





ABISCO ANNUAL MEETING

For the GMOS-Train consortium, the past period was certainly most marked by the annual meeting in Abisko (7.-10. June, 2022), the Swedish polar research area. In addition to the excellent participation, we were greeted by the beautiful June sun, which opened the hearts of even the most closed-minded people.

"In addition to the creative spirit and excellent ESR presentations, we learned about the basics of permafrost and heard many interesting stories from this beautiful part of the world." M. Horvat

I can honestly say that without the determination to go to this end of the world, many people would never have the opportunity to see the beautiful snow-covered peaks, the melting of the snow and the abundance of water flowing from the hills in deep and mysterious pools. And of course, experiencing a real sauna and swimming in a lake with frozen snow was a life experience for many. Just as the beauties of the world hide their enigmatic beauty, we can safely say that exploring mercury is entering the world of the unknown, exciting and rewarding. Every bit of something new arouses curiosity in us and drives us to search for more.

The post-coronavirus time is really a big change in the GMOS-Train project, because personal contacts and exchanges cannot be replaced by modern internet technology. We have a lot of work ahead of us. We will make up for what we missed in Corona time. With the one-year extension, we will definitely make up for everything we missed at the beginning of the project, above all socializing and in-person teamwork. We look forward to the next regular working meeting in February 2023 in Hamburg.

Prof. Milena Horvat GMOS-Train Coordinator

COMING UP ...

GMOS-TRAIN METROLOGY TRAINING COURSE (PART 1)

29. – 30. September, 2022



Zoom: https://us02web.zoom.us/j/85702019608?pwd=bDRSa1U2eFJVVk5uUXF1VzR3eTVYUT09



TRAVELLING AND COLLABORATION

Saeed Waqar Ali (ESR 9) is sharing recent experiences in his research work: "The highlight of the last year was our visit to the Abisko Scientific Research Station in the arctic circle for the GMOS-Train mid-term meeting. I also accompanied ESR 8 during her visit to the permafrost sites although much of the fieldwork was constrained by COVID-19-related issues. I then extended my stay for another two weeks in Stockholm to learn the extraction and analysis of fluorescent Dissolved Organic Matter (fDOM) from soil samples at the Department of ACES, Stockholm University."

SECONDMENT TO MIO — MERCURY IN THE SOUTH PACIFIC OCEAN

Earlier this year Alina (ESR 5) spent her secondment to the Mediterranean Institute of Oceanography (MIO) on a GEOTRACES cruise crossing the South Pacific Ocean (SO 289)! More than 30 scientists were on board RV Sonne investigating biogeochemical cycling of trace metals in the marine environment. We spend almost two months at sea sampling more than 40 profiles, to provide high resolution full water column observations on Hg speciation.



MERCURY SORPTION AND UPTAKE EXPERIMENTS AT IFREMER

During the first semester of 2022, Isabel (ESR6) worked on 8 experiments of Hg species uptake and sorption by living particles in collaboration with a Master student and later on with Sonja (ESR 7) who joined for her secondment.



SECONDMENT TO MIT

Charikleia's first secondment to MIT took place in February 2022. She also participated in HTAP meetings where she gave a presentation. In May she was seconded to Hereon before going to the annual GMOS-Train meeting in Abisko. It was a great opportunity for her to attend the ESOF 2022 MSCA satellite event and participate in the ICMGP with a talk.







FIELD CAMPAIGN NORTH OF THE ARCTIC CIRCLE

"We spent the first 3 days in a peatland called Storflaket, just a few minutes driving away from the research station. We were fortunate to samples as part of an experimental set-up that has been started at Storflaket peatland in 2005 by Margareta Johansson (University of Lund), where snow fences have been erected to catch the snow each winter and simulate an increase of winter precipitation."

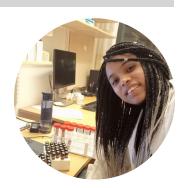
KINETIC EXPERIMENTS

Sreekanth got this year off to a busy start by taking part in the ERCA winter school training, where he also presented a poster about previous laboratory experiments.



LUISA IS BACK TO THE

"Full of the joys of summer I returned with fresh ideas to my usual lab activities at GET.





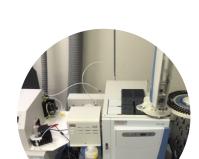
MERCURY SPECIATION IN THE SOUTHERN OCEAN

David and Sonja decided to trade in their European summer for an Antarctic winter to investigate mercury concentrations and speciation in the Southern Ocean. They joined the South African SCALE 2022 cruise to the Antarctic on board the S.A. Agalhus II, as their secondment to MIO.



THE ABCS OF METHYLMERCURY NANOBIOSENSORS

By Allwin



SEAWATER MERCURY QUEEN

By Natalia



EXPERIMENTS IN GOM CALIBRATION

By Teodor Daniel



"Iconic" secondment to Hereon

The entire month of May 2022, Alkuin (ESR1) and Charikleia (ESR 15) visited Koketso (ESR14) and David (ESR13) at Hereon for a hands-on tutorial with Dr. Johannes Bieser on the new and exciting ICON model.