

## **RULES OF MOSTRATEC 2023 ELEMENTARY, MIDDLE AND TECHNICAL-PROFESSIONAL HIGH SCHOOL EDUCATION**

### **1. ABOUT THE EVENT**

**1.1.** International Science and Technological Fair, hereinafter called MOSTRATEC, is organized by Fundação Escola Técnica Liberato Salzano Vieira da Cunha, located in Novo Hamburgo, Rio Grande do Sul, Brazil, having public and private institutions as partners and it is supported by National Scientific and Technological Development Council - CNPq.

**1.2.** MOSTRATEC will happen from October 23<sup>th</sup> to October 27<sup>th</sup> at FENAC – Business and Events Center, Novo Hamburgo – RS.

**1.2.1.** On October 23<sup>rd</sup> all the projects should be accredited at the accreditation booth.

**1.2.2.** The exposition and public visitation will happen from October 24<sup>th</sup> to October 26<sup>th</sup>.

**1.2.3.** The Award Ceremony of Mostratec will happen on the evening of October 27<sup>th</sup>.

**1.3.** MOSTRATEC 2023 will have the following vacancies for the presentation of research projects: 300 to students from Elementary, Middle and Youth and Adult Education (YAE), and 410 to students from Technical-Professional High School Education. These vacancies include projects that received accreditations from affiliated fairs and that were chosen in a selection process.

**1.4.** The participation fee is individual and it will be used to pay for the expenses of the event according to the following:

**1.4.1. Elementary, Middle and YAE**

- Foreign public and private schools: US\$ 75 per person, without meals.

**1.4.2. High School and Technical-Professional School**

- Foreign public and private schools: US\$ 125 per person, without meals.

**1.5.** In the registration form, there is the possibility to include meals, by selecting the number of meals for each project member; US\$6 per meal.

**1.6.** Payment of the participation fee must be made through Mercado Pago. After the project being reviewed by the Scientific Review Committee (SRC), the link to the Mercado Pago platform will be available on the Student Panel on Mostratec Digital Portal (the student responsible must log in with the project registration email and the password created to access – see item 4).

- 1.6.1.** Projects from countries where Mercado Pago does not operate will be able to make the payment on accreditation day (in person), just have to select this option during the registration.

## **2. OBJECTIVES**

- Arouse students' interest in the development of scientific initiation research and technological projects and make the disclosure of the projects possible, enabling the production and dissemination of knowledge.
- Encourage imagination, curiosity, and pleasure through scientific and technological research.
- Integrate exhibitors and teachers from educational institutions in order to broaden relationships and to enable contact with other cultures.

## **3. PARTICIPATION**

Technological or scientific research projects which meet the following requirements will be able to participate in MOSTRATEC 2023.

### **3.1. Categories**

**3.1.1.** Elementary, Middle School and Youth and Adult Education (YAE) can join the following categories:

- CATEGORY 1: Early years of Elementary School
- CATEGORY 2: Final years of Elementary School
- CATEGORY 3: Middle School
- CATEGORY YAE: All levels of Youth and Adult Education

**3.1.2.** Projects from High School or Technical-Professional Education must meet one of the following research areas:

- Animals and Plants Science
- Cellular and Molecular Biology, Microbiology
- Chemistry and Biochemistry
- Computer Science
- Earth and Planetary Sciences and Mathematics and Physics
- Education and Humanities
- Electrical Engineering
- Electronic Engineering
- Engineering and Materials
- Environmental Science
- Health Science
- History and Social Science
- Mechanical Engineering
- Sanitary and Environmental Engineering

## 3.2. Criteria

### 3.2.1. The students must:

- a) be enrolled in a learning institution, according to the level of their project (Elementary, Middle /Youth and Adult Education, High School/ Technical Professional);
- b) be with a responsible adult, if underage (the mentor can be the responsible);
- c) register only one scientific or technological project;
- d) respect the deadlines established by MOSTRATEC.

### 3.2.2. The project must:

- a) be developed under the supervision of one mentor (above the age of 21 and graduated) and **could** have up to two co-mentors.
- b) have up to 3 (three) students (Categories 2, 3, and YAE);
- c) have up to 4 (four) students (Category 1);
- d) present the continuous research of, at latest, 12 (twelve) months, developed within a year before the fair;
- e) be the authorship of the students from the level informed at the registration and carried out according to MOSTRATEC Research Regulations. It is the exclusive responsibility of the participants, the authorship, the category or research area chosen and the truth of the information provided on the registration form.

