



Fair of Science and Technology of the Nations (FeNaDANTE)

FeNaDANTE (Fair of Science and Technology of the Nations – Colégio Dante Alighieri) is a Science and Technology Fair aimed at yearly disseminating scientific pre-initiation research developed by students from public and private schools from different Brazilian locations and abroad. The event seeks to encourage the development of these projects within basic education institutions, enabling students better involvement in scientific production in different areas of knowledge.

We believe that students' commitment to *scientific doing* helps them learn about science, making it part of their world, and allows them to develop different types of competencies and skills required for life in society. In this way, **FeNaDANTE** is attuned to the current scenario of science education in the country and plays a central role in fostering a society that seeks to develop by enhancing science and technology.

Supporting initiatives where basic education students disclose their scientific preinitiation projects to educational and scientific communities can stimulate schools and families to value science. Furthermore, it is possible to increase creativity, critical and complex thinking, interaction with scientific methodologies, and the construction of scientific knowledge, fundamental aspects for developing young people's skills and competencies, favoring dialogue equitably with the demands of the contemporary world.

To encourage these young researchers, the **6th FeNaDANTE - César Lattes edition**, as an international event, will promote in 2024 the meeting of talented students from all over the world, expanding its spaces for dialogue and enriching participants' cultural repertoire.

What is needed to participate?

- a. Be enrolled in the 9th grade of middle school or be in high school (public or private).
- b. Have a scientific pre-initiation project that uses scientific methodologies adapted to the student's area of knowledge or engineering methodology.
- c. Have a project with a defined research methodology and partial or total results.
- d. Have an advisor over 21 years old, with a degree as a minimum requirement.

e. Have a project developed individually or by a group of a maximum of three students.

1. Areas

The **6th FeNaDANTE - César Lattes edition** will be divided into eight areas of knowledge:

- Agricultural Sciences: encompasses projects focused on the following subareas:
 Agronomy; Forest Resources and Forest Engineering; Agricultural Engineering;
 Zootechnics; Veterinary Medicine; Food Science and Technology; Fisheries
 Resources; and Fisheries Engineering.
- <u>Biological Sciences:</u> encompasses projects focused on the following subareas:
 General Biology; Biochemistry; Genetics; Biophysics; Botany; Pharmacology;
 Zoology; Immunology; Ecology; Microbiology; Morphology; Parasitology; and Physiology.
- <u>Health Sciences:</u> encompasses projects focused on the following subareas:
 Medicine; Dentistry; Pharmacy; Nursing; Speech, Language and Hearing Science; Nutrition; Collective Health; Physiotherapy and Occupational Therapy; and Physical Education.
- Human Sciences: encompasses projects focused on the following subareas:
 Philosophy; Geography; Sociology; Psychology; Anthropology; Education;
 Archeology; Political science; History; and Theology.
- <u>Social and Applied Sciences:</u> encompasses projects focused on the following subareas: Law; Museology; Administration; Communication; Economics; Social Service; Architecture and Urbanism; Domestic Economy; Urban and Regional Planning; Industrial Design; Demography; Tourism; and Information Science.
- <u>Exact and Earth Sciences:</u> encompasses projects focused on the following subareas: Physics; Probability and Statistics; Chemistry; Geosciences; Astronomy; and Oceanography.
- Engineering: encompasses projects focused on the following subareas: Sanitary Electronics; Production Electrotechnics; Civil, Naval, and Ocean Transport; Chemical Engineering; Mining Engineering; Aerospace Engineering; and Materials and Metallurgical Engineering.
- <u>Digital Transformation:</u> encompasses projects focusing on the following subareas: Artificial Intelligence, Mobile Applications; Software Development; Information Security; Business Intelligence; and Development of Games.

When submitting projects, participants must choose the area considered the most appropriate for their research proposal¹.

2. Where

The **6th FeNaDANTE - César Lattes edition** will be held at Colégio Dante Alighieri (Alameda Itu, 560), central region of São Paulo, close to Avenida Paulista, one of the city's postcards. The region has excellent public transportation infrastructure.

