

FS REPORT	Name	Year and term for exchange
	Ebba Ramberg	2024 Spring
Country for the project		
Federal University of Santa Catarina	- UFSC	
Degree programme		

# A Two-Month Trip to Paradise with Interesting Work and Adventures

Chemical Technology

#### Before departure

During the final exam period of the Spring Term 2023, I received a message from my program coordinator addressed to those who might be writing their bachelor's thesis in the spring of 2024. The message contained information about various projects in Brazil during the spring, offering the opportunity to participate. I was immediately interested and reached out to the contact person. When I learned that there was a chance to complete my bachelor's thesis in Brazil, I knew it would likely be expensive to get there. Therefore, I began looking for ways to fund the trip and discovered the KTH Field Studies program.

Initially, it was planned that I would work on a completely different project in a different city in Brazil than the one I eventually ended up working on. Throughout the fall, I gathered and prepared all the necessary information for the KTH FS application report and maintained contact with the supervisor I was initially assigned. However, in January/February, I was informed by my KTH supervisor, who was also the contact person with the various institutes in Brazil overseeing these projects, that the location might not be ideal. As a result, I was quickly reassigned to a completely different project in a city much further south, Florianópolis. Even in Florianópolis, I was initially supposed to work on a different project, but when the opportunity arose to work on a project that hadn't been as extensively explored by other students, I decided to switch to it, about three weeks before departure. Consequently, there was little time left to prepare for the project itself.

Regardless of where I was going in Brazil, getting vaccinated was essential. I received vaccinations for Hepatitis A and B, Yellow Fever, Typhoid, and Cholera. One vaccine I should have taken but didn't, which became increasingly concerning as the trip approached, was for Dengue Fever. Fortunately, I avoided contracting this disease, but I would recommend getting the vaccine.

Other than the obvious preparations like arranging accommodation and flights, there weren't many major preparations. I started learning Portuguese using Duolingo. While it didn't help much, it did provide a good foundation for learning more once I arrived

#### **Upon arrival**

I arrived in Florianópolis on a Friday and was scheduled to start work the following Monday. Since I had a classmate who had already been in the city for about a month, I quickly settled in over the weekend. I explored various places on the island and met several exchange students and locals. On Monday, I met my supervisors and the team at the laboratory where I would be working. I was given a brief tour of the department and some recommendations for local eateries. What I appreciated most was that, in addition to focusing on the project, they were also keen on ensuring I had the opportunity to see and experience the city.

I spent eight weeks in Florianópolis, working on the project with varying levels of intensity. During my free time, I fully immersed myself in everything the city had to offer.

#### **Financials**

The Brazilian currency, reais, was worth about 2 SEK, but overall, prices were much lower than in Sweden. Most food, drinks, and activities cost about half of what they would in Sweden, depending on where you ate and went. One of the most common ways to get around was by Uber, which was also generally very inexpensive. An even cheaper option was the local bus system, which I used more frequently the longer I stayed.

I wasn't very good at bringing packed lunches during the day, partly because my evenings were filled with other activities, so I didn't cook much. As a result, I often ate lunch and sometimes dinner out.

The cheapest option was the university's own campus restaurant, where students with a specific card could eat both lunch and dinner for about 3 SEK. Although I wasn't officially a student there, my supervisors helped me get a card, but I had to pay 6 SEK per meal. However, I didn't go there often because it was farther away on campus, and I preferred to eat closer to the lab so I could take shorter lunch breaks and finish earlier in the day. Nearby, there were places that served buffets or daily specials, which usually cost me around 40-70 SEK.



#### **Accommodation**

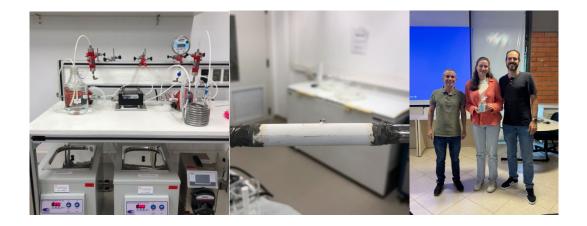
I was early on advised that Airbnb was very popular in Brazil, so I primarily searched there when looking for accommodation. During my search, my KTH supervisor, who had lived there before, also recommended specific areas to stay in (and some to avoid). Based on these recommendations and my preference for being within walking distance to campus, I chose to stay with a friendly couple in an apartment in the Trindade neighborhood. The couple I stayed with was very welcoming and helpful, which was a huge relief at the beginning when I wasn't familiar with the area, and for example where to shop for groceries and other necessities. It was also nice to live with them because both spoke English, which made communication easier. Where their English skills fell short, I could mostly understand them in either Portuguese or occasionally Spanish. This was a great way to practice Portuguese. The cost of staying here was just under 10,000 SEK for the eight weeks. Although there were cheaper options, the location and the hosts made it feel safe and comfortable.

