First Announcement: 7th LatinMag Biennial Meeting (2023)

The Latin American Association of Paleomagnetism and Geomagnetism (LatinMag) is pleased to announce its Seventh Biennial Meeting (http://www.latinmag2023-rj.com/), which will take place from November 12th to 17th, 2023, at the National Observatory (ON/MCTI), Rio de Janeiro, Brazil. The third workshop for students of Paleomagnetism and related fields, the III Young Paleomagician Meeting, will also be held at this institution during the event.

Please remember to register for the meeting.

We look forward to seeing you in Rio de Janeiro.

The Local Organizing Committee - 7th LatinMag Biennial Meeting

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1. Thematic Areas

- Paleomagnetism
- Geomagnetism and Geophysical Methods
- Rock Magnetism
- Archaeomagnetism
- Magneto- and Cyclostratigraphy
- Environmental Magnetism
- Magnetostratigraphy (magnetic anisotropy)
- Instrumentation in Paleo/Geomagnetism

2. Registration and Registration Fees

Registrations will be made through an electronic form available on the website http://www.latinmag2023-rj.com/registration/ starting from April 25th, 2023. There will be three registration periods: (1) early registration (04/25/2023 - 06/30/2023), with a discount on the registration fee; (2) regular registration (08/01/2023 - 08/31/2023); and (3) late registration (10/01/2023 - 10/06/2023).

Further instructions on payment methods will be provided on the event's website on the date of the instructions' release.

Registration fees

	Researchers	**Graduate students**	**Undergraduate students**	**Accompanying**	**Representatives and researchers from the productive sector.**
April 25 – June 30, 2023: early bird registration	US$ 200	US$ 75	US$ 50	US$ 50	US$ 300
August 1 – 31, 2023: regular registration	US$ 250	US$ 90	US$ 70	US$ 50	US$ 300
September 1 – October 6, 2023: late registration	US$ 350	US$ 150	US$ 100	US$ 50	US$ 350

Each registration will allow submission of up to three (3) papers.

Proof of payment must be attached to the electronic form at the time of registration. Once registration is complete, the participant will be notified automatically by e-mail. The participant will only be registered for the 7th LatinMag Biennial Meeting after confirmation sent by the Local

Organizing Committee. Participation in the event and publication of papers in the special volume of the 7th LatinMag Biennial Meeting will be subject to payment of the registration fee.

For any questions or problems regarding registration, please contact the Organizing Committee through the electronic form available at http://www.latinmag2023-rj.com/contact-us/.

2.1 About requests for registration fee discounts

Following the guidelines of previous meetings (Isla Margarita 2009, Tandil 2011, Montevideo 2013, São Paulo 2015, Querétaro 2017, Rancagua 2019), the Organizing Committee has made efforts to minimize registration costs. In addition, local funding agencies and companies have been solicited for financial support and, in case of approval from these entities, partial support may be provided to undergraduate and graduate students, as well as researchers in a situation of economic vulnerability who participate in the meeting with presentation of their work.

In accordance with the above, requests for a discount on the registration fee will be evaluated on a case-by-case basis by the Local Organizing Committee, whose approval and availability of resources will be a determining factor. Requests must be submitted no later than June 15th, 2023, through the "Application for fee discount & financial aid" electronic form, which will be available on the event's website from April 13th, 2023. In case of undergraduate or graduate students, in addition to the aforementioned information, updated proof of enrollment and a letter from their advisor attesting to the condition of being enrolled will also be required, both sent as attachments to this form. Requests that do not comply with these guidelines will be disregarded by the organization.

3. Request for financial support

Similar to the stated in section 2.1, the Local Organizing Committee will also evaluate requests for financial support made by undergraduate and graduate students, as well as researchers in a situation of economic vulnerability, who will present works at the 7th LatinMag Biennial Meeting. Requests from applicants who will not be presenting at the event will not be considered.

Requests must be made by June 15th, 2023, through a form available on the website http://www.latinmag2023-rj.com/registration/. For students, it is important to note that only requests accompanied by proof of enrollment and a letter from their advisor, attesting to the student's status and support for the request, will be considered.

It is important to highlight that the granting of these benefits will be conditioned to the availability of financial resources.

4. Submission of expanded abstracts and presentations

The submission of papers to the 7th LatinMag Biennial Meeting will be in the form of expanded abstracts, which will be accepted between April 25th and October 6th, 2023, according to the instructions provided on the website http://www.latinmag2023-rj.com/schedule/.

Selected expanded abstracts will be included in a special volume of the LatinMag Letters journal (http://www.geofisica.unam.mx/LatinmagLetters/published.html), based on a selection made by the Scientific Committee, which is currently being formed. The role of this committee will be: 1) forwarding of papers for review; 2) editorial supervision for the special volume of LatinMag Letters; 3) definition of the congress agenda, including the order of presentations and session coordinators; 4) judging the award for best student paper and the Daniel Valêncio Award, to be given to a researcher for their career trajectory.

Expanded abstracts may be written in Spanish, English, or Portuguese, in a format that will be presented on April 25th on the website http://www.latinmag2023-rj.com/abstracts-submissions/.

Expanded abstracts written in Portuguese or Spanish must contain an abstract in English. When submitting these texts, it will be possible to indicate a preference for the presentation format (oral or poster).