3. Schedule

Next, we present some important dates² related to the event:

Activities	Deadlines
* Project submission period	03/01/24 to 05/25/24
*Period for the signature of the mandatory and additional documents	03/01/24 to 05/25/24
*Disclosure of the list of the 1st-call finalists	06/04/24
*Period for the confirmation of participation of the 1st-call finalists (payment of the registration fee – Sympla System)	06/04/24 to 06/14/24
*Disclosure of the list of the 2nd-call finalists	06/20/24
*Period for the confirmation of participation of the 2nd-call finalists (payment of the registration fee – Sympla System)	06/20/24 to 06/30/24
* Abstract updating	03/01/24 to 08/12/24
*Submission of expanded abstract and report (or article)	03/01/24 to 09/16/24
*The event	09/23/24 to 09/28/24

¹ If the Pre-Review Committee of the 6th FeNaDANTE - César Lattes edition considers another area of knowledge more appropriate for the work, they may reassign it to another area of knowledge.

² The Organizing Committee of the 6th FeNaDANTE - César Lattes edition may change, independently and free of charge, the dates in the schedule above, if necessary. Such changes will be communicated through the website http://dante.pro/fenadante and on the event's social networks.

4. Steps for registration and submission of documents

1st phase:

Between 03/01/24 and 05/25/24, the <u>teacher-advisor</u> must register the project data in FeNaDANTE registration system (https://www.colegiodante.com.br/fenadante/ – note: ONLY the teacher-advisor is allowed to carry out this register). Thus, it will be necessary to submit the data related to the <u>Research Plan</u> of the project, containing the following sections: *Abstract*, Introduction, Justification, Problem-question (or problem), Hypothesis (or proposed solution), Methodology, Results, Discussion (if any – can be in "Preliminary Discussions" format) and Conclusions (if any – can be in of "Preliminary Conclusions" format). Note: The abstracts of the works submitted in this phase will be used to produce the abstract book for the event. Thus, this section may be updated until 08/12/24. All projects must contain the bibliographic references used, following the ABNT norms. Each student may enroll in only <u>ONE</u> project of their authorship. The teacher-advisor³, on the other hand, can apply as a supervisor for more than one project. Please note that projects submitted outside the registration period will not be accepted.

Likewise, between 03/01/24 and 05/25/24, the mandatory and additional documents for participation in the 6th FeNaDANTE - César Lattes edition must be signed, which will be done through the event registration system. The mandatory documents at this stage are: i) Authorization for using intellectual rights – major and minor; ii) Term of Conduct; and iii) Disclaimer. These documents will be signed through the registration system of the 6th FeNaDANTE - César Lattes edition. The project may be disqualified if the mandatory documentation signing process is not completed. As for additional documents (forms ranging from F07 to F19, which need to be filled in based on the theme of each project), advisors and students must check which ones will be necessary for the registered project and provide the signatures – via the registration system. The project may be disqualified if the additional documentation signature process is not completed.

2nd phase:

Between 03/01/24 and 09/16/24, the shortlisted participants must insert in the FeNaDANTE registration system:

³ Over 21 years old, with a degree as a minimum requirement.

- i) the research expanded abstract (with up to three pages), which must be developed based on the steps previously described in this notice. The expanded abstract does not have a cover, and authors must follow the ABNT style guidelines. The file must be submitted in PDF format.
- ii) the <u>project report (or article)</u>, <u>which</u> must present the work more extensively and elaborately. The number of pages, in this case, is at the discretion of the authors of the work. The file must be submitted in PDF format.

5. Project Review Process

1st phase:

- 5.1. Based on the **Research Plan** submitted by the authors, the projects will be forwarded to an eliminatory pre-review.
- 5.2. The review criteria will be:
 - 5.2.1. Creativity and innovation: creative research must support an investigation and propose an original answer to the question raised. Furthermore, a creative contribution presents an efficient and reliable problem-solving method. The student's role in proposing the question (with creativity and innovation) must be evident.
 - 5.2.2. Scientific methodology and engineering methodology: for the former, the problem definition must be understandable and unambiguous. Furthermore, the scientific methodology used must be compatible with the research area studied, in addition to allowing the creation of a possible solution to the problem presented. As for the engineering methodology, the objective of the project must be evident and relevant to the end user. We suggest that the presented solution is also economically feasible.
 - 5.2.3. Depth: in this regard, the student must question whether the established goal has a theoretical basis that supports the project. Thus, the theoretical framework and the degree of knowledge of the subject studied are essential items.
 - 5.2.4. Students' skills and competencies: in this regard, the possible skills students develop throughout the project will be observed. For example: encouraging the identification of facts, description of situations, data comparison, and proposition of experiments, among other possibilities.

