

BIOTOXMET PROJECT

final overview

PI: Vlatka Filipović Marijić
Ruđer Bošković Institute

THIRD MEETING

Integrated evaluation of aquatic organism responses to metal exposure:
gene expression, bioavailability, toxicity and biomarker responses
(BIOTOXMET)

Zagreb, 17th February 2025

Conferences

Participation at around 40 conferences 12.2020-2.2025



Workshops / scholarships

**“10th Acanthocephalan Workshop”
Dijon, France 2021
Merida, Mexico 2024**

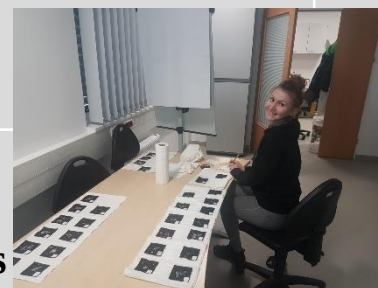


Team member

**V. Filipović
Marijić
S. Šariri**

**CEEPUS scholarship for one month visit in Austria
(project collaborators from the Univ. of Vienna and
Univ. of Leoben) – practice on LA ICP-MS**

**IRB programme resources - for one month visit in Slovenia
(Mojca Bavcon Kralj, Faculty of Health Sciences, University
of Ljubljana) – practice related to microplastics investigations**



S. Šariri

S. Šariri

Scholarship programme of the City of Zagreb – EMEC 2023 conference

**Workshop „How to increase the visibility
of your investigation?”**

S. Šariri

S. Šariri

**M. Kuštro
V. Filipović**

Marijić

S. Šariri

**COST action scholarship CA20101 PRIORITY (Plastics
monitoRING detectiOn RemedIaTion recoverY) for the
workshop Recent Trends in Microplastic Research - Jena**



Practical workshops

Participation at around 25 practical workshops 12.2020-2.2025

		Team member
Jasika- Sample preparation and techniques of molecular spectroscopy		I. Karamatić S. Šariri
Statistical workshops		S. Šariri M. Kuštro
MS Users Meeting - MASS WITH US		S. Šariri I. Karamatić D. Ivanković Z. Dragun M. Kuštro
ERASMUS DAYS		M. Kuštro
Agilent Microplastics Meeting		M. Kuštro
Doručak s mikroplastikom, IMI		S. Šariri T. Mijošek V. Filipović Marijić

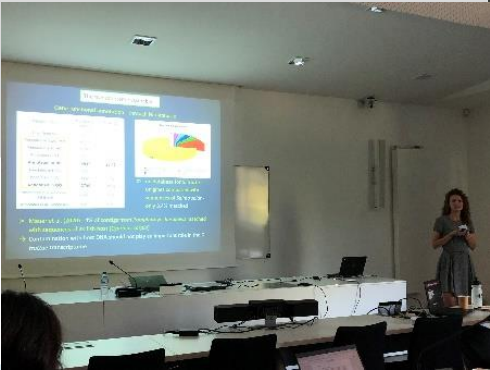
Webinars

Participation on around 20 webinars 12.2020-2.2025

	Team member
Novogene: A Beginner's Guide to RNA-seq Introducing NovoMagic – Novogene's Online RNA-seq Bioinformatics Analysis Tool A Beginner's Guide to Next Generation Sequencing: Principles & Recent Developments	I. Vardić smrzlić S. Šariri V. Filipović Marijić
„Ažurirajte svoj Scopus autorski profil – korak po korak upute”	S. Šariri
„How to overcome stage fright and become a communication artist?”	V. Filipović Marijić
„Introduction to R” (Data Camp)	S. Šariri
Early stage researchers retreat (project „ALLIANCE4LIFEACTIONS”)	S. Šariri
HPLC-Beginner Webinar Series	S. Šariri I. Karamatić T. Mijošek M. Kuštro



Rewards

	Team member
“Young Climate Professionals” (S. Šariri was awarded among other EU students for her project proposal on microplastics within the Erasmus+ 2022/2023 programme) CIVICS/HUB project: Understanding microplastics in our waters	S. Šariri 
Best oral presentation at the 11th ISE Satellite Student Regional Symposium on Electrochemistry	S. Šariri 
“10th Acanthocephalan Workshop” (S. Šariri was chosen for student reward, which included registration fees)	S. Šariri 

Student laboratory practices and supervisions

Student laboratory practices

Antonia Jelena Lučev

University of Split, University Department of Marine Studies

1. 3. – 22. 3. 2021.

Amalia Brkić

University of Zagreb, Faculty of Science, Biology

15. 3. – 19. 5. 2021.

**Camille Boucaud
(ERASMUS)**

France, Catholic University of Lyon (UCLY), Biology

7. 4. - 6. 8. 2021.

Dubravka Tavra – MSc thesis

Marija Kuštro – MSc thesis

University of Zagreb, Faculty of Chemical Engineering and Technology

2023.



