



## MSCA ITN COORDINATOR GMOS-TRAIN FOREWORD

"The second Newsletter is a reflection of the work of individual ESRs after the first year of their involvement in the GMOS-Train project. The work is underway and the first results of the research work are already on the horizon.

*"Clearly, the COVID epidemic has not stopped research activity!"*

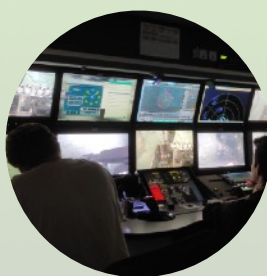
A special highlight is the special session dedicated to the GMOS-Train at the Goldsmith conference in Lyon. Sincere thanks to organizers and the presenters. Since the GMOS-train is based on a lot of fieldwork and interdependent work between ESRs and research institutions, it is no wonder that the Secondment Program suffered noticeable delays. Given all the measures that ensure the normalization of work, we hope

that we will make up for everything in the next period. Ahead of us is a mid-term meeting between 6.-8. October at the Jožef Stefan Institute in Ljubljana, which will be the first opportunity for real socialization between ESRs, mentors and project partners. We look forward to this event and successful work in the coming period."

Prof. Dr. Milena Horvat



**ATMOSPHERIC MERCURY IN THE  
TROPICAL BOLIVIAN ANDES AND  
INDIAN OCEAN**



**ECOSYSTEMS ON THE LARGEST  
SUBMARINE ERUPTION EVER  
OBSERVED**

WEBINARS AND COURSES  
IN 2021

Research Integrity webinar  
by Prof. Abhay Pandit



Introduction to Minamata  
Convention on Mercury by  
Mr Eisaku Toda and Mercury  
Game by Prof. Noelle E. Selin



Statistical data analysis with  
the scripting language R by  
Dr. Armin Aulinger



## FIELD CAMPAIGN AT ASKO LABORATORIET AND ONBOARD R/V ELECTRA

The overall goal of the study was to test the hypothesis that Hg entering the sea from land is mainly unavailable for methylation and biological uptake. Find out what Alina and Sonja are most excited for after this three-day cruise in the Baltic sea.



IPR Management in the  
Changing World of Economic  
and Social Impact by Dr.  
Špela Stres



Training course on writing/  
text analysis by Dr. Sofi  
Jonsson (SU) and Dr. Jeroen  
E. Sonke (CNRS)

## AYE AYE, CAPTAIN MERCURY!

Natalia was trained in clean sampling methods and ultra-trace level seawater mercury measurements. She first applied the method to samples of hydrothermal vent fluids of the Midatlantic ridge. Right now she joined an oceanographic cruise to the Rainbow hydrothermal vent plume on RV Meteor. Read how exciting the life of a researcher can be!



## MERCURY AND CARBON

Luisa worked in 7 photoreduction experiments with different conditions to study Hg and C stable isotopes.

The relevant results were presented at the Goldschmidt conference in June under the title "Carbon and mercury stable isotopes fractionation during aqueous MeHg photoreduction" ...



## TACKLING UNCERTAINTY OF MEASUREMENT RESULTS FOR GEM

Teodor is comparing the mercury concentrations given by the gas standard calibrator unit with the traceable NIST 3133 CRM (certified reference material), in order to establish the best conditions in which the gas calibrator units can be used.



## PRASAD AND ATMOSPHERIC REACTIONS

Although the WRF-Chem model is conceptually relatively straightforward the details are less so. Updating the chemistry routine to include the atmospheric reactions of mercury in the atmosphere is not simple, especially as it seems that new updates are published every couple of months.





## Hg IN FOLIAR SAMPLES

The validation of the methodology for Hg determination in foliar samples which is needed for the estimation of the uncertainties associated with different sampling approaches and sample preparation techniques is very important says Ali.

## GMOS TRAIN NETWORK AT DEVELOPING A 1D Hg/MeHg BIOACCUMULATION MODEL

The idea of this model is that looking at ecosystem interactions in a simplified context allows to identify the driving processes for Hg/MeHg bioaccumulation.



## NAVAGIO, SHIPWRECK, ZANTE, GREECE

In August, Koketso and Charikleia decided to meet in person in Greece, taking advantage of the multicultural and collaborative environment of an ITN project.



## MOLECULAR MIMICRY AT PLAY

By Allwin



## HgO OXIDATION EXPERIMENTS

By Sreekanth



## TAVVAVUOMA FIELD CAMPAIGN

By Charlotte

COMING UP ...

GMOS-TRAIN MID-TERM CHECK  
IN LJUBLJANA, SLOVENIA

