

INSTITUTE OF GEOSCIENCES, UNIVERSITY OF SÃO PAULO
Official Public IGc-USP Notice N^o. 16/2025, July 1st, 2025

APPLICATIONS ARE NOW OPEN FOR THE SELECTION PROCESS FOR AN ASSISTANT PROFESSOR POSITION AT THE DEPARTMENT OF ENVIRONMENTAL AND APPLIED GEOLOGY OF THE INSTITUTE OF GEOSCIENCES, UNIVERSITY OF SÃO PAULO.

The Director of the Institute of Geosciences of the University of São Paulo (IGc-USP) hereby informs all interested persons that, per the decision reached at the Regular Meeting of the Congregation held on June 11, 2025, the applications will be open for 90 (ninety) days, starting at 08:00 (Brasília time) on July 04, 2025 and ending at 5:00 p.m. (Brasília time) on October 01, 2025, for the public selection process of titles and examinations to fill one (1) position of Ph.D. Professor, in Full-Time Dedication to Teaching and Research (RDIDP in the Portuguese acronym), with a salary of R\$ 16,353.01 (sixteen thousand, three hundred and fifty-three reais and one cent) on the subject area of **Applied Geophysics** under the terms of Article 125, §1 of the General Statute of USP and the following programmatic themes:

GSA0308 – APPLIED GEOPHYSICS: History of Applied Geophysics, its relationship with Pure Geophysics, current situation and future perspectives. Areas of activity: mining, civil engineering, hydrogeology and environmental. Presentation of electrical, seismic, gravimetric, magnetometric, electromagnetic and radiometric methods. Airport and terrestrial methods. Introduction to well logging. The importance of geophysics. The interrelationship between geologists and geophysicists. Historical cases. Practical field classes.

GSA0519 – GEOPHYSICS APPLIED TO THE STUDY OF UNDERGROUND POLLUTION: - Fundamental concepts of geophysical methods applied to the study of pollution of subsurface materials, particularly groundwater. History and evolution of geophysics applied to the study of underground pollution. - Conditions of applicability of each method according to the characteristics of the area: traditional methods (electroresistivity and inductive electromagnetic), modern method (ground penetrating radar) and auxiliary methods (refraction seismic, spontaneous potential, induced potential, etc.). - Different cases of contamination by landfills, vinasse, cemeteries, industries, sewage treatment plants, gas stations, etc.). Contamination by organic and inorganic substances: treatment, interpretation and integration of geophysical data through modern processing techniques. - Historical cases. Practical cases.

The competition will be governed by constitutional principles, notably that of impartiality, as well as by the provisions of the Statute and General Regulations of

the University of São Paulo and the Regulations of the Institute of Geosciences of the University of São Paulo.

1. Registration applications must be submitted exclusively through the link <https://uspdigital.usp.br/gr/admissao> during the period indicated above, and the candidate should fill in the requested personal data and attach the following documents:

I – detailed report and proof of published works, activities performed relevant to the competition and other information that allows for an assessment of their merits, in digital format;

II – proof of the holder of a Doctorate granted by USP, recognized by it or with national validity;

III – proof of discharge from military service for male candidates;

IV – certificate of electoral discharge or detailed certificate issued by the Electoral Court less than 30 days before the start of the registration period;

V – official identification document.

VI – Research Project, in accordance with item 9 of this Notice.

§ 1º - Supporting elements of the memorial referred to in item I, such as models, works of art or other materials that cannot be scanned, must be submitted by the last business day before the start of the competition.

§ 2º - Dropbox or Google Drive links or any other link to a page that the candidate can change will not be accepted as proof of the items contained in the memorial.

§ 3º - For the purposes of item II, defense minutes without information on approval will not be accepted when the granting of the Doctorate degree depends on this measure within the scope of the issuing Educational Institution, and the candidate is hereby aware that in this case the lack of proof of such approval will imply the rejection of his/her application.