Team member

V. Filipović
Marijić
T. Mijošek



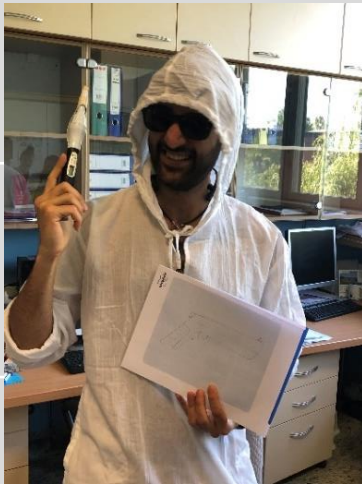
V. Filipović
Marijić
Ž. Cvetković
T. Mijošek
I. Karamatić
V. Filipović
Marijić
T. Mijošek



V. Filipović
Marijić
T. Kralj



Student laboratory practices and supervisions

		Team member
Yasir Al Marsoomi (ERASMUS) Ghent, Belgium		V. Filipović Marijić S. Šariri
Amalia Brkić MSc Degree University of Zagreb, Department of Biology		Ž. Cvetković
Magdalena Litrić University of Zagreb, Department of Biology		V. Filipović Marijić T. Mijošek S. Šariri
Nela Košić University of Zagreb, Department of Biology		V. Filipović Marijić
Marta Pinčić , University of Zagreb, Faculty of Chemical Engineering and Technology		V. Filipović Marijić S. Šariri

Student laboratory practices and supervisions

		Team member
SAID MAHAMOUD Souban (ERASMUS) Ghent, Belgium		V. Filipović Marijić S. Šariri
Barbara Barušić MSc Degree – in progress University of Zagreb, Faculty of Chemical Engineering and Technology		V. Filipović Marijić M. Kuštro
Dora Katarina Kovač Laboratory practice - volunteer		V. Filipović Marijić S. Šariri
Lara Vereecke (ERASMUS) Ghent, Belgium		V. Filipović Marijić S. Šariri M. Kuštro



Popularisation of science



Team member

Open Days of the Ruđer Bošković Institute (ODI 2022)- „Environment”



T. Mijošek
T. Kralj
S. Šariri
I. Karamatić
V. Filipović
Marijić
I. Karamatić
V. Filipović
Marijić

Scientific Picnic 2022., Gornja Stubica



Scientific Festival in Čabar

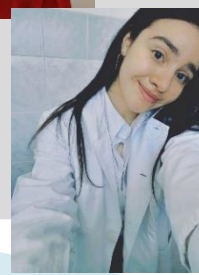
Science in the passage



D. Valić

S. Šariri
V. Filipović
Marijić

Career Day (professional orientation for highschool students, 2023, 2024)



S. Šariri
I. Karamatić
V. Filipović
Marijić



Invited lectures/ organising committees

		Team member
Faculty of Chemical Engineering and Technology – lectures for students		Z. Redžović V. Filipović Marijić
XVI Rotifer meeting – keynote speaker		V. Filipović Marijić
14th Croatian Biological Congress with international participation – organising committee		V. Filipović Marijić
PhD Student Symposium 2022, 2023 – organising committee		S. Šariri
SOBS 2023 – organising committee		T. Mijošek
ODI 2022 – organising committee		T. Mijošek V. Filipović Marijić
13th ISE Satellite Student Regional Symposium on Electrochemistry – president of the organising committee		S. Šariri



Media

HRT
Documentary „Smeće i ja”



Team member

I. Karamatić
S. Šariri
V. Filipović
Marijić

Liberta.hr
Web prilog



T. Mijošek
S. Šariri
V. Filipović
Marijić

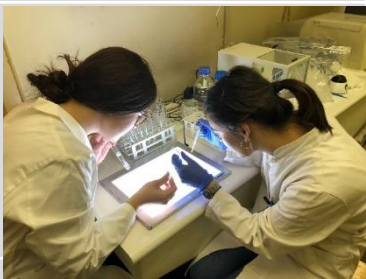
Regionalni.hr
Web prilog

IRB web and Facebook
Best oral presentation 11th ISE
Young Climate Professionals award
Popularisation – ODI 2022, Children’s Festival in Šibenik, Science in the passage, Scientific Picnic
Project Understanding microplastics in our waters

V. Filipović
Marijić
S. Šariri
T. Mijošek
I. Karamatić
T. Kralj
V. Filipović
Marijić



New collaborations within the project

		Team member
German-Croatian bilateral project ExpoMetAc (continuation of collaboration within the new HRZZ project PlastOrgAnoTox)		V. Filipović Marijić I. Vardić Smrzlić T. Mijošek S. Šariri
Serbo-Croatian bilateral project – still waiting for the results of the call		I. Vardić Smrzlić T. Mijošek S. Šariri
Faculty of Chemical Engineering and Technology (continuation of collaboration within the new HRZZ project PlastOrgAnoTox)		Z. Redžović V. Filipović Marijić M. Kuštro
Veleučilište Knin		V. Filipović Marijić
		

Publications

Šariri, S., Valić, D., Kralj, T., Cvetković, Ž., Mijošek, T., Redžović, Z., Karamatić, I., Filipović Marijić, V. Long-term and seasonal trends of water parameters in the karst riverine catchment and general literature overview based on CiteSpace, Environmental science and pollution research, 31 (2024), 3; 3887-3901. doi: 10.1007/s11356-023-31418-3.