#### **Project**

My project focused on surface-modifying a ceramic membrane to acquire hydrophobic properties, allowing it to be used in membrane distillation to separate ammonium from water. This was an ongoing project when I arrived and has continued after I left. However, it is not something I will continue working on. There is a chance that the results I produced could be used in a publication by the team working on this project, which may mean that my name could be mentioned (but only maybe).

A typical day during my field studies involved working in the lab, performing a variety of processes such as surface modification, membrane distillation, quantitative analysis, or qualitative analysis. Many days were spent working long hours in the lab.

At the department where I worked, I received a lot of support, especially from a PhD student whose project it was. He helped me tremendously, guiding me through the various methods and processes. At the end of my time there, I gave a presentation about my work to the department, as a practice run for my final presentation.



## Country

Florianópolis was an amazing city to live in. It was incredibly beautiful and I felt very safe. There was always something happening or some activity to do—whether it was parties, dancing, music, food, hiking, or simply enjoying sunny days on the beach.

I never really experienced culture shock; instead, it was more of a confirmation of what I had already expected or what I had been told. I anticipated that the perception of time there would differ from what I was used to and that people would generally be more welcoming and social. I understood that the food culture would be different and was excited to taste as much as possible. The only real 'shock' was to not always know how to dress for different events—sometimes it was much more casual than I expected, while other times, it was more formal/party.

I got invited to a June party "Fiest de Junio" which is a bigger festive tradition that happens during all of June. Here I got to enjoy the festive traditional food, drinks and dance/music.

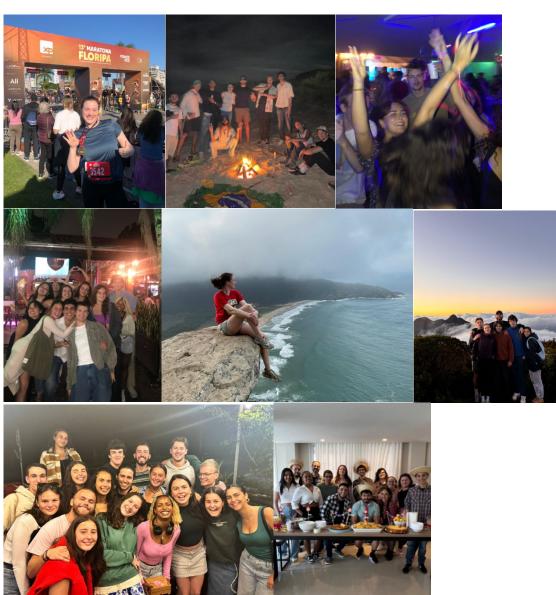


#### Leisure and social activities

My free time consisted of a variety of activities. I met some exchange students whom I often hung out with after a day at the lab. We would go to a place that played live samba music, and sometimes we would head to a viewpoint to watch the sunset. We visited different beaches and went on different hikes during the weekends and later in the evening, we would go out together.

One activity I took the opportunity to do while there was to run a half marathon towards the end of my stay. Some of the friends I had made had run earlier during my time there, which you could say inspired me. What made it even more fun was that a few friends I knew ran alongside me, and we also trained together in the lead-up.

I was also invited to join a trip to Curitiba to hike up a mountain and watch the sunrise (just outside the city). It was an incredible experience, as we hiked up in complete darkness and reached the top just in time for the sunrise. It was probably the toughest hike I've ever done, but also the most memorable.



### Sustainability

During my time in Brazil, I primarily traveled by car, as it was the most convenient way to get around. Uber is very popular and widely used, especially since the prices are reasonably affordable. However, as I became more familiar with the area, I also started taking the bus, which was even cheaper. The bus was a convenient option if there were stops nearby and if you could switch buses at terminals (otherwise, you had to pay again when boarding another bus). Had I stayed longer, it might have made sense to get a bike for shorter trips, but since I was only there for two months, it didn't seem necessary.

The project I worked on is connected to the United Nations' Sustainable Development Goals, as it focused on water purification. Research regarding different techniques for water purification is necessary as there are so many different substances and applications.

#### Other recommendations and observations

If there are other exchange students around, it's a great idea to spend time with them, as they're likely just as eager to explore the city and country as you are. Traveling in a group not only makes it easier to plan bigger trips, but it can also help reduce costs.

Be sure to talk to locals about the best places to visit, eat, and hang out. If people are open and friendly, try to engage in deeper conversations about life, politics, and other topics to gain new perspectives and better understand the place you're in. Just remember to approach these discussions with mindfulness and respect.