§ 4º - Professors working at USP will be exempt from the requirements referred to in items III and IV, provided that they have proven due payment at the time of their initial contract.

§ 5 - Foreign candidates will be exempt from the requirements of items III and IV, and must prove that they are in a regular situation in Brazil.

§ 6º - The foreign candidate approved in the examination and nominated to fill the position may only take office if he or she presents a temporary or permanent visa that allows the exercise of paid activity in Brazil.

§ 7 - When registering, candidates with disabilities must submit a request for the necessary conditions to be provided for taking the tests.

§ 8 - It is the sole responsibility of the candidate to upload each of their documents in the specific field indicated by the system at the link <https://uspdigital.usp.br/gr/admissao>. The candidate is hereby informed that uploading documents in an order other than that established therein will result in the rejection of their registration.

§ 9 - It is the sole responsibility of the candidate to submit their documents in their entirety (front and back) and in a legible file. The candidate is hereby informed that if they do not correct any irregularity due to an incomplete or illegible document upload during the registration period, their registration will be rejected.

§ 10 - The late submission of documents by the candidate will not be permitted, even in the appeal stage.

§ 11 - At the time of registration, candidates who self-declare as Black, mixed-race or Indigenous shall express their interest in participating in the differentiated scoring system provided for in item 12 and its paragraphs of this Notice.

§ 12 - In order to be entitled to the bonus for candidates who self-declare as Black and mixed-race, the candidate must have phenotypic traits that characterize him/her as Black, Black or mixed-race.

§ 13 - The self-declaration as Black or mixed-race made by the candidate who expresses his/her interest in participating in the differentiated scoring system shall be subject to confirmation by a heteroidentification panel.

§ 14 - In the event of non-confirmation of the self-declaration of racial affiliation, the candidate shall be eliminated from the competition and, if appointed, shall be subject to the cancellation of his/her admission to public service or employment, after an administrative procedure in which he/she shall be guaranteed the right to a hearing and full defense, without prejudice to other applicable sanctions.

§ 15 - To confirm the self-declaration of Indigenous candidates, the candidate's own Indigenous Birth Certificate (Rani) or, in the absence of such certificate,

the Indigenous Birth Certificate (Rani) of one of his/her parents will be required at the time of registration.

§ 16 - Exceptional situations may be assessed by the Inclusion and Belonging Council, which may allow confirmation of the candidate's self-declaration as Indigenous by means of, cumulatively, a memorial and declaration of ethnic belonging signed by chiefs, tuxauas, Indigenous leaders of communities, associations and/or organizations representing Indigenous peoples of the respective regions, under penalty of law.

§ 17 - The current rules for presenting documents relating to self-declaration as Black, brown and Indigenous, as well as for their confirmation, are available on the website of the USP General Secretariat (<https://secretaria.webhostusp.sti.usp.br/?p=12343>).

§ 18 - For item III, the documents listed in Article 209 (two hundred nine) of Federal Decree No. 57,654/1966 will be accepted. Male candidates who have completed 45 (forty-five) years of age by December 31 of the year prior to the registration period will be exempt from submitting the documents.

§ 19 - When registering, candidates may express their intention to take the tests in English, by Article 39, and its sole paragraph, of the Rules of Procedure of the Institute of Geosciences of USP. The content of the tests, conducted in both English and Portuguese, will be identical.

2. The applications will be evaluated by the Congregation of the Institute of Geosciences at the University of São Paulo, taking into account their formal aspects, and the decision will be published in a public Notice.

Sole paragraph – The competition must be held within thirty to one hundred and twenty days, counting from the date of publication in the State Official Gazette of the approval of the applications, in accordance with Article 134, sole paragraph, of the USP General Regulations.

