



# Inside CPS

CENTRO PAULA SOUZA - BRAZIL

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Área de Relações Internacionais

Centro Estadual de Educação Tecnológica Paula Souza International Office



## Open doors to the world!



It is with great joy that the Centro Paula Souza (CPS) presents the first edition of the monthly newsletter of the International Office (ARInter), which brings news about initiatives and opportunities of international collaboration. The largest state network of VET in Latin America, CPS manages 223 Technical Schools (Etecs) and 73 Technology Faculties (Fatecs). There are more than 320 thousand students and 15 thousand teachers in all regions of the State of São Paulo.

Our pursuit for excellence crosses borders. One of the priorities of the CPS is to get closer to the best educational institutions on the five continents. We work through partnerships to promote exchanges, training, technical visits, cooperation in research projects and technology transfer. CPS has its doors open to interact with new cultures, create connections and build possibilities for young people around the world.

**A big hug and good reading!**

*Prof. Laura Laganá*

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Superintendent Director of the Centro Paula Souza



### Study abroad at CPS

The Paula Souza Center offers academic semester places for students from partner institutions, whether in Vocational training, Undergraduation or Graduation. Classes are in Portuguese, a great opportunity for anyone who wants to get into a new culture. Another way to enter is applying to the entrance exam, the test is carried out in person near one of the 223 Vocational training units or 73 Colleges distributed in the State of São Paulo, Brazil.

#### Education without Borders

Living with other cultures. Get to know the customs of different peoples.

These are privileges that some groups of students at the Centro Paula Souza (CPS) are fortunate to be able to enjoy.

Several state Technical Schools (Etecs) and Faculties of Technology (Fatecs) have students with foreign nationalities from countries on five continents. The Etecs house 320 students of other nationalities; at Fatecs, there are 150. Among so many other nations, there are natives from Russia to Peru, from Nigeria to Italy, from Iran to Haiti.

#### Matter of Luck

Paula Mirada is studying food technology at Fatec Deputado Oque Trevisan, in Piracicaba. She came from the state of Santa Fé, in Argentina, straight to the interior of the State of São Paulo, with the purpose of studying at a university associated with her home institution, the Universidad del Centro Educativo Latinoamericano (UCEL), where she is studying for a degree in Food Engineering.

"I wanted quality education, but I had never heard of Fatec, I had references and luck. I'm really enjoying the course. The study system is similar to what I'm used to. At first, I had difficulty understanding the classes, then I adapted", she says.

Unfortunately, Paula arrived just as the pandemic broke out. That's why she never went to her Brazilian college, she's studying on the Teams platform.

"I hope that by the end of the course I can at least go there to take a picture!", she longs.

### Looking for the best

Tabarre is a commune in Haiti on the outskirts of Port-au-Prince. It was there that Betchie Witney Charlot learned to speak Portuguese, with a book taken by her father, who traveled a lot to Brazil. Now 16, the young woman perfectly follows the classes in the Computer for Internet course at Etec Dr. Geraldo José Rodrigues Alckmin, in Taubaté.

She still doesn't know her classmates well because she joined the course this year and soon came isolation: "I'm dying for the pandemic to end and classes to return normally". Enthusiasm has a reason. She reveals that she chose Etec because "it is one of the best schools in the region" and – very important – she has already made friends there.

### Cultural integration

Beatriz Brito came from Porto, Portugal, at the age of 18, she is happy in the course of Systems Development Analysis, at Fatec Americana - Minister Ralph Biasi, where she joined in February 2020. "Since I was a child I have been very fond of science and technology, robotics. Logic is a very



important thing in people's personal and professional lives. In addition to being an area where jobs will never be lacking", she said.

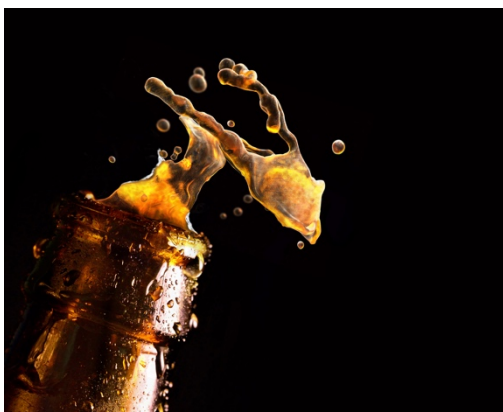
At Fatec, Beatriz always made an effort to make friends. "In between classes, I would talk to people, not only from my class, but from other classes", she recalls. The effort was so successful that, in the first year, she was already elected class representative, a position she maintains until now.