5.2.5. Clarity: the project comprehensibility will be analysed; that is, the delimitation of the objectives, possible procedures used, and the methodology established, among other points.

5.3. It is worth noting that aspects of the writing and language must also be carefully observed. Thus, reviewers will check whether the language is adequate for the scientific work and is as per the specificities of the area of research. The content must reflect the work developed (or to be developed).

6. Disclosure of finalists

On 06/04/24, the shortlisted projects (1st call) will be announced via the 6th FeNaDANTE - César Lattes edition website (https://www.colegiodante.com.br/fenadante/). Moreover, the shortlisted projects for the 2nd call will be announced on 06/20/24. We ask participants to stay tuned for new information to be released, consulting, whenever possible, the FeNaDANTE website.

7. Confirmation of participation and registration of finalists

Confirmation must be carried out per project, not per participant. Therefore, if the project has been shortlisted, the participant responsible for submitting the project must confirm the participation of their team in the **6th FeNaDANTE - César Lattes edition**. At that moment, the names of the authors/advisors/co-advisors who will participate in the days of the fair must be informed.

To confirm participation in the project, <u>participants must pay the registration</u> <u>fee(s) during the confirmation period,</u> through the website <u>www.sympla.com.br</u> (Event 6th FeNaDANTE - César Lattes edition). The value is <u>BRL 150.00</u> (one hundred and fifty reais – Brazilian currency) <u>PER PARTICIPANT</u>.

The due date for the payment of the registration fee for the 1st-call finalists is **06/14/24**. The due date for the payment of the registration fee for the 2nd-call finalists is **06/30/24**. The minimum delegation for a finalist project to participate in the event is the confirmation of at least one finalist student.

Important: Project registration will only be effective after payment confirmation. Failure to pay the participation fee within the date stipulated in this notice will result in the disqualification of the project for participation in the 6th FeNaDANTE - César Lattes edition.

Projects from outside the state of São Paulo and abroad must plan the logistics for their participants' transportation and accommodation in advance. This measure not only guarantees smooth participation but also avoids last-minute cancellations. When a project suddenly withdraws, the FeNaDANTE team does not have sufficient time to invite other projects to fill the vacancy left. Therefore, by anticipating logistical planning, external projects can significantly contribute to the fluidity and success of the event.

8. Reviewing the shortlisted projects

- 8.1. The Reviewers' Committee of the **6th FeNaDANTE** will comprise teachers, professors, and researchers from different schools, universities, centers, and research institutes in Brazil and abroad without a bond with the projects presented at the fair.
- 8.2. The finalists' review criteria include those mentioned in item 5.2, as well as:
 - 8.2.1. Poster: each project must have a poster, size 120 cm (height) x 90 cm (width). The poster must succinctly display the information present in the Research Plan (Item 4), that is: introduction, justification, problem-question, hypothesis, methodology, results, discussion (if any), conclusion (if any), and references. It is important that the information is organized coherently and that the images used help in the work presentation with the proper credits. The name of the institution to which the participants belong must not be forgotten, nor the title of the research and the names of the authors, supervisors, and cosupervisors. The poster presentation should last 10 minutes on average, allowing reviewers to ask questions and/or present suggestions for improving the research developed. During the poster presentation period, the finalist students must remain at their booth to present the project whenever requested by the reviewers or visitors.
 - 8.2.2. Report or article: unlike the Research Plan, the report (or article) is the final product of the investigation. It should present a compilation of the main data about the developed project. Thus, language and writing must be clear and appropriate, as they are in the Research Plan. The report must contain: cover (with title and name of authors), abstract in Portuguese and English, introduction, justification, problem question (or problem), hypothesis (or proposed solution), methodology, results, discussion (if any), and conclusions (if any). Lists of tables, figures, abbreviations, glossaries, and attachments are not mandatory items, but they can help understand the project. Note: In addition to submitting the file in the 6th FeNaDANTE registration system César Lattes edition, the author

of the finalist project must bring one printed copy of the report or article to the event, leaving it available at the stand during the exhibition.