3. The competition will be held according to objective criteria, in two phases, employing the attribution of grades in tests, divided as follows:

1st phase (eliminary): written test – weight 1 (one)

2nd phase:

I) evaluation of the memorial with public argumentation test – weight 4 (four)

II) didactic test – weight 3 (three)

III) presentation of the research project and respective argumentation – weight 2 (two)

§ 1º - The call for applicants to take the tests will be published in the State Official Gazette.

§ 2 - Candidates will be eliminated from this competition if, at any time, they:

a) arrive after the time set for the start of the competition or any of the tests, including the draw for points, without prejudice to any applicable legal sanctions;

b) behave inappropriately or disrupt the performance of the tests or any other stages of the competition, disturbing the order of the work, whether through verbal manifestations or conduct incompatible with the integrity and tranquility of the environment;

c) carry a firearm in the place where the tests are held, even if they have legal authorization to carry it, except in exceptional cases provided for by law and expressly authorized by the Judging Committee.

§ 3 - In the evaluation of the tests by the judging committee, the purpose expressed for creating the vacancy (granting of a teaching position) for which this competition is intended, available in the annex to this announcement, will be considered.

4. The written test, which will cover a general and doctrinal subject, will be conducted in accordance with the provisions of Article 139, and its sole paragraph, of the USP General Regulations.

I – the committee will prepare a list of ten points, based on the competition program, and will inform the candidates of this list 24 (twenty-four) hours before the point is drawn, and candidates may be required to perform other activities during this period;

II – the candidate may propose the replacement of points immediately after being informed of their statements, if he/she believes that they do not belong to the competition program, and it is up to the judging committee to decide, immediately, on the merits of the claim;

III – once the point is drawn, the non-extendable five-hour test period begins;

IV – for sixty minutes after the draw, consultation of books, periodicals and other bibliographic documents will be permitted;

V – notes taken during the consultation period may be used during the test, and must be written on paper initialed by the committee and attached to the final text;

VI – the test, which will be read in a public session by the candidate, must be reproduced in copies that will be given to the members of the judging committee when the session opens;

VII – each test will be evaluated individually by the members of the judging committee;

VIII – candidates who obtain a minimum score of seven from the majority of the members of the judging committee will be considered qualified for the second phase;

IX – the judging committee will present the scores received by the candidates in a public session.

5. At the end of the assessment of the written test, each candidate will receive a final score from each examiner, taking into account any possible application of differentiated scoring under the terms of item 12 of this Notice.

6. Only candidates approved in the first phase will participate in the second phase.

7. The assessment of the memorial, expressed by an overall score, including arguments and evaluation, must reflect the merit of the candidate.

Sole paragraph – When judging the memorial, the committee will assess:

I – scientific, literary, philosophical or artistic production;

II – university teaching activities;

III – activities related to the provision of services to the community;

IV – professional or other activities, when applicable;

V – diplomas and other university honors.

8. The teaching test will be public, with a minimum duration of 40 (forty) minutes and a maximum of 60 (sixty) minutes, and will cover the program of the aforementioned area of knowledge, in accordance with Article 137 of the USP General Regulations.

I – the judging committee, based on the competition program, will organize a list of ten points, which the candidates will be informed of immediately before the point is drawn;

II – the candidate may propose the replacement of points, immediately after being informed of their statements, if they believe that they do not belong to the competition program, and it is up to the judging committee to decide, immediately, on the merits of the allegation;

III – the test will be carried out 24 (twenty-four) hours after the draw of the point, which will be at the candidate's discretion, and he/she will not be required to carry out other activities during this period;

IV – the candidate may use the teaching material he/she deems necessary;

V – if the number of candidates requires it, they will be divided into groups of a maximum of three, observing the order of registration, for the purposes of the draw and carrying out the test;

VI – when the 60th (sixtieth) minute of the test is reached, the Judging Committee must interrupt the candidate;

VII – if the candidate's presentation ends before the 40th minute of the test, the examiners must give the candidate a score of zero in the respective test.

