



NAME: Christian Gfatter

DEGREE: Marine Science (MSc) USF, Tampa, FL 2018
Management w/Computer Applications (BSc)
Worcester Polytechnic Institute, Worcester, MA 1988

DEGREE SEEKING: PhD in Geology at FSU

THESIS/DISSERTATION TITLE: Redox sensitive trace metal analyses of foraminiferal calcite to better constrain ancient hypoxic marine environments

RESERCH INTEREST:

Tracking redox-sensitive elements such as molybdenum is of broad interest to understand the effect of climate perturbation feedbacks. Black shales are temporally sparse throughout much of the Phanerozoic (e.g., Cenozoic Era), so using foraminiferal calcite as a possible tracer will enhance our ability to track seawater trace metal concentration which is directly related to the global marine redox state.

PUBLICATIONS:

- Amergian K., Beckwith S., **Gfatter C.**, Selden C. and Hallock P. (2022) “Can Areas of High Alkalinity Freshwater Discharge Provide Potential Refugia for Marine Calcifying Organisms?”. *Journal of Foraminiferal Research* 52 (1): 60–73. <https://doi.org/10.2113/gsjfr.52.1.60>.
- **Gfatter C.** (2018) Application of Image Recognition Technology to Foraminiferal Assemblage Analyses. USF, <https://scholarcommons.usf.edu/etd/7506>

ABSTRACTS:

- **Gfatter C.** and Owens J.D. (2021) Assessing trace metal incorporation using a flow through culturing system for benthic foraminifera. 2021 GSA Annual Meeting. Portland, OR (**POSTER**)
- **Gfatter C.** and Owens J.D. (2020) Experimental design to culture organisms for subsequent trace element analyses. GSA Joint Section Meeting. Reston, VA (**POSTER**)
- **Gfatter C.**, Amergian K., Beckwith S. and Hallock P. (2016) Refugia for Carbonate Producing Organisms in High Carbon Dioxide Environmental Conditions. 2016 AGU Fall Meeting. San Francisco, CA (**POSTER**)
- **Gfatter C.** (2016) Utilizing Image Recognition Technology for Foraminiferal Assemblage Analyses. 2016 GSA Annual Meeting. Denver, CO (**ORAL**)
- Lane C., Rosenthal M., **Gfatter C.** and Lee Y. Enzyme Bearing Metal Organic Framework (MOF) for the Absorption and Degradation of Pesticides. 20th Annual Massachusetts Statewide Undergraduate Research Conference. UMass Amherst, MA (**POSTER**)

HONORS AND AWARDS:

- FSU Attendance and Presentation Grant, 2021
- Lyman Toulmin Award, 2021
- Loeblich and Tappan Student Research Award, 2020

- Golden Key International Honour Society, 2019
- Phi Kappa Phi Love of Learning Award, 2019
- Lyman Toulmin Award, 2019
- GSA Southeastern Section Student Travel Grant, 2016
- Joseph A. Cushman Award for Student Travel, 2016
- USF Conference Presentation Grant Program Award, 2016
- Linton Tibbetts Endowed Graduate Student Fellowship, 2016
- Honor Society of Phi Kappa Phi, 2015
- Wells Fargo Fellowship in Marine Science, 2015