



Education



◆ *May 2023 - Ongoing*

PhD candidate at Ludwig-Maximilians-Universität München, Germany (Advisors: D. Dingwell and U. Kueppers)
Project- **PYTON: PYroclast Textures to understand vOlcaNic behaviour'**

○ *March 2019 - September 2021*

Master's Degree with Honours in Regional and Economic Geology, Universidade Federal do Rio de Janeiro (RJ, Brazil)
Project: "Evolution of the explosive subaerial volcanism of Trindade Island:
Evidence from the quantitative morphological analysis of juvenile pyroclastic fragments"

○ *February 2012 - December 2018*

Bachelor of Science in Geology, Universidade Federal de Minas Gerais (UFMG), BH-MG, Brazil
Final project: "Study of the Poços de Caldas-Trindade alkaline volcanic alignment and its contribution as a geological heritage"

Previous experience



○ *December 2021 - January 2023*

Principal Geologist at Sigma Lithium Corp., Araçuaí, Brazil.

○ *March 2022*

International Field Course on Physical Volcanology (2022) by Prof. Dr. Joan Martí at Tenerife, Canary Islands.
Geoscience Barcelona, CSIC.

○ *August 2019*

Participated in the **6th annual GeoIntern programme** at Tenerife, Canary Islands.
Geochemical training at the Canary Islands Volcanological Institute (INVOLCAN) on diffuse volcano degassing monitoring at the Tenerife NSRZ volcano.

○ *December 2017 - December 2018*

Internship at **CODEMIG/CODEMGE (Minas Gerais development company)**.

○ *January 2017 - July 2017*

Exchange student at the **University of Copenhagen, Denmark**.

○ *February 2016 - January 2017*

Scientific internship with professor Mário Chaves (UFMG).
"Fronteiras de Minas" project, regional mapping (1:100.000) of two regions of Minas Gerais.

○ *October 2015 - December 2017*

Voluntary scientific initiation with professor Alexandre Chaves (UFMG).
Petrographic, microprobe analyses and x-ray diffraction of Kamafugite samples from west of Minas Gerais.

○ *May 2015 - January 2016*

Voluntary scientific initiation with professor Fábio Soares (UFMG)
Characterization of thin sections and samples from the alkaline volcanic rocks of Ilha da Trindade and sandstones from Antarctica.

○ *2014*

Tutor of the disciplines Mineralogy I, II e III (UFMG).
Description and collaboration on the thin sections catalog of the petrography laboratory of UFMG.

Language



PT-BR

Native



EN

Advanced



ES

Intermediate



DE

Beginner

Skills and courses



- Curso de Volcanología para la Sociedad: Online volcanology course organized by Volcanología Chile (2022).
- Volcanoes: their formation, form, and function (2022). Online course by Agust Gudmundsson, edX platform.
- Melts, Glasses, Magmas (2023 and 2024), short course by Donald Dingwell, LMU.
- Communication and Teams (2024), workshop by the Graduate Center LMU, instructed by Sabine Lerch.
- Presentation Skills (2024), workshop by the Graduate Center LMU, instructed by Sabine Lerch.
- International School on Hot Rock Avalanches: "Experimental, Analytical and Numerical Approach to Volcanic Rock Failure and Deposit-Derived PDCs Formation" held at Roma Tre University in Rome from 3 to 6 June (2024).
- Working on Active Volcanoes – Lipari-Stromboli-Vulcano, Italy, 15 to 23 June (2024).
- Invited to participate at the First International Seminar of Interdisciplinary Dialogues – Globalization and Social Change, Mexico City, Mexico (2024).