IMPORTANT: Authors must follow the ABNT style norms. Copies of work, quotations without references, and other circumstances characterized as plagiarism will incur disqualification of the project in 6th FeNaDANTE - César Lattes edition and the loss of any prizes won. In case the student uses Generative Artificial Intelligence –including but not limited to language modeling, text generation, image synthesis, and analytical tools- it must be done with complete transparency and following all ethical principles. For content generated in interaction with Generative AI, the student is responsible for critical reflection, analysis, and refinement of the content and takes full responsibility for the final product. In cases where confidentiality is required, whether for intellectual property, data sensitivity, or privacy, using Generative AI must be carefully weighted. The insertion of confidential data into platforms or tools that use Generative AI is not recommended unless the terms of use of such platforms or tools guarantee the security and privacy of this information. This clause will be periodically reviewed to reflect technological advances and changes in practices and regulations related to the use of Generative Al.

How to cite content generated with Generative Artificial Intelligence:

LAST NAME, Name <aluno>. Content generated in interaction with Generative Artificial Intelligence through the solution <marca>, available at link>. Accessed on: 17 Nov. 2023.

8.2.3. Expanded abstract: as previously highlighted in this notice, the file (in PDF format) must have <u>up to three pages</u> and be prepared based on the stages developed in the project. <u>The expanded abstract does not have a cover,</u> and authors must follow the ABNT style guidelines. Note: copies of work, quotations without references, and other circumstances characterized as plagiarism will be liable to <u>disqualification</u> of the project on the 6th FeNaDANTE - César Lattes edition and <u>loss of any prizes won (see item "IMPORTANT" above)</u>. Note: In addition to submitting the file in the 6th FeNaDANTE registration system - César Lattes edition, the author(s) of the finalist project must bring one printed copy of the expanded abstract to the event, leaving it available at the stand during the exhibition.

8.2.4. Logbook (scientific or field diary): it is a notebook in which the student registers each step taken to develop their project. The registers must be detailed

and accurate, with dates and places of collection (when they happen), facts observed, inquiries made, interviews, tests, outlines, and notes, among other possibilities. As a notebook, the material is expected to be mostly handwritten. Thus, we recommend they are written in a brochure notebook with the advisor(s)' check marks/signatures/comments. Students must take the logbook to the 6th FeNaDANTE - César Lattes edition and present it to the reviewers.

8.3. After the presentation by the participating students, the reviewers will fill in an online form made available by the Organizing Committee of the **6th FeNaDANTE - César Lattes edition**, scoring the projects (separated by area) between 1 and 5 for each criterion established in this call for proposals (5 – excellent, 4 – very good, 3 – good, 2 – weak and 1 – insufficient). The works with the highest score in each area will be awarded.

All participants will receive a certificate of presentation of their work at the event.

There may also be extra awards from our supporters, accreditations to partner fairs of FeNaDANTE, and an invitation to publish the work in the journal InCiência (developed by a specialized team from Colégio Dante Alighieri). If the project is awarded accreditation for FeNaDANTE's partner fairs, ALL COSTS for the participation of such project in those events will be the SOLE AND EXCLUSIVE responsibility of its authors and/or their families. FeNaDANTE's organization and Colégio Dante Alighieri will not be held accountable for those costs.

9. Stands/Benches

- 9.1. Stand measurements: 1m wide x 1m high x 0.5m deep. If the project requires sockets (110v), finalists must request via the email fenadante@colegiodante.com.br. If the banner needs to be hung using hooks (and not glued with adhesive tape), finalists must also request hooks via the email above.
- 9.2 Rules for the benches: to ensure the safety of all event participants, the FeNaDANTE team will check the stands before the exhibition. Therefore, the following items will not be permitted to be displayed on the stands:
 - living or dead organisms (even if preserved), including plants;
 - dissected specimens or parts of them;
 - animal or human fluids (e.g., blood, urine, etc.);
 - various substances in a liquid state;
 - any substance that generates gas or smoke (e.g., dry ice);
 - sharp or pointed materials;
 - flames or flammable materials;

- batteries with exposed cells;
- samples of soil, sand, earth, rocks, or trash;
- human or animal food (exhibition and/or distribution to the public is prohibited, for example, distribution of sweets).
- photographs or any other visual presentation showing vertebrate animals undergoing surgical techniques, dissections, necropsies, or others;
- photographs showing people without prior authorization;
- photographs showing people in traffic accidents, according to art. 212 of the Brazilian Penal Code;
- photographs showing naked people;
- display of products that can be tested on people (for example: ointments or essences);
- the FeNaDANTE team will verify other cases before the project is exposed.