## 4. SUBMISSION OF A PROJECT

Project submissions are carried out through Mostratec Digital Portal (<https://digital.mostratec.com.br/>). The submission guidelines can be found in Appendice 1 of this regulation and also on the website [https://www.mostratec.com.br/en/online\\_registration/](https://www.mostratec.com.br/en/online_registration/).

There are two ways to participate in MOSTRATEC 2023:

### 4.1. Participation through affiliated fairs

Many fairs are affiliated to MOSTRATEC and accredit projects to take part in it. Projects accredited through an affiliated fair must meet all the criteria established in these rules and observe the registration dates (from July 3<sup>rd</sup>, 2023 to September 25<sup>th</sup>, 2023). **All projects indicated by affiliated fairs are not selected by Mostratec, that is, if they meet all the participation criteria, they are guaranteed a vacancy.**

### 4.2. Participation through direct selection process

It is possible to submit a project through the direct selection process from July 3<sup>rd</sup>, 2023 to August 2<sup>nd</sup>, 2023 and wait for the announcement of the selected projects (see the schedule on Mostratec website).

The selection of research projects through the direct selection process will be made by the Organization Committee of MOSTRATEC 2023 taking into account the data from the Registration Form, considering the number of vacancies and representativeness.

A project submitted through the direct selection process that has not been approved by the Organization Committee cannot be registered as a project from an Affiliated Fair.

The Organization Committee may ask for additional information during the selection process.

### **Important:**

The mentor must be a graduated teacher, above 21 years old. The role of a mentor is to supervise the young researcher at every stage ensuring ethics, the viability of the project and also participant's safety. The co-mentor must be over 18 years old and must have been graduated from High School.

## **5. ANNOUNCEMENT OF THE FINALIST PROJECTS**

The Organization Committee of MOSTRATEC 2023 will announce the finalist projects on the website ([www.mostratec.com.br](http://www.mostratec.com.br)) on October 9<sup>th</sup>, 2023.

The participation will be confirmed through the payment of the fee, the correct filling in of the registration form, the sending of the needed files and the fulfillment of the requirements and the research rules (link at the end of this text).

## **6. SCHEDULE**

All deadlines end at 23:59 (Brasília time) of the respective date.

<b>Date</b>	<b>Activity</b>
July 3 <sup>rd</sup>	Opening: registrations / submissions of projects
August 2 <sup>nd</sup>	Ending: submissions of projects through direct selection process
September 25 <sup>th</sup>	Ending: registration of projects accredited through affiliated fairs
October 9 <sup>th</sup>	Announcement of all finalists of MOSTRATEC 2023 <b><u>ATTENTION:</u> All projects indicated by affiliated fairs are not selected by MOSTRATEC, that is, if they meet all the participation criteria and deadlines, they are guaranteed a vacancy</b>
October 10 <sup>th</sup>	Deadline to pay the registration fee through Mercado Pago <sup>1</sup>
October 12 <sup>th</sup>	Deadline to send the Research Paper (only High School and Technical-Professional Education projects should send the Research Paper)

<sup>1</sup>- Projects from countries where Mercado Pago does not operate will be able to make the payment on accreditation day (in person), just have to select this option during the registration.

## **7. EXHIBITION**

### **7.1. Accreditation**

On accreditation day, according to the schedule, the mentor and the finalists should collect the badges and fair material and be oriented about how to set up the booth. Take the proof of the registration payment with you, if necessary, the receptionist can ask for it.

### **7.2. Booth setting up and finalists' attitude during the fair**

Information about setting up and finalists' attitude and behavior during the fair will be available at EXHIBITION AND SAFETY RULES on the official website.

## **8. JUDGEMENT**

### **8.1. Evaluation**

The evaluation of the projects will be held in person, at the fair, and will be based on the following elements:

- High School and Technical-Professional Education: research paper, abstract, booth (display included), project data book and oral presentation.
- Elementary and Middle School: abstract, booth (display included), project data book and oral presentation.

### **8.2. Judges**

The judges will be determined by the Organization Committee of Mostratec 2023. They do not have any relation with the participant learning institutions.

## **9. AWARDS**

The awarding ceremony will be held in person and webcasted following the Organization Committee ceremonial, according to the schedule.

