

# *Environmental History and Geography of Fresh Water Ecosystems*

University of Ljubljana, September 17-19, 2018

(CEEPUS network *EcoManAqua*)



Organizers:

Dr Tajan Trobec, Assist. Prof.

Dr Žiga Zwitter, Assist. Prof.

## **Final programme**

**September 16, 2018:** afternoon/evening: arrival of participants to Ljubljana and to the dorm, free time

**DAY 1, September 17, 2018:**

8.30-9.00: Registration: Faculty of Arts, University of Ljubljana, Aškerčeva cesta 2, 1<sup>st</sup> floor, classroom 119: <https://goo.gl/q4y6r7>



9.00-9.10: 1<sup>st</sup> floor, classroom 119: Opening of the CEEPUS excursion (welcome by the head of the Department of History, Dr Alenka Cedilnik, on behalf of the faculty)

9.10-10.20: Hydrogeography of Slovenian aquatic systems (Tajan Trobec)

10.20-10.30: coffee break

10.30-11.40: Environmental history of fresh water environments in the early modern period: possible long-term approaches (Žiga Zwitter)

11.40-11.50: break

11.50-12.00: walk to the Archives of the Republic of Slovenia

12.00-12.40: guided tour of the Archives, so that students will understand better, how one can find pieces of water history information in the archives (archivist and historian Vanja Pfajfar)

12.40-13.00: The application of the historical critical method to the study of archival records (Žiga Zwitter)

13.00-14.00: lunch in Ljubljana

14.00-ca. 20.00: guided tour of the drained Ljubljana marsh (the former southernmost raised bog in Europe, ca. 160 km<sup>2</sup>):

- Water resources of the Ljubljana marsh and its surroundings (Tajan Trobec):

- the Iška river alluvial fan in the southern Ljubljana marsh and its local and regional significance through the history (the Iška river, ground water, marsh springs),

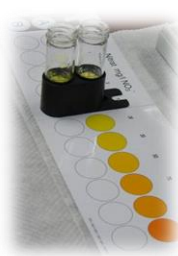
- measurements of basic physical and chemical characteristics of the water resources with multiparameter meter and testers to determine water origin and human influence.

- Environmental history of the Ljubljana marsh (Žiga Zwitter):

- palaeoecology and environmental history of the Ljubljana marsh,

- the marsh and the Ljubljanica river as archaeological treasures with an emphasis on environmental archaeology,

- drainage of the marsh.



## **DAY 2, September 18, 2018:**

8.30: departure from Ljubljana

9.50: the Idrija mercury mine (UNESCO world heritage site):

- five centuries long history of this European and World important mine; guided visit to the mine and to the museum (local guide),

- Historical mercury pollution of freshwater ecosystems in the Idrija region in the first four centuries of mining activities (Žiga Zwitter),

- lecture on challenges (1) of management of heritage related to both, water and past mercury mining in the Idrija region as well as (2) of legacies of historical mercury pollution in Idrija and in the Idrijca River (MSc Tajana Dizdarević, head of the Idrija Mercury Heritage Management Centre)

13.30-14.30: lunch in Idrija

14.30-15.50: journey Idrija-Tolmin

15.50-16.20: visit to the fishery in Tolmin: the environmental history and current issues of the endemic marble trout (*Salmo marmoratus*) (local expert)

16.20-17.20: journey to the village Log pod Mangrtom, severely devastated through a mudflow in 2000

17.20-18.00: visit to Log pod Mangrtom: explanation of the causes for, consequences of and preventive measures taken after this mudflow (Tajan Trobec)

18.00-20.30: return to Ljubljana



### **DAY 3: September 19, 2018:**

9.00: departure from Ljubljana to the intermittent karst polje Lake Cerknica – one of the largest preserved intermittent lakes in Europe

10.00-11.40: visit to the Jezerski hram museum:

- explanation how the polje functions (Vekoslav Kebe with his model explaining, how the lake fills and drains; and Tajan Trobec),

- the history of the researches into the hydrology of this intermittent lake (Žiga Zwitter),

- challenges for fish in the intermittent lake (Žiga Zwitter)

12.15-13.15: lunch in Dolenje Jezero

13.15-15.30: visit to several interesting parts of the Lake Cerknica, selection based on the hydrological situation on the day of the excursion

15.30-16.45: journey Lake Cerknica-cave Županova jama

16.45-18.00: visit to the cave, explanation of the formation of the types of speleothems in the cave (cave guide and geographer Lučka Jere), basics of the history of cave researches relevant for this cave (Žiga Zwitter)

ca. 18.45: return to Ljubljana



**September 20:** free time, departure of students from Ljubljana