late Variscan megashear and implications for the assembly of the South Carpathians basement (Romania). Geological Society of America Abstracts, 45, 598.

Invited Talks

- Profeta, L., Lehnert, K., & Klöcking, M. (2023). Leveraging Data Systems to Propel an Open Geoscience Data Lifecycle. Geological Society of America Abstracts, 55, 392872.

Service Appointments

Executive Boards

- OneGeochemistry – Steering Committee Member (2021-2025)
- EAGE Student Chapter (2011-2012)
- AAPG Student Chapter (2010-2011, 2011-2012)

Journal Editorial Boards

Geochemical Data Journal – Associate Editor

Professional membership

- American Geophysical Union (AGU)
- Geological Society of America (GSA)

Workshop facilitation

- Klöcking, M., Profeta, L., Lehnert, K. A., & Kallas, L. (2023). Open Data in Geochemistry Part 1: Navigating the Present Data Infrastructure Landscape, 4-hour online workshop. Goldschmidt 2023 Conference.
- Klöcking, M., Profeta, L., Lehnert, K. A., & Kallas, L. (2023). Open Data in Geochemistry Part 2: Managing, Publishing, and Archiving Imagery Generated by Geochemical and Cosmochemical Sample Analysis | 1-day hybrid workshop. Goldschmidt 2023 Conference.
- Lehnert, K., and Profeta, L., (2020) Data Systems & Services at EarthChem & Astromat. Goldschmidt 2020 Conference, Zenodo, doi:10.5281/Zenodo.903378

Outreach

- Exhibit Booths for Geoinformatics tools (AGU, GSA, Goldschmidt 2019, 2023, 2024)
- Seismology and river systems demos (Tucson Festival of Books Volunteer 2014, 2015)
- Volunteer at Junior Education Booth (Tucson Gem & Mineral Show 2013, 2015, 2016)
- Mentoring undergraduate level students (University of Bucharest 2011– 2012)
- Participant in European Virtual Seminar on Sustainable Development (2011-2012)

Awards

Fellowships

- GRFP Fellow for 2025-2027

Scholarships and Honors

- Geological Society of America Research Grant recipient 2016 & 2015
- ConocoPhillips Scholarship 2016
- College of Science Galileo Scholar 2014
- ChevronTexaco Geology Scholarship 2013
- Peter J. Coney scholarships 2013

Grants

- IEDA2 – Co-Principal Investigator (NSF EAR-2148939, \$3,637,233.00)
- Tephra Information Portal – Co-Principal Investigator (NSF EAR-2411333, \$623,273.00)