Main publications



- **Figueiredo, C.A.**, Kueppers, U., Depauli, L., Esenyel, S., Pereira, L., and Dingwell, D.B., 2025. Shape evolution of pumice during granular flow, submitted to *Communications Earth & Environment*.
- **Figueiredo, C.A.**, Kueppers, U., Depauli, L., Esenyel, S., Pereira, L., and Dingwell, D.B., 2025. Shape evolution of pumice during granular flow, IAVCEI Scientific Assembly 2025, Geneva, Switzerland.
https://sa2025.iavceivolcano.org/content/uploads/sites/17/2025/06/abstractbooklet_20june2025.pdf
- **Figueiredo, C.A.**, Esenyel, H. S., Kueppers, U., and Dingwell, D. B., 2024. Shape evolution of pyroclasts in tumbling experiments, EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-22220. <https://doi.org/10.5194/egusphere-egu24-22220>
- **Figueiredo, C.A.**, Bongioiolo, E.M., Jutzeler, M., Gomes, O. da F.M., Neumann, R., 2022. Alkalic pyroclast morphology informs on fragmentation mechanisms, Trindade Island, Brazil. *J. Volcanol. Geotherm. Res.* 428, 1–21.
<https://doi.org/10.1016/j.jvolgeores.2022.107575>
- Santos, F.A., Souza, M.C. De, Zuquette, L.V., Angulo, R.J., Luiza, M., Rosa, C., Talamini, A.A., **Figueiredo, C.A.**, 2022. Inventory of natural processes with nautical charts, real-time kinematic global navigation satellite systems (RTK-GNSS), and unmanned aerial vehicle (UAV), Trindade Island, Brazil. *Brazilian J. Geol.* 52(4), 1–15. <https://doi.org/10.1590/2317-488920220220007>
- Cordero-Vaca, M., **Figueiredo, C. A.**, Czwakiel, N. L., Padrón, E., Melián, G. V., Alonso, M., Asensio-Ramos, M., Hernández-Ramos, W., Hernández, P. A., and Pérez, N. M., 2020. Diffuse CO₂ degassing monitoring of the Tenerife North–South Rift Zone (NSRZ) volcano, Canary Islands, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-12067.
<https://doi.org/10.5194/egusphere-egu2020-12067>
- **Figueiredo, C.A.**, Chaves, A. de O., Sgarbi, P.B. de A., Fernandes, M.L.S., 2018. O Processo de Analcimização De Um Kamafugito (Luz262) do Centro-Oeste Mineiro. *Geonomos* 26, 1-11. <https://doi.org/10.18285/geonomos.v26i1.1233>
- **Figueiredo, C.A.**, Possas, C.R., Ferreira, A.M.S.A., Costa, A.G., Oliveira, F.S. Caracterização Petrográfica dos Chibinito e Lujaurito da Pedra do Balão do Complexo Alcalino de Poços de Caldas. 49º Congresso Brasileiro de Geologia 2018, Abstracts, STV1, Rio de Janeiro, Brazil. <http://cbg2018anais.siteoficial.ws/resumos/9046.pdf>
- **Figueiredo, C.A.**, Possas, C.R., Ferreira, A.M.S.A., Costa, A.G., Oliveira, F.S. Caracterização Petrográfica do alinhamento Poços de Caldas- Ilha da Trindade. 49º Congresso Brasileiro de Geologia 2018, Abstracts, ST 17, Rio de Janeiro, Brazil.
<http://cbg2018anais.siteoficial.ws/resumos/9340.pdf>
- **Figueiredo, C.A.**, Ferreira, A.M.S.A., Machado, M.R., Oliveira, F.S. Schaefer, C.E.G.R. Caracterização Petrográfica das Rochas da Ilha da Trindade, Atlântico Sul. 48º Congresso Brasileiro de Geologia 2016, Abstracts, p. 481, Rio Grande do Sul, Brazil.
<http://cbg2017anais.siteoficial.ws/inf.htm>
- Ferreira, A.M.S.A., **Figueiredo, C.A.**, Machado, M.R., Oliveira, F.S. Schaefer, C.E.G.R. Caracterização Petrográfica de Rochas das Montanhas Ellsworth –Oeste da Antártica. 48º Congresso Brasileiro de Geologia 2016, Abstracts, p. 480, Rio Grande do Sul, Brazil.
<http://cbg2017anais.siteoficial.ws/inf.htm>