9. In the public examination for the presentation of the research project, the candidate must make a presentation of no more than 20 (twenty) minutes, followed by an examination by the judging panel that will consider:

I – its suitability to the consolidated and/or intended lines of teaching and research, in accordance with the vacancy profile document available in the annex to this Notice;

II – its originality and proposal for innovation, considering the areas of activity of the Department and the prospects for scientific advances in Geosciences;

III – its scientific feasibility and funding expectations.

Sole paragraph – The duration of the examination will not exceed thirty minutes per examiner, and the candidate will have the same amount of time to respond.

10. At the end of the evaluation of the tests, each candidate will receive a final score from each examiner, which will be the weighted average of the scores given by the examiner in the two phases, taking into account the weights mentioned in item 3 and the possible application of differentiated scoring under the terms of item 12 of this Notice.

11. The test scores may vary from zero to ten, with rounding up to the first decimal place.

12. Differentiated scoring will be applied to Black, mixed-race, and Indigenous candidates under the terms specified herein.

§ 1 - The formula for calculating the differentiated score to be attributed to Black, mixed-race and Indigenous candidates in all phases of the public selection process is:

$$PD = (MCA - MCPPI) / MCPPI$$

Where:

- PD is the differentiated score to be added to the scores, in each phase of the public selection process, of all Black, mixed-race or Indigenous candidates who expressed an interest in participating in the differentiated score.

- MCA is the average score of the general competition among all candidates who scored, excluding those who were disqualified, that is, those who did not achieve the minimum score referred to in items 4 and 13 of this Notice. "General competition" is understood to be all candidates who scored and who did not declare themselves as Black, mixed-race or Indigenous and those who, having declared themselves as Black, mixed-race or Indigenous, chose not to participate in the differentiated score.

- MCPPI is the average score of the PPI competition among all candidates who scored, excluding those who were disqualified.

§ 2 - The formula for applying the differentiated score to the final grades of Black, mixed-race and Indigenous candidates in each phase of the public selection process is:

$$NFCPPI = (1 + PD) * NSCPPI$$

Where:

- NFCPPI is the final grade in the public selection process phase, after applying the differentiated score, which will generate the candidate's classification in the public selection process stage, limited to the maximum score provided for in the Notice. At the end of the public selection process phase, the final grade will be considered the candidate's simple grade.

- NSCPPI is the simple grade of the beneficiary candidate, to which the differentiated score will be applied.

§ 3 - The calculations referred to in §§ 1 and 2 of this item must consider two decimal places, and fractions greater than or equal to 0.5 (five tenths) must be rounded to the next whole number.

§ 4 - The differentiated score (PD) provided for in this item applies to all qualified beneficiaries, that is, those who have achieved the minimum performance established in the competition Notice, considering, for this last purpose, the simple score.

§ 5 - If there are no candidates who benefit from the differentiated score among those qualified, the differentiated score will not be calculated.

§ 6 - The differentiated score will not be applied when, in the formula for calculating the differentiated score (PD), the MCPPI (average score of the PPI competition) is greater than the MCA (average score of the general competition).

13. The result of the competition will be announced by the judging committee immediately after its conclusion, in a public session.

14. Candidates who obtain, from the majority of examiners, a minimum final score of seven will be considered qualified.

15. The candidates will be indicated by the examiner, according to the scores he or she awarded.

16. The candidate who receives the highest number of nominations from the judging committee will be proposed for appointment.

17. The appointment of the nominated candidate will be subject to approval in a medical examination conducted by the State Department of Medical Expertise – DPME, in accordance with Article 47, VI, of Law Nº 10.261/68.

18. The appointment of the professor approved in the competition, as well as other resulting measures, will be governed by the terms of Resolution Nº 7271 of 2016.

19. The professor in RDIDP must maintain an exclusive employment relationship with USP, in accordance with Article 197 of the USP General Regulations.

20. The competition will be valid immediately and only the candidate nominated for the position put up for competition will be proposed for appointment.