Mijošek, Tatjana; Šariri, Sara; Kljaković-Gašpić, Zorana; Fiket, Željka; Filipović Marijić, Vlatka: Interrelation between environmental conditions, acanthocephalan infection and metal(loid) accumulation in fish intestine: an in-depth study // Environmental pollution, 356 (2024), 124358, 13

Vlatka Filipović Marijić, Tatjana Mijošek, Sara Šariri: Što skriva krška ljepotica Krka? Liberta.hr, 20.06.2023.

Vardić Smrzlić, Irena; Čolić, Barbara; Kapetanović, Damir; Šariri, Sara; Mijošek, Tatjana; Filipović Marijić, Vlatka: Phylogeny and genetic variability of Rotifer's closest relatives Acanthocephala: an example from Croatia // Hydrobiologia, 851 (2023), 2845-2860

Mijošek, Tatjana; Kljaković Gašpić, Zorana; Kralj, Tomislav; Valić, Damir; Redžović, Zuzana; Šariri, Sara; Karamatić, Ivana; Filipović Marijić, Vlatka: Spatial and temporal variability of dissolved metal(loid)s in water of the karst ecosystem: consequences of long-term exposure to wastewaters // Environmental technology & innovation, 32 (2023), 103254, 12



Publications

Mijošek, Tatjana ; Filipović Marijić, Vlatka ; Dragun, Zrinka ; Ivanković, Dušica ; Krasnići, Nesrete ; Erk, Marijana. Efficiency of metal bioaccumulation in acanthocephalans, gammarids and fish in relation to metal exposure conditions in a karst freshwater ecosystem // Journal of trace elements in medicine and biology, 73 (2022), 127037, 9

Vlatka Filipović Marijić, Poštujmo svoj okoliš i okolinu!, poglavlje u knjizi Putovanje u nepoznato (ur. Anita Peti-Stantić, Vedrana Stantić), 2021., Ljevak, Zagreb, str. 170-181

Filipović Marijić, Vlatka ; Mijošek, Tatjana ; Dragun, Zrinka ; Retzmann, Anika ; Zitek, Andreas ; Prohaska, Thomas ; Bačić, Niko ; Redžović, Zuzana ; Grgić, Ivana ; Krasnići, Nesrete et al. Application of Calcified Structures in Fish as Indicators of Metal Exposure in Freshwater Ecosystems // Environments, 9 (2022), 2; 14, 16

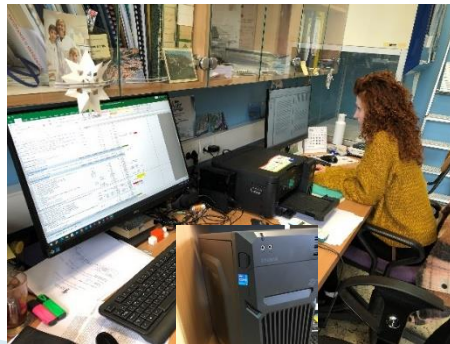
Filipović Marijić, Vlatka ; Sara Šariri; Mijošek Pavin, Tatjana. Integrirana procjena odgovora akvatičkih organizama na izloženost metalima: ekspresija gena, bioraspoloživost, toksičnost i biomarkerski odgovori (BIOTOXMET). Kem. Ind. 73 (11-12) (2024) 497–504

1 paper under review (Scientific Reports) and 2 papers sent to journals (Journal of Contaminant Hydrology, Aquatic Toxicology)



New equipment

- boat for the fish sampling
- boat engine
- incubator
- light table
- centrifuge
- adaptor for spectrophotometer
- freezer +4°C/-20°C
- ice maker
- spectrophotometer (Tecan Infinite)
- homogenizer (ultra-turax)
- teflon paste for homogenizing in eppendorf tubes
- PC and monitors
- digester



Other activities

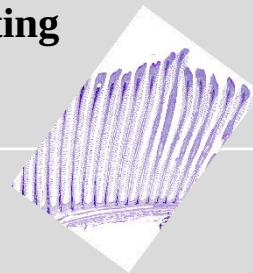


Team member

Competition for the cover photo of the SOBS meeting

T. Kralj

HRZZ competition for the best scientific photo



J. Barišić
V. Filipović
Marijić

Project photo selected as a cover photo of the Abstract Book of Znanstvena škola



Successfully finished doctoral thesis

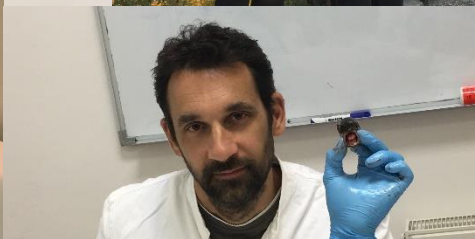
T. Mijošek
T. Kralj

HRZZ PhD students

S. Šariri
M. Kuštro







**THANK YOU FOR YOUR
ATTENTION**

