

International Workshop on the Harmonisation of Protocols and Quality Concepts for the Monitoring of Mercury and Mercury Compounds in Marine Ecosystems

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The International Workshop on the Harmonisation of Protocols and Quality Concepts for the Monitoring of Mercury and Mercury Compounds in the Marine Environment was held from 10th to 15th November 2024 at Jožef Stefan Institute, Ljubljana, Slovenia. The workshop was hosted by the Government of Slovenia through the Jožef Stefan Institute, with the support of the International Atomic Energy Agency (IAEA). It was attended by 20 participants from Slovenia, Argentina, Bangladesh, Brazil, Cuba, Jamaica, Kenya, Mexico, Nicaragua, Thailand and Malaysia. The participants of this workshop were trained by Ms. Milena Horvat, an expert researcher in mercury studies in the environment, and Ms. Sabine Azemard a Reference Material Specialist at the International Atomic Energy Agency (IAEA) Monaco.



Lecture Session.



Country Presentation.



Group photos with experts and participants.



Mercury Analysis Laboratory Visit.

The event aims to discuss and exchange views on the harmonisation of technical criteria and to prepare guidelines for sampling strategies and the determination of mercury and mercury compounds in marine samples. The learning agenda for this workshop includes an introduction to mercury as a global pollutant,

the Minamata Convention, sampling strategies for water and sediment sampling, analytical methods for mercury, and the implementation of quality control and quality assurance.

The participants also visited Idrija Mercury Mine, one of the UNESCO World Heritage Sites in Idrija Town for approximately an hour's drive from Ljubljana City. The Idrija Mercury Mine is famous for being the second-biggest mercury mine in the world. Over centuries, Idrija miners dug out over 700 kilometres of tunnels and shafts reaching 380 metres in depth at different levels and produced almost 150 thousand tonnes of mercury throughout Europe and worldwide for scientific, agricultural, and industrial purposes.



Excursion to UNESCO Heritage Idrija Mercury Mine.

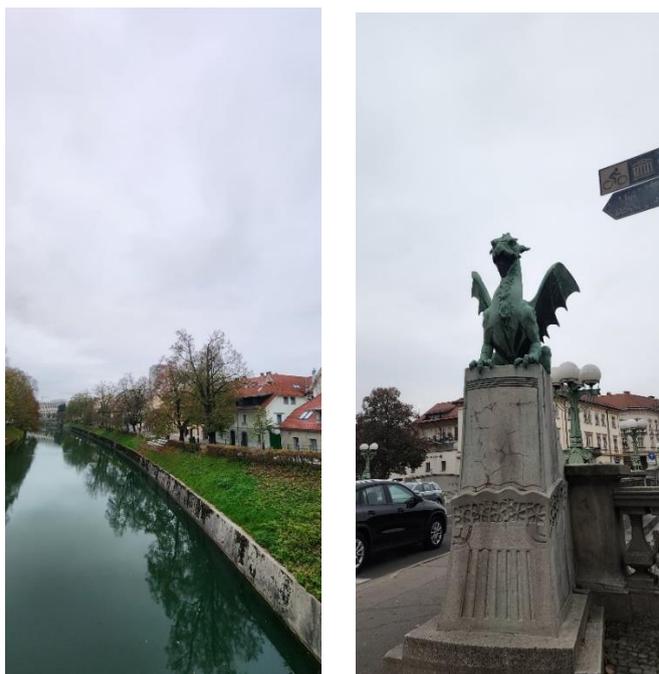


The tunnel in the mining area where the mercury has been found.

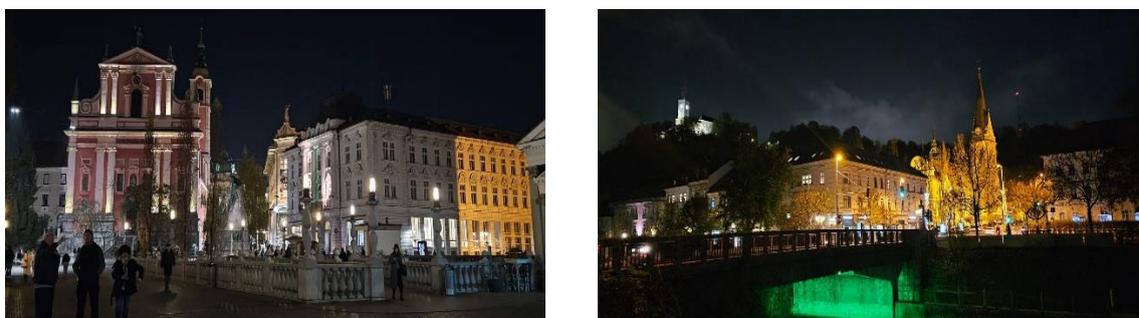
The IAEA aims to strengthen ocean health for sustainable development. With over 70 per cent of the Earth's surface covered by oceans, they are vital for maintaining livelihoods by providing food, regulating global climate, and preserving biodiversity. However, threats such as pollution from radioactive and non-radioactive contaminants such as mercury, climate change, ocean acidification and deoxygenation, are affecting marine life, food security and human health, the attainment of sustainable development goals (SDGs) relating to ocean health remains in question.

This workshop discussed strategies for monitoring mercury and mercury compounds in marine

environments with appropriate sampling and analytical techniques. With the help of experts and the discussion among the participants, a guideline for this project will help researchers worldwide in conducting the monitoring of these pollutants in marine ecosystems. The excursion to Idrija Mercury Mine resulted in a deeper understanding of the impact of mercury and mercury compounds contamination and the urgent need to prevent these contaminants from entering the environment and food web. These knowledge-sharing and learning experiences contribute to research collaboration and foster future discussions to support the Minamata Convention on Mercury worldwide.



The famous Dragon Bridge at Ljubljana City.



View of Ljubljana City at night.