KTH VETENSKAP OCH KONST

| FIELD STUDIES REPORT | Student's name | Country for the project |
|-------------------------------------|-------------------|-------------------------|
| | Nemrit Kaur | Brazil |
| Year and semester for field studies | | |
| 2025 VT | | |
| Degree programme | | |
| Energy and environment – MSc Chen | nical Engineering | |

The Magic Island of Florianópolis

Before arrival

When I began my studies at KTH, I quickly became aware of the many international opportunities available to students. I was familiar with the Field Studies and understood its value early on. From the start, I felt that participating in a field study would be an important part of both personal and academic growth something I wanted to include in my educational journey.

While planning my master's thesis, I came across an international project through my KTH professor, Fred. The moment I heard about it, I felt it was the perfect match both in terms of the project and the country. The topic aligned well with my studies, and there was already a strong collaboration between KTH and the host university in Brazil. Two previous KTH Field Studies students had conducted similar research, which made coordination between the two institutions smooth and efficient. The environment felt welcoming, and I was also excited about the opportunity to experience life as an exchange student in a new and vibrant culture.

Out of the available projects, I chose to work on was development of hollow fibre membranes for the removal of micropollutants. The topic was deeply interesting to me, as I have long been passionate about water purification. I had also taken relevant courses in this field, so the project felt both meaningful and academically appropriate.

As part of my preparation, I attended the FS workshop organized by KTH, which I found very helpful. It provided essential information about travel insurance, who to contact in case of emergencies, useful websites to consult before travelling, and intercultural understanding. It helped me feel more confident and prepared for the experience abroad.

Regarding travel logistics, I didn't need a visa for my 90-day stay, which was sufficient for completing my lab work. For accommodation, both my professors in Sweden and Brazil supported me with practical advice, such as where to live, which areas are safe, local customs, and how to navigate cultural differences. Several vaccinations were recommended before departure, and I received those for Hepatitis A and B, Yellow Fever, Typhoid, and Cholera.

Upon arrival

The journey to Brazil was quite long, taking nearly two full days of travel. I arrived a few days before the official start of my project to give myself time to adjust. Upon arrival, I was welcomed by the warm island weather sunshine, ocean breeze, and a stunning landscape that made an immediate impression. One of my first stops was to try Brazil's famous açaí, something I had always wanted to experience. It was the perfect way to ease into the new environment and unwind after the long journey. I spent my first day settling in and exploring the nearby area, which helped me get familiar with local transportation, shops, and everyday life. Shortly after, I met with my Brazilian professor, who warmly welcomed me, gave me a tour of the lab, and introduced me to the research team. The onboarding process was smooth and made me feel comfortable from the start. Coincidentally, a few local holidays followed my arrival, giving me extra time to adjust and get to know the city before officially starting lab work the following week. In total, I conducted my field studies for approximately 12 weeks.



Financials

During my stay in Brazil, the local currency, the Brazilian real (BRL), was worth around 1.7 SEK. Overall, I found the cost of living to be lower than in Sweden. Accommodation, food, and drinks were typically around two-thirds of the prices in Stockholm.

Before traveling, a good way to save money is by booking flight tickets well in advance to secure better prices. Additionally, booking accommodation for a longer period especially through Airbnb can often lead to discounts. Once in Brazil, public transportation was quite affordable. A local bus ticket cost about 12 SEK, and if you can obtain a student card and register for a CPF (Brazilian tax ID), the cost can be even lower. Uber was also much cheaper and very affordable compared to Sweden.

One of the most budget-friendly options for meals was the UFSC university restaurant. I was able to get a UFSC community card, which gave me access to one meal per day at the campus restaurant for just 13 SEK, and the food was surprisingly good! During my stay, I ate there about five times. It was a bit far from the lab, but otherwise, it would have been perfect for a daily meal.



Accommodation

I first searched for a studio on Airbnb but couldn't find the right fit, so I explored Facebook student housing groups. Unfortunately, I was scammed after signing a contract and paying rent, despite being cautious. After that experience, I returned to Airbnb and found a reliable room for my full 12-week stay, which cost around 15,000 SEK. I highly recommend booking through Airbnb at least for the first few weeks unless you can visit the place in person or know the landlord directly.

Project

My project focused on developing different types of hydrophobic polymeric membranes for the removal of micropollutants from water. The goal was to explore membrane fabrication methods and evaluate their performance in removing harmful contaminants, contributing to cleaner and more sustainable water treatment solutions.

I received great support throughout the project. My supervisors and colleagues in the lab were always available to help and guide me. Their expertise made a big difference thanks to their input, we were able to overcome challenges and generate valuable experimental results. I learned a lot from them, both technically and culturally. A typical day during the field studies involved planning and conducting membrane fabrication and testing in the lab, analyzing results, and discussing the outcomes with my supervisors. At the end of my stay, I presented my findings to the lab team and supervisors, which was a rewarding way to wrap up the project. I'm also planning to include this research in my master's thesis and may explore further development of the results in the future.



Country

This was my first time in Brazil and I was genuinely surprised by how welcoming and kind people were. People were social, easy-going, and it was easy to make friends with both locals and other internationals. Just by attending one event, I was quickly invited to others. Florianópolis, offered a great mix of nature and culture, with beautiful beaches, hiking trails, and activities like surfing. The city had a lively vibe, full of music, dancing, and great places to eat. Locals often mentioned that the island is one of the safest places in Brazil and it felt like a European-style tourist island.



Leisure and social activities

My free time was filled with a variety of activities. I spent a lot of time with two classmates from Sweden, and together we made many new friends—both exchange students and locals. On weekends and holidays, we often hung out, going to places with live samba music or hiking up to viewpoints to watch the sunset. We explored different beaches, went on hikes, and usually ended the day going out together in the evenings.

One highlight was a trip to Curitiba and Iguaçu Falls, which was an unforgettable experience. We even spent a day on the Argentinian side, making the trip even more special.



Sustainability

I tried to reduce my carbon footprint by walking or using buses for daily transport. When taking Ubers, I usually shared the ride with others. For longer trips, like to Curitiba and Iguaçu Falls, I chose buses instead of cars. One thing that surprised me was the heavy use of small, free plastic bags in supermarkets. To avoid waste, I used a reusable bag I brought from Sweden. My project supported SDGs 3, 6, 9, 13, 14, 15, and 17, as it focused on developing membranes to remove micropollutants from wastewater.

Other recommendations and observations

If you're travelling to Latin America, I highly recommend checking out events like Mundo Lingo or Gringo Tuesday. These are great for meeting both locals and international people, and they make it easy to blend in and build a social circle. I also suggest taking a Portuguese course. I took one offered by UFSC, and it was both informative and enjoyable and helped me understand the culture better. If you have any questions, feel free to contact me through Nemritkaur@gmail.com. I will be happy to help you with any type of advice.

I am really glad that I could participate in a meaningful project, get to know many kind people and visit an incredibly beautiful place! Thank you, very much KTH FS, for making this unforgettable experience a reality!