### CPS's vocational training stand out on international competition

Studying at a CPS Vocational training (Etec) is not just about having access to quality professional education, which obtains the best results in assessments of the size of the National High School Exam (Enem) or the International Student Assessment Program (Pisa) . It's also about having the chance to shine on the podium of the most disputed with national and

international knowledge applications and Olympiads. In 2020, the pandemic that forced students at the Paula Souza Center (CPS) to study at a distance did not prevent them from participating in championships in various areas and winning more than 100 awards. In 2019, when Coronavirus was not circulating, there were 170 awards. The challenges posed to young people were equally diverse: from building a drone to creating an application to support the prevention of Covid-19, through testing knowledge of astronomy, computing, history, geography, mathematics, entrepreneurship and the environment, among others. Participating in these contests is a tradition at the institution. In 2003, the year of the launch of one of the most renowned scientific educational events, the Brazilian Science and Engineering Fair (Febrace), promoted by the Polytechnic School of the University of São Paulo (USP), Etec Prof. Basilides de Godoy, from the Capital, took the prize in the Technology category; and two other schools reached the final stage. Since then, the Etecs classify projects for the exhibition and win trophies every year. In 2021, 19 works from 14 units will compete. The State Technical Schools are also constantly present in the main

competitions in the country, such as the Brazilian Olympiad of Knowledge (OBS), in which the Etecans won 66 medals in 2019, and 16 in 2020. One of last year's gold medals went to Etec Prof. Armando José Farinazo, from Fernandópolis, where each victory is celebrated with the greatest enthusiasm. There was even a motorcade of teachers, during the pandemic, to honor the two winners of the Lavoisier Prize, instituted by the Regional Council of Chemistry. Principal Valdete Aparecida Zanini Magalhães says that each success is shared with the school community, during the Civic Moment, promoted monthly by the student union, on the sports court: "Participation in tournaments influences the performance of young people. They improve learning, are more interested in subjects. And the whole group comes together in this process, when there is a winner in the group".



### Low calorie craft beer

Science contributing to improve the national product. From this perspective, Daniela Nascimento starts, this year 2021, another research applied to the craft drinks industry. Professor of biotechnology and biochemistry at Fatec Piracicaba since 2010, and from 2012 in RJI, she will now study, together with Gisele Gonçalves, also a professor at the same unit, a mix of yeasts capable of generating a less caloric beer. Graduate students will help create the different types of fermentation.

The project has national and international partners. In Brazil, it receives support from Fermentec, a company that has a yeast bank to supply sugar and alcohol mills; Companhia Brasileira de Cerveja Artesanal and Cervejaria Leuven. From Belgium, the HelHa group is part of the project, with technicians from

Brasserie du Bocq, a renowned brewery in the country.

This project has as main objective to analyze the efficiency of specific mix of yeasts in the alcoholic fermentation of beer wort on a laboratory scale, aiming at complete fermentation of sugars.

#### Specific objectives:

- Use of wild, beer and bioethanol yeasts, in known proportions, as inoculations in the alcoholic fermentation of beer wort on a laboratory scale;
- Evaluate the fermentation efficiency presented by each yeast and its mix in terms of ethanol and other important volatile organic compounds quantity, cell viability and sugar consumption;
- Compare the efficiencies obtained in this study with those commonly presented in the production units (microbrewerys) for the production of craft beer;
- Conclude on the feasibility of using the studied yeast mix as potential inoculants for alcoholic fermentation in a given operational condition and aiming at final products with low residual carbohydrate content;
- Point out possible consequences of the results obtained for the



continuity and deepening of this research.

"We are going to publish the preliminary results and show the quality of the work, guided by rigorous scientific criteria. I am sure that we will be able to attract the interest of development agencies that believe in research, by funding new equipment, inputs and grants for researchers",

says Daniela