Oral presentations will be fifteen (15) minutes long, with an additional five (5) minutes for questions and discussion. Invited presentations will have a total of twenty (20) minutes, plus five (5) minutes for questions and discussion. Invited lectures will have a total time of sixty (60) minutes. Posters will be displayed throughout the event, and their dimensions will be disclosed soon by the event organizers.

5. Student Workshop - III Young Paleomagician Meeting

The III Young Paleomagician Meeting (YPM) aims to provide students with the opportunity to think and discuss topics related to rock magnetism and paleomagnetism. In the third edition of the YPM, we suggested a discussion on the research and advancements being made by different laboratories in Latin America.

It is expected that this meeting will raise awareness among students of the future directions of their research, addressing some of the pressures faced by the paleomagnetic community. It is also hoped that students will develop skills and form networks, promoting greater international collaboration.

6. Student Awards

Continuing with the tradition started in the early meetings of LatinMag, the Best Student Paper (poster and oral presentation categories) will be awarded by the Local Organizing Committee, according to the choice of the Scientific Committee.

7. Daniel Valêncio Award

As discussed in section 4, the Scientific Committee will select the Daniel Valêncio Award, recognizing a researcher of renowned relevance and professional trajectory in the thematic areas related to the event.

8. Lectures

The 7th LatinMag Biennial Meeting will feature invited lectures by internationally renowned researchers in their field of expertise. Further information will be announced soon.

9. Scientific outreach activities

Following the positive experience of previous LatinMag Meetings, the Organizing Committee will be implementing a series of activities aimed at popularizing Science during the Meeting. We invite all participants willing to offer a talk on these topics to inform the Committee through email to organization@latinmag2023-rj.com with the subject: OUTREACH TALK, providing details about the title, duration, and nature of the talk, in order to schedule it and give appropriate diffusion to the community.

10. Field trip to outcrops in the state of Rio de Janeiro

We also plan to hold a field trip on November 15th, 2023 (Wednesday) to outcrops in the southeast of Brazil, of interest to the LatinMag community. Details will soon be available on the event website.

11. Description of the Thematic Areas

- **Paleomagnetism:** the accurate acquisition of paleomagnetic data in rocks and sediments allows us to understand variations in the Earth's magnetic field in the past. These variations, in turn, are

used to reconstruct the behavior of the paleomagnetic field and determine the positions of paleocontinents.

- **Geomagnetism and Geophysical Methods:** the geomagnetic field has two distinct origins: internal and external. The internal origin field arises from the flow of conductive material in the Earth's outer core, as well as the lithospheric field, due to magnetized rocks in the upper portion of the planet. The external origin field originates from the electric currents generated in the magnetosphere and ionosphere. Works that address different aspects of the geomagnetic field and its variations will be welcome, as well as those related to geophysical methods that use the properties of the Earth's magnetic field as a source of information.

- **Rock Magnetism:** different rock magnetism parameters, such as composition, grain size, and magnetic domain, influence the remanent magnetization of rocks and sediments. Studies that involve magnetic characterization in rocks and sediments are essential for tracing the evolution of the geo-, archeo-, and paleomagnetic field, understanding environmental (natural and anthropogenic) and paleoclimatic problems, and applications in paleogeographic reconstructions.

- **Archaeomagnetism:** variations in the Earth's magnetic field on time scales of hundreds to thousands of years can be accessed from measurements of remanent magnetism in archaeological materials. These materials include ceramics, bricks, tiles, burned soil, rock paintings, and anthropogenic sediments. Studies on archaeomagnetism in Latin American targets will be welcome.

- **Magneto- and Cyclostratigraphy:** acquisition of paleomagnetic and rock magnetic data in geological sequences are important for defining parameters for absolute and relative dating. Astronomical forcings, based on magnetic data, constitute an important high-resolution tool for calibrating sedimentary sequences. Through this information, it is possible to determine and

calibrate paleoclimatic and paleoenvironmental changes in different sedimentary environments with greater accuracy.

- **Environmental Magnetism:** past environmental changes recorded in natural and anthropogenic soils and sediments are the object of study in environmental magnetism. Environmental and anthropogenic alterations often influence, for example, the transport regime, deposition, diagenetic processes in soils and sediments. Works that relate environmental magnetic parameters with weathering, erosion, deposition, diagenesis, pedogenesis, paleoclimate, paleoenvironments, magnetofossils, and pollution will be welcome.

- **Magnetic fabrics:** Magnetic fabrics analysis allows the evaluation and identification of rock fabric based on the behavior of magnetic anisotropy, which can be applied to understand problems in structural geology, tectonics, and sedimentology. Experimental and theoretical contributions that combine paleomagnetic and magnetic fabric data with geological and field information, as well as new approaches to determining and evaluating magnetic anisotropy data, are welcome.

- **Instrumentation in Paleo/Geomagnetism:** Paleomagnetic and geomagnetic measurements are only possible with the use of different types of equipment, such as magnetometers and demagnetizers. The need to increase the resolution and accuracy of paleo and geomagnetic measurements has led to the development of different types of equipment, such as magnetic microscopes and automatic demagnetizers. Papers involving the presentation of new equipment, instruments, and techniques in paleo- and geomagnetism are welcome.