HENRIQUE BERGER ROISENBERG

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EDUCATION

Roma Tre University *2023-2025*
PhD Student in Earth Sciences - Research Topic: Seismic Ambient Noise and Surface-Wave Attenuation

Federal University of Rio Grande do Sul (UFRGS) *2021-2022*
MSc Student in Geosciences - Area: Marine Geology - Research Topic: Paleomagnetism
National Council for Scientific and Technological Development (CNPq) Scholarship Holder

Federal University of Santa Catarina (UFSC) *2015-2020*
Geologist
Graduated with honors
Overall GPA: 9.26/10.00
Exchange Student at University of Bergen
Member of the American Association of Petroleum Geologists (AAPG), Brazilian Society of Geology (SBG) and International Association of Sedimentologists (IAS)

RESEARCH AND WORK EXPERIENCE

Roma Tre University January 2023 - December 2025
PhD student *Rome, Italy*

· I currently conduct research in the field of seismology and crustal studies, focusing on the mapping of shear velocities and attenuation of crustal structures on a global scale, using seismic ambient noise, providing insights into the physical properties and composition of the Earth's crust.

Paleomagnetism Laboratory March 2021 - November 2022
Master student *Florianópolis, Brazil*

· I developed my Master's research in Paleomagnetism at the Federal University of Rio Grande do Sul. I worked within a Petrobras funded project, where I studied the magnetostratigraphy of a core in Sergipe-Alagoas Basin, NE Brazil. I was funded by the National Council for Scientific and Technological Development.

QIGEO Consulting Company October 2019 - March 2021
Research Assistant *Florianópolis, Brazil*

· I was responsible for performing fluid substitution on wells to evaluate the changes on properties like P-impedance and S-impedance. I was also responsible for the use of Multidimensional Scaling to evaluate the results of seismic inversion.

Reservoir Geology Laboratory August 2019 - December 2020
Researcher *Florianópolis, Brazil*

· My responsibility was to study the outcrops of Jaicós Formation using Virtual Outcrop Models in order to perform a reservoir characterization of this unit.

Connectionism and Cognitive Sciences Laboratory January 2018 - July 2019
Researcher *Florianópolis, Brazil*

· My responsibility was to research rock physics models and develop a Gassmann Fluid Substitution software to be incorporated in a pseudo-well simulation software developed by the laboratory.

Micropaleontology Laboratory   January 2017 - July 2017
Researcher   *Florianópolis, Brazil*

· I was responsible for collect and study the calcareous fossils of Pântano do Sul beach in order to perform an environmental reconstruction.

PUBLICATIONS

1. Roisenberg, H. B., Cammarano, F., Boschi, L., Magrini, F., & Molinari, I. (2024). Surface-wave attenuation and phase-velocity maps using the AlpArray seismic network: implications for crustal heterogeneity (No. EGU24-753). Copernicus Meetings.

2. Roisenberg, H. B., Bállico, M. B., Guadagnin, F., Manna, M. O., & de Souza, E. G. (2022). Digital outcrop models applied to high-resolution stratigraphy in braided fluvial systems: A study case at Jaicós formation in Parnaíba Basin, NE Brazil. Journal of South American Earth Sciences, 104006.

3. Manna, M. O., dos Santos Scherer, C. M., Bállico, M. B., dos Reis, A. D., Moraes, L. V., Ferrari, L. A. B., ... & de Oliveira, V. G. (2021). Changes in fluvial architecture induced by discharge variability, Jaicós Formation (Silurian-Devonian), Parnaíba Basin, Brazil. Sedimentary Geology, 420, 105924.

4. Nunes et al. HPC for Seismic Processing and Stochastic Inversion in Brazil Asset. SIAM Conference on Mathematical and Computational Issues in the Geosciences, 2021.

5. Roisenberg et al. Modelos Virtuais de Afloramento Aplicados a Arquitetura de Sistemas Fluviais: Estudo de Caso na Formação Jaicos, Bacia do Parnaiba, Brasil. 50º Congresso Brasileiro de Geologia, 2020. v. 1. p. 339-339.

6. Manna et al. Low and High Discharge Variability Fluvial Styles: example of the Jaicos Formation, Parnaiba Basin, Brazil. In: 35th Meeting of Sedimentology, 2021, Prague, Czech Republic. Book of Abstracts. Prague Czech Republic: 35th Meeting of Sedimentology, 2021.

7. Ferrari et al. Arquitetura Deposicional de um Sistema Fluvial Entrelaçado. Estudo de Caso da Formação Jaicos, Siluro-Devoniano da Bacia do Parnaiba, Nordeste Brasileiro. 50º Congresso Brasileiro de Geologia, 2021. v. 2. p. 561-561.

8. Rosa et al. Mapeamento Litoestratigrafico em Escala 1:25.000 do Complexo Metamorfico Brusque na Regiao de Lageado Baixo, Botuvera, SC. 50º Congresso Brasileiro de Geologia, 2021. v. 1. p. 150-150.

9. Oliveira et al. Analise Multi-Escala de Sistemas Fluviais Entrelaçados da Formaçao Jaicos, Siluro-Devoniano da Bacia do Parnaiba, NE Brasil. 50º Congresso Brasileiro de Geologia, 2021. v. 1. p. 203-203.

TECHNICAL STRENGTHS

Programming	Matlab, Python
Typesetting Document	Latex, Microsoft Office
Modeling Softwares	RokDoc, MOVE, Petrel
Georeferencing Softwares	ArcGIS, QGIS

LANGUAGE SKILLS

English	Proficient
Portuguese	Proficient
Spanish	Proficient
Italian	Proficient
German	Intermediate

VOLUNTEERING ACTIVITIES

American Association of Petroleum Geologists (AAPG) UFSC Student Chapter July 2018 - July 2019

Coordinator *Florianópolis, Brazil*

· During my time at AAPG UFSC Student Chapter we organized several events with Brazilian and international researchers from universities and the oil and gas industry.

Connectionism and Cognitive Sciences Laboratory January 2018 - July 2019
Researcher *Florianópolis, Brazil*

· The research work developed in this Laboratory and described above was a volunteer work developed during one and a half year, resulting in a final product and a report for UFSC and Petrobras.

Micropaleontology Laboratory January 2017 - July 2017
Researcher *Florianópolis, Brazil*

· The research work developed in this Laboratory and described above was a volunteer work that was continued by another student. The work developed resulted in a report for UFSC.

Teaching Assitant August 2016- December 2016
Teacher Assistant *Florianópolis, Brazil*

· I worked as a Teacher Assistant for one semester of the Instrumental Geology course.

AWARDS AND RECOGNITIONS

Best Oral Presentation at the 50th Brazilian Geological Congress (2021)

The work "Virtual Outcrop Models applied to the architecture of fluvial systems: study case in Jaicós Formation, Parnaíba Basin, Brazil" was awarded the Best Oral Presentation of the thematic section "Remote Sensing, Geostatistics and Spatial Modeling" at the 50th Brazilian Geological Congress.

Best Graduating Student (2020)

I was awarded with the medal and certificate of Best Graduating Student as a result of the best GPA in class.

Academic Achievements (2015, 2015, 2016, 2017, 2018, 2018, 2020)

I was certified seven times for excellent academic performance.