Note: The project may be disqualified if participants tamper with the exhibition bench/stand after the conference held by the FeNaDANTE team.

10. About the distribution of gifts and food:

<u>Distributing any gifts and food to participants and reviewers of FeNaDANTE during</u>
<u>the exhibition is strictly prohibited</u>. Note: Participants can bring and exchange gifts
(non-food) with other finalists <u>only at IntegraFENA</u> (described in item 11).

Breaching this regulation may lead the event organization to take the following actions:

- **1st Warning:** In the first occurrence, the participant will be warned by the FeNaDANTE organization team.
- **2nd Disqualification:** In case of recurrence, the project will be disqualified from the fair. These actions aim to ensure equal conditions for everyone involved and guarantee the fairness of the review process.

11. IntegraFENA

IntegraFENA is a moment FeNaDANTE organizes to bring finalists to socialize, exchange experiences, and expand learning. It is therefore suggested that finalists provide items representative of their localities, which can be exchanged with other participants in the event. Furthermore, participants (students and teachers) are encouraged to share aspects of their cultures during the presentations promoted by the event, whether through regional dances with typical costumes, reciting poetry, among other possibilities. The presence of the flag is significant to identify and honor the cultural

origin of each participant. More information about IntegraFENA will be sent later to the selected projects.

12. General schedule of the event

The 6th FeNaDANTE - César Lattes edition will be held between 09/23/24 and 09/28/24, at the sports arena of Colégio Dante Alighieri. Below, we present the general schedule of the event⁴:

Date	Period	Activity
09/23/24	From 10 a.m.	Accreditation of participants
	5 p.m.	Opening ceremony
	6-8 p.m.	IntegraFENA
09/24/24	9:30 a.m.* to 7 p.m. (coffee break: 12 p.m. to 2 p.m.)	Project review and exhibition
09/25/24	9:30 a.m.* to 7 p.m. (coffee break: 12 p.m. to 2 p.m.)	Project review and exhibition
09/26/24	9:30 a.m.* to 6 p.m. (coffee break: 12 p.m. to 2 p.m.)	Project review and exhibition
09/27/24	Free day (no activities planned by FeNaDANTE)	
09/28/24	2 p.m.* (until around 6 p.m.)	Award ceremony

*Note: Gates open 30 minutes before the scheduled activity starts.

13. About attitudes and accountability

The commitment to ethics and respect is one of Colégio Dante Alighieri's values. In this way, all participants in the **6th FeNaDANTE - César Lattes edition** must be committed to the collective well-being. <u>Disrespectful attitudes will not be tolerated. They may result in the cancellation of the participation of those involved in the fair.</u>

Furthermore, Colégio Dante Alighieri shall not be held legally responsible for the content of the works presented in the **6th FeNaDANTE - César Lattes edition**, and they are not under any obligation to respond for plagiarism, the inadequacy of any topic, the incorrectness in the conduct of any research, or the inaccuracy or inconvenience of any conclusion. As a guarantee against any such claim, Colégio Dante Alighieri has the right to discredit from the exhibition any work whose content violates the Declaration of Human Rights, offends ethics and morals, violates the honor of any person or institution, or inflicts on a person any disrespect in the form of discriminatory acts or racism. Upon

⁴ The Organizing Committee reserves the right to change the dates and times of the schedule above, if necessary, and such changes will be communicated through updates to this notice.

verification of offensive elements or others that affect someone's dignity or violate any precept or rule typified by law, the work will be disqualified and not compete for any award.

14. Filming and dissemination

The **6th FeNaDANTE - César Lattes edition** can be recorded or photographed. In this way, the event participants authorize Colégio Dante Alighieri to use their images/videos (including those of participants' companions) by audiovisual means where they deem necessary for the dissemination of the fair in the different circuits and means of communication for an indefinite time and non-commercial purposes.

15. Questions or other details

Exceptional issues not covered by this public notice will be analyzed by the Organizing Committee of the **6th FeNaDANTE - César Lattes edition**. They may lead to specific solutions, as they will be judged case-by-case.

Email: fenadante@colegiodante.com.br. In your contacts, remember to always identify your project with its title and the author(s)' name(s).