All the projects will receive a participation certificate that will be sent by email after the fair.

Finalists registered and awarded will receive a medal of MOSTRATEC 2023. Students, mentors and co-mentors registered and awarded will receive an Award certificate of MOSTRATEC 2023 that will be sent by email after the fair.

### **9.1. Popular project award**

Besides the awards of MOSTRATEC 2023, during the fair, the public will be able to select the best project of each category and research area. Finalists, mentors and co-mentors will receive an award certificate that will be sent by email after the fair.

## **9.2. Awarded Projects**

All the projects have the possibility to receive different kinds of awards. Thus, the same project can be awarded more than once.

## **9.3. Mostratec Awards**

The Organization Committee of MOSTRATEC 2023 will award the projects according to the score obtained along the evaluation process. The awards will be proportionally distributed from 1<sup>st</sup> to 4<sup>th</sup> places per category or research area and will receive medals and award certificates.

In the case of finalists from different school years in the same project, it will be considered the category of the more advanced one, for award purposes.

### **9.3.1. Awards offered by partners and supporting institutions**

MOSTRATEC 2023 finalist projects can receive awards offered by partners and supporting institutions, such as: publications in magazines and periodicals, honorable mentions, electronic equipment, immersions and scientific visits and travel expenses for participation in science fairs. For these specific awards extra evaluations may occur, with criteria and evaluators established by the supporters and sponsors themselves.

### **9.3.2. Accreditation to other scientific fairs**

A MOSTRATEC 2023 participating project can receive accreditation to other fairs in Brazil or abroad. These accreditations follow the criteria of these fairs.

## **10. PENALTIES**

The Organization Committee reserves the right to penalize the projects that do not follow the rules and guidelines established in this document or do not follow the rules and ethics of research. The penalties can be a written warning, the loss of points or the declassification of the project.

Acts of indiscipline and lack of commitment to the project presentation can be declassified. Special cases and/or omissions in this regulation will be evaluated by the Organization Committee.

## **11. GENERAL PROVISIONS**

The filling in and the sending of the registration form by the participants represent the **acceptance and agreement of all the rules established here**.

Fundação Liberato and MOSTRATEC, following the Federal Law 13.709/2018 and State Decree 55.647/2020, are in accordance with the new Brazilian General Law of Personal Data Protection. Any questions can be sent to [cmptdp@liberato.com.br](mailto:cmptdp@liberato.com.br).

The Organization Committee of MOSTRATEC 2023 reserves the right to modify or adjust the rules of this regulation when necessary.

Novo Hamburgo, July of 2023.

Organization Committee of MOSTRATEC and Junior MOSTRATEC 2023.

### **Links**

Submission of a Project: Direct Selection Process

<https://digital.mostratec.com.br/>

Registration of a Project: Affiliated Fair

<https://digital.mostratec.com.br/>

Research Rules

<https://www.mostratec.com.br/en/scientific-review/>

Exhibition and Safety Rules

<https://www.mostratec.com.br/en/exhibition-and-safety-rules/>

Research Areas

<https://www.mostratec.com.br/en/research-areas/>

Forms

<https://www.mostratec.com.br/en/forms/>



## APPENDICE 1 – GUIDELINES FOR PROJECT REGISTRATION

Here are the guidelines for project registration at MOSTRATEC 2023:

- **Online registration is carried out on Mostratec Digital site:** <https://digital.mostratec.com.br> (the language can be chosen at the right top menu). The student responsible for each project must pre-register by choosing one of the two forms of participation: “By Affiliated Fair” or “Selection Process”. You will get a confirmation email, after confirm the registration, fill in the entire registration form. For projects accredited by an affiliated fair, the name must be selected from the list of affiliated fairs.

**IMPORTANT: THE PRE-REGISTRATION MUST BE DONE IN THE NAME OF ONE OF THE STUDENTS!** Do not use personal data of a mentor or any other person involved. The information inserted there will be part of the registration form of student 1 and cannot be changed later.

- **Project submission through direct selection process can be done from July 3<sup>rd</sup> to August 2<sup>nd</sup>,** according to the schedule (<https://www.mostratec.com.br/en/schedule-direct-selection-process/>) that is available on the website.

