Grace Margaret Beaudoin (she, her, hers)
Education Specialist
Lunar and Planetary Institute
Universities Space Research Association
gbeaudoin@lpi.usra.edu

EDUCATION

2016-2022 **Ph.D.** **Geological Sciences**, University of Texas at Austin
Dissertation: *The behavior of halogens (F, Cl, Br, I) in altered oceanic crust during prograde subduction zone metamorphism and devolatilization*

2011-2015 **B.A.** **Geology**, University of California at Berkeley
Honors Thesis: *Transition of Franciscan eclogite to blueschist in a metamorphic block from Jenner, CA*

PROFESSIONAL EXPERIENCE

2021-present **Education Specialist**
Universities Space Research Association / Lunar and Planetary Institute

I support LPI's mission to advance the understanding of space and planetary science by engaging with diverse audiences, collaborating with scientists and educators, and developing programs and resources for all learners.

- *Serves as National Team Coordinator on NASA's International Observe the Moon Night Coordinating Committee*
- *Leads development of new programming, and curates and distributes resources, aimed at broadening participation in planetary science by students and early-career scientists*
- *Assists with the planning and facilitation of virtual and in-person, public events for young learners (Virtual Explorations with Planetary Scientists; SkyFest) and general audiences (Cosmic Explorations Speaker Series)*
- *Directs promotional efforts for public programs, including developing and writing content for webpages, newsletters, and social media posts*
- *Collaborates with scientists, educators, and community partners from a range of institutions on a variety of projects*
- *Contributes to researching, writing, and reviewing educational materials, internal records, official publications, and proposals*

PRESENTATIONS

2022 The behavior of halogens (F, Cl, Br, I) in altered oceanic crust during prograde subduction zone metamorphism and devolatilization, **Beaudoin, G.M.**, PhD Dissertation Defense at Jackson School of Geosciences in Austin, TX.

2021 Identifying, Implementing, and Preserving Lessons from Virtual Programming, **Beaudoin, G.M.**, Shupla, C., Webb, S., Shaner, A. Poster presentation at the 2022 AGU Fall Meeting in New Orleans, LA.

2021 Halogen cycling in subduction zones: Insights from the exhumed rock record, **Beaudoin, G.M.**, Departmental seminar presentation in the Lithosphere & Deep Earth Seminar Series at Jackson School of Geosciences.

2020 The evolution of the halogen budget in ophiolites from the Western Alps, **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E.
Virtual iPoster presentation at the 2020 AGU Fall Meeting.

2019 Global halogen flux of subducting oceanic crust, **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E.
Oral presentation at the 2019 Goldschmidt Conference in Barcelona, Spain.

2018 From AOC to eclogite: halogen behavior during devolatilization in the forearc, **Beaudoin, G.M.**, Barnes, J.D., John, T.
Poster presentation at the 2018 Goldschmidt Conference in Boston, MA.

2018 Halogen cycling during prograde subduction zone metamorphism and devolatilization, **Beaudoin, G.M.**, Barnes, J.D., John, T.
Poster presentation at the Jackson School of Geosciences Research Symposium.

PUBLICATIONS

2022 **Beaudoin, G.M.** The behavior of halogens (F, Cl, Br, I) in altered oceanic crust during prograde subduction zone metamorphism and devolatilization. University of Texas at Austin, PhD Dissertation. Advised by Jaime Barnes.

2020 Urann, B.M., Le Roux, V., John, T., **Beaudoin, G.M.**, Barnes, J.D. The distribution and abundance of halogens in eclogites: an *in situ* SIMS perspective of the Raspas Complex (Ecuador). *American Mineralogist* 105, 307-318. https://doi.org/10.2138/am-2020-6994

2019 Barnes, J.D., Penniston-Dorland, S.C., Bebout, G.E., Hoover, W., **Beaudoin, G.M.**, Agard, P. Chlorine and Lithium Behavior in Metasedimentary Rocks during Prograde Metamorphism: A Comparative Study of Exhumed Subduction Complexes (Catalina Schist and Schistes Lustrés). *Lithos* 336-337, 40-53. https://doi.org/10.1016/j.lithos.2019.03.028

2015 **Beaudoin, G.M.** Undergraduate Honors Thesis: Transition of Franciscan eclogite to blueschist in a metamorphic block from Jenner, CA, Dept. of Earth and Planetary Science, Univ. of California, Berkeley. Advised by Sean Mulcahy.

Work in progress

Submitted **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E. Global halogen flux of subducting oceanic crust. *Earth and Planetary Science Letters*.

In prep. **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E. Utilizing exhumed metamorphic terranes in the Western Alps to investigate progressive halogen (F, Cl, Br, I) devolatilization from subducting ocean crust.