21. The candidate will be summoned for appointment by the State Official Gazette.

22. Further information, as well as the rules relevant to the competition, are available to interested parties at the Academic Technical Assistance of the Institute of Geosciences of the University of São Paulo, at Rua do Lago, 562 - room 306 - Butantã, São Paulo - SP, e-mail: ataciqc@usp.br.

ANNEX – JUSTIFICATION FOR THE TEACHING POSITION

Current Status of the Department/Area

The Department of Environmental and Applied Geology (GAA) is characterized by its multidisciplinary work in teaching and research topics related to pressing demands of society regarding natural resources (water, minerals and energy), the environment, climate change, the impact of human activities on the physical environment and associated geological processes.

Within these topics, the application of geophysical methods represents a traditional and important area at GAA. However, the department does not currently have a teacher with this specialized training, which represents a very significant gap in the training of IGc-USP students in topics related to Applied Geophysics, which makes it urgent to hire a teacher with this profile.

General Objective of Recruiting a Professor

The application of Geophysics, with an emphasis on electrical methods, represents an area with interdisciplinary characteristics and diverse applications in issues related to the environment, soil contamination, aquifer pollution, groundwater supply, oil and gas, mineral research and engineering geology, which require an in-depth understanding of environmental management principles. Additionally, it is an area undergoing an accelerated process of methodological and technological innovation, with the development of techniques and the use of artificial intelligence, topics that are also very important for the training and employability of IGc-USP graduates. Thus, the development of this area will enable the training of professionals needed to meet the growing demand for specialists in teaching and research institutions, in industry, in service and consulting companies and in management in public agencies, aiming at socioeconomic development with sustainability.

Individualized Plan

Teaching Goals

In the short term, the new professor is expected to teach the subjects related to GSA0308 Applied Geophysics and GSA0519 – Geophysics applied to the study of Underground Pollution, addressing the geophysical methods applied to the study of soil and groundwater contamination by organic and inorganic substances, as well as

the introduction to well logging methods (e.g., electrical resistivity and inductive electromagnetic, ground penetrating radar, reflection seismic, spontaneous potential, induced potential, resistivity, and radiometric methods).

In the medium and long term, the professor should seek to integrate the different areas of Geosciences, combining knowledge of Applied Geophysics, Geotechnologies, Data Sciences, Environmental Geology, Hydrogeology and Environmental Education, aiming to provide complementary and interdisciplinary training to students in the Geology and LIGEA courses.

Research and Innovation

Regarding research, in the short and medium term, the professor is expected to join national and international research groups, as well as participate in and propose research projects to funding agencies and the private sector, aligned with the Sustainable Development Goals advocated by the United Nations. Their work must be aligned with the goal of conducting research with a positive impact on society, and the results will be evaluated based on qualified scientific production and analysis of the social, environmental and economic impact of the GAA research. The development of innovative lines of research is expected to reflect the rapid scientific and technological development of the area, which has resulted in the creation of new methods, application of inversion algorithms, data science and digital processing, and use of artificial intelligence.

Culture and Outreach

In culture and outreach, professors are expected to participate in the dissemination of geophysics applications, aligned with the SDG (e.g., SDG 4 – Quality education; SDG 6 – Clean water and sanitation; SDG 7 – Affordable and clean energy; SDG 11 – Sustainable cities and communities; SDG 13 – Climate action) based on the proposal of university outreach activities that enable the curricularization of Outreach (AEX with activities aimed at external communities, lectures, outreach courses, workshops).

Expected Impact of the Hiring

This hiring is aligned with the Department's Academic Project, which aims to develop innovative areas focused on sustainability and expand its prominent role at the national and international levels in the training of human resources, cutting-edge scientific and technological research, internationalization, fundraising for research, and geoscientific dissemination. The development of the area will promote greater involvement of Geosciences with the demands of society, including the proposal of diagnoses and solutions for environmental problems and support for the formulation of public policies.