# ECOBIAS training in AQUATIC ECOTOXICOLOGY

# **Agenda**

28<sup>th</sup> and 29<sup>th</sup> January 2021, On-line

Task Leader: Sandra Radić Brkanac, P3 UNIZG for P08 UTZ, P09 UNSA, P10 UBL and P11 UES

Thursday 28.01.2021.	ECOBIAS online trainings 28-29.01.2021. University of Tuzla, Tuzla, Bosnia and Herzegovina  Task Leader P3 for P8
14:00-14:15	Trainings Day 1 participants registration and login
14:15-15:00	Introduction, definition of ecotoxicology and historical overview. Contamination of environment – natural and anthropogenic sources. Examples of problems - Uvod, definicije pojmova i povijest ekotoksikologije. Onečišćenje okoliša - prirodni i antropogeni izvori. Primjeri ekotoksikoloških problema.
15:00-15:45	Overview of main classes of toxicants/contaminants and mechanisms of their toxic action - Pregled glavnih vrsta toksikanata/onečišćivala i mehanizama njihova toksičnog djelovanja
16:00-16:15	Coffee break
16:15-17:00	Biomarkeri u biomonitoringu onečišćenja vodenih ekosustava – Biomarkers in aquatic biomonitoring

Friday 29.01.2020.	ECOBIAS online trainings 28-29.01.2021. University of Tuzla, Tuzla Bosnia and Herzegovina Task Leader P3 for P8
10:00-10:15	Trainings Day 2 participants registration and login
10:15-11:00	Basics of uptake, biotransformation (Phase I and II reactions), accumulation and excretion. Comparison in plants and animals - Osnove procesa unosa, biotransformacije (reakcije I. i II. Faze), akumulacije i eliminacije. Usporedba tih procesa u biljkama i životinjama.
11:00-11:45	Mechanisms of resistance/tolerance on heavy metals. Oxidative stress and antioxidative defense mechanisms in response to contaminants - Mehanizmi otpornosti/tolerancije na teške metale. Oksidativni stres i antioksidativni obrambeni mehanizmi u odgovoru na zagađivače
11:45-12:15	Coffee break
12:15-13:00	Toxicology of 21st century, prediction and assessment of toxicants by in silico data analysis of high-throughput screening methods - Toksikologija 21. stoljeća i predviđanje i procjena toksičnosti spojeva in silico analizom podataka visokoprotočnih probirnih metoda
13:00-14:00	Test organisms in aquatic ecotoxicology – plant and animal models - Testni organizmi u akvatičnoj ekotoksikologiji – vodene biljke i životinje



# **Annex 10. EVENT REPORT**

Title of document	Event report of the training in Aquatic ecotoxicology
Work Package	WP2
Last version date	1/2/2021
Status	X Draft Final
Document version	v.01
File name	Event report of the training in Aquatic ecotoxicology
Number of pages	3
Dissemination Level	Internal

# **VERSIONING AND CONTRIBUTION HISTORY**

Date	Revision Description	Partner Responsibile	
1/2/2021	First draft	P8 University of Tuzla	

### **LIST OF ABBREVIATIONS**

Xxxxxxxxx



### Purpose, objectives and elements of event

The purpose of this course was introduction to anthropogenic chemicals and the way they act at all levels of biological systems, from molecular to ecosystem levels. The basic elements of events were: introduction and definition of ecotoxicology; overview of main classes of toxicants/contaminants and mechanisms of their toxic action, introduction to biomarkers in aquatic biomonitoring; basics of uptake, biotransformation, accumulation and excretion-comparison in plants and animals. Mechanisms of resistance/tolerance on heavy metals; Toxicology of 21st century, prediction and assessment of toxicants by in silico data analysis of high-throughput screening methods; Test organisms in aquatic ecotoxicology.

#### LIST OF PARTICIPANTS

Dr.sc. Sandra Radić Brkanac, izvr. prof, University of Zagreb

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# Date of the 1st day

28.01.2021.

# Date of the 2<sup>nd</sup> day

29.01.2021.

#### **CONCLUSIONS**

The training was successful, extremely helpful and provided a lot of information with an understandable approach and logical sequence. The lecturers were really well prepared. All participants were etremly satisfied.

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# Annex 4. Summary of the Participant Feedback Form for Training (to be filled by host institution)

Part 1: Training Information

Date: 28/1/2021 29/01/2021	
Place: On line training on MS Teams – Host Univer	sity of Tuzla
Training objective: Aquatic ecotoxicology (Task Le	eader P3 University of Zagreb) develop for
Lecturer: Dr.sc. Sandra Radić Brkanac, izvr. prof.	Dr.sc. Goran Klobučar, red. prof.
Objective: The aim of this course is to provide kno anthropogenic chemicals and aquatic ecosystems toxicity testing.	
Evaluator name Dr.sc. Amela Hercegovac, vanr. pro	of.
Signature Amela H	
Evaluator affiliation <u>Faculty of Natural Sciences and</u>	d Mathematics, University of Tuzla



### Part 2: Organization and Structure

Organizational feature	3 Strongly Agree	2 Agree	1 Disagree	0 Strongly Disagree
The objectives of the training were clearly defined	13 × 3			
information related to each item prepared well in advance of the training	13 x 3			
The material distributed were helpful and on time	13 x 3			
The presentations met my expectation	13 x 3			
Participation and interactions were encouraged by moderator	13 x 3			
The training objectives were met	13 x 3			
i will be able to apply the training's content in my future work	13 x 3			
The training content was challenging enough	13 × 3			
The timeframe was adequate	13 x 3			
The facilities were adequate	13 x 3			
Skill practice sessions were included	13 x 3			
Suggestion and criticism box (please specify)				
				Total: 429

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# 01. AQUATIC ECOTOXICOLOGY: Print Screens from on-line trainings