In prep. **Beaudoin, G.M.**, Barnes, J.D., John, T., Chatterjee, R., Stockli, D. Halogen transport during HP vein formation: Vein transects from Raspas, Monviso, New Caledonia, and Tianshan eclogites provide insights into volatile fluxes during prograde subduction.

TEACHING EXPERIENCE

2020 Head Teaching Assistant, GEO 401 Physical Geology, Jackson School of Geosciences, Univ. of Texas, Austin, Spring semester 2020

- *Helped transition the course from an in-person setting to a virtual setting midway through the semester. Prepared and delivered lab lectures, demonstrations, assignments, and assessments in an online format. Authored lab exams for the 180-person, introductory geology course.*

2018 Head teaching Assistant, GEO 416K Earth Materials, Jackson School of Geosciences, Univ. of Texas, Austin, Fall semester 2018

- *Responsible for lab lectures and demonstrations, preparing lab materials (instruments, samples, assignments), and writing three lab practical exams. Teaching topics included mineral hand specimen ID, crystallography, petrographic microscopy, and basic petrology.*

2017 Teaching Assistant, GEO416K Earth Materials, Jackson School of Geosciences, Univ. of Texas, Austin, Fall semester 2017

- *Teaching topics included mineral hand specimen ID, crystallography, petrographic microscopy, and basic petrology.*

RESEARCH EXPERIENCE

2016-2022 Graduate Research Assistant, Department of Geological Sciences, Jackson School of Geosciences, University of Texas at Austin

Skills: *High precision inductively coupled plasma mass spectrometry (HP-ICP-MS) of Br and I, ion chromatography (IC), pyrohydrolysis, clean lab and wet chemistry procedures, petrography, field mapping*

2014-2015 Undergraduate Research Assistant, Department of Earth and Planetary Science, University of California, Berkeley

2013-2014 Undergraduate Research Apprentice, Museum of Paleontology, University of California, Berkeley

OUTREACH & VOLUNTEERING

2022 Outreach activities on behalf of the LPI:
- Exhibit at Dickenson ISD STEAM EXPO
- Exhibit at Rice University's "Reach for the Stars" STEM event
- Exhibit at Aldine ISD STEM Fest

2020 GeoFORCE Educational Coach (Virtual)
- *GeoFORCE is a K-12 outreach program that takes > 300 high school students on geological field trips during week-long summer academies.*
- *I participated in two summer 2020 academies: 10th Grade Academy - American Southwest and 11th Grade Academy - Pacific Northwest.*
- *Due to COVID-19 precautions, academies were held virtually for the first time, demanding all new curriculum. I sourced and developed student assignments, labs, and challenges that I then presented in online, interactive activities.*

2020 Organized and participated in introductory geology lessons for young learners at Bernice Kiker Elementary School, Austin, TX

2020 Organized and operated a Minerals & Fossils booth at Tom Ford Elementary School's Annual STEAM Fair, Georgetown, TX

2019 Organized and presented an introductory Earth science lesson to students (3-9 years old) at science-themed summer camp, Goddard School, Leander, TX

2019 Presented at "Hot Science, Cool Talks", a science education and public outreach program, Univ. of Texas, Austin. Hands-on demonstrations aimed at educating the public about planetary differentiation and comets.

2018 STEAM Fair volunteer at UT Austin Geosciences Minerals & Fossils booth, Tom Ford Elementary School, Georgetown, TX

CERTIFICATION

2019-2021 Advanced Teaching Preparation Certificate
Teaching preparation series conducted by the Faculty Innovation Center at the Univ. of Texas, Austin

2019 Inclusive Classrooms Leadership Certificate
Seminar series conducted by the Division of Diversity and Community Engagement (DDCE) and the Graduate School at the Univ. of Texas, Austin

2017 NOLS Wilderness First Aid Training

PROFESSIONAL SOCIETIES

Geological Society of America
American Geophysical Union
Mineralogical Society of America
European Association of Geochemistry
Cal Alumni Association

AWARDS

2020	University of Texas at Austin Graduate School Summer 2020 Fellowship
2020	Outstanding Teaching Assistant Award from the Jackson School of Geosciences for Spring 2020 semester
2019-2020	Endowed Presidential Scholarship (EPS) from the Jackson School of Geosciences
2019	Folk/McBride Petrography Contest, 2nd Place, Graduate division, Jackson School of Geosciences
2018	ExxonMobil special recognition Geological Society of America Graduate Student Research Grant
2018	Folk/McBride Petrography Contest, 2nd Place, Graduate division, Jackson School of Geosciences
2017	Geological Society of America Graduate Student Research Grant
2016	Jackson School of Geosciences Recruitment Fellowship
2015	Highest Honors in Geology, Department of Earth and Planetary Science, Univ. of California, Berkeley
2014-2015	Al Ragan Track & Field Scholarship for Academic and Athletic Excellence, Univ. of California, Berkeley