- **Project registration through affiliated fairs can be done from July 3<sup>rd</sup> to September 25<sup>th</sup>,** according to the schedule (<https://www.mostratec.com.br/en/schedule-affiliated-fair/>) that is available on the website.

For finishing your registration, you must have:

1. The **Research Plan** (must be filled online, in its specific field);
2. Mandatory forms (<https://www.mostratec.com.br/en/forms/>):
  - a) **Rules of Conduct and Release** filled in and signed for all parts;
  - b) **Review Form-1** filled in and signed for all parts – **ATTENTION:** for Elementary and Middle School projects (**Mostratec Junior**) only Rules of Conduct and Release form is mandatory;
3. **Additional Forms**, according to the type of research (and only for Secondary School projects);
4. **Banner** (link to a PDF file, publicly shared, in a virtual place – “cloud”);
5. **Video presentation** of the project (**YouTube link**) – check the recommendations for video recording in Appendice 2.

All forms **must be uploaded in the registration form as PDF files**. You can use a digital signature or print, sign and scan the forms. Files should not be sent by email, unless requested. The links for banner and video presentation must be informed in the registration form. The documents are analysed by the Scientific Review Committee – SRC.

Registration must be completed and sent according to the schedules. After sending the inscription, a **confirmation email should be received**. **If you don't get the email**, or if you have any question or problem sending the registration form, **please let us know immediately by sending a message to WhatsApp +5551984647731**.



## APPENDICE 2 – GUIDELINES FOR PROJECT PRESENTATION VIDEO RECORDING

### Technical Aspects:

**Time:** between 5 and 10 minutes

**Minimal Quality:** 480p, 30fps.

**Delivery Format:** Youtube video. Send the link through the registration form, in the proper field. Projects in English must have English subtitles. Projects in Spanish should have Spanish subtitles. Learn how to upload and add subtitles here: <https://support.google.com/youtube/answer/57407?co=GENIE.Platform%3DDesktop&hl=en>

**Recording Equipment:** You can use a smartphone, a laptop or a digital camera to record your video. The recording should be made always in the landscape position. If it's necessary, place your equipment on a base to avoid blurry images.

**Edition:** You can use any software, mobile or online application to edit your video. We recommend you use this clapboard to identify your project in the beginning of the video. Follow the link and download the editable version: <https://tinyurl.com/ClapboardMostratec>

**Recording environment and outfit:** The video can be recorded indoors or outdoors. Wear a plain color contrasting with the background color.

**Lighting:** it has to be not too dark nor too light. If you opt to record your video indoors, do it preferably in daytime and in front of a window. We recommend testing the light before recording.

**Audio:** avoid recording your video near noisy equipment or machines. If you opt to record your video outdoors, verify if the wind or other surrounding noises will not interfere with the sound capture. We recommend testing the quality of the capturing and the volume before recording.

### BASIC RULES:

All the students responsible for the project must be on the video. The mentor and co-mentor can help, but should not be part of the video.

The body posture of the research students, as well as their language and outfit must be appropriate to the situation.

Practical demonstrations of any nature must be performed with the right Personal Protective Equipment.

The complete rules related to the videos you can find in the items 9.1, 9.5, 9.6 and 9.7 in the Research Rules file: <https://www.mostratec.com.br/en/scientific-review/> (available in the link at the end of the page).

## GENERAL INSTRUCTIONS

The video of your project should describe, with a beginning, middle and end, the objective and the results of your project. The judges and the public need to be capable of understanding the main idea and how your project was developed.

Be creative, but do not forget that it is important to be clear and objective in your use of language and when expressing your ideas. Speak clearly and use an appropriate tone of voice and language speed.

Basic Script:

1. Presentation: Say the names of the students, mentor, school, city and country.
2. Introduction: Present the justification and the problem of your project. State the hypothesis and the objectives clearly.
3. Theoretical Framework and Methodology: Support your research theoretically and present your methodological procedure.
4. Results and discussion: What results were obtained? What do they mean? How are your conclusions related to the problem, hypothesis and objectives? In progress projects: What are the perspectives? What are the expected results? Why?

The mentioned items do not need to be in the indicated order. It is not necessary to highlight the division of the items in the presentation. Try to make a smooth presentation, as if you were telling a story.

The use of a banner, images, graphs, tables and slides is optional. The main focus of the video is on the researcher(s) and the presentation. The researcher(s) is free to choose the best way to make the presentation provided that the rules shown above are observed.