

IAESTE Internship feedback (CH-2021-000036)

Hello, my name is Bagdaulet Shugay. I am from Kazakhstan, and currently, I am a second-year master's student at Nazarbayev University and doing a master's degree in chemical and materials engineering. During my bachelor's study, I heard about the IAESTE program from my groupmates who successfully finished their internships in South Korea and Poland. Then I have inspired by this chance, and in 2019, I also applied with a groupmate for an internship through the local Kazakhstan IAESTE. However, due to quarantine restrictions because of COVID-19, I received an offer in April 2021 from Paul Scherrer Institut, located in Switzerland. I was successfully accepted for the Electrochemistry laboratory, part of the Energy and Environment Research Division (ENE) at the Paul Scherrer Institute, which continued for three months from September to November.

The Paul Scherrer Institute (PSI) is the largest and most prestigious Swiss research institute with an annual budget of US\$500m with unique facilities such as Swiss Spallation Neutron Source (SINQ). During the internship, I developed segmented GDLs for proton exchange membrane fuel cells (PEMFC) in-house by applying radiation techniques or hydrophobic agents to create the segmentation pattern with chemical and mechanical methods.

From my experience, I can say that Switzerland is the best country for travelling because of its location and excellent transportation system of trains, buses, and ferries. I had a chance to visit the biggest waterfall in Europe, Schaffhausen, then one of the most beautiful train roads, Bernina express and many other places in Switzerland, Italy, France, and Liechtenstein. I want to say thank you for this magnificent travel experience for local IAESTE members, PSI colleagues, and the amicable local Kazakh society "Birlik."

Finally, the IAESTE internship gives you a bucket of opportunities for your professional growth as well as for your personality. I can genuinely say that I got the professional experience of being a scientist, and this internship helped me choose the future direction of career growth. Also, I gained new knowledge about hydrogen-based fuel cell engines, then made friends, got a chance to travel around Europe, and understood many things about life.