**CURRICULUM VITAE**

**Personal information**

**Name and Surname: Vlatka FILIPOVIĆ MARIJIĆ**

**Date of birth:** 3.11.1975.

**Affiliation:** Ruđer Bošković Institute, Division for Marine and Environmental Research, Laboratory for Biological Effects of Metals

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**Identification number from the Register of Scientists**: 235740

**Nationality**: Croatian

**Education**

**1982-1990** Primary School “22. lipnja“, Sisak, Croatia

**1990-1994** Secondary school „Gymnasium Sisak“, Sisak, Croatia

**1994-2000** BSc in Biology, Faculty of Science, Department of Biology, Division of Ecology, University of Zagreb, Zagreb, Croatia

**7th June 2000** – BSc degree, diploma‘s thesis "Influence of indasolonic compounds on urea and leucocytes level in mice treated with cis-platin", supervisor dr. sc. Marko Radačić from the Division of Molecular Medicine, Ruđer Bošković Institute

**2000-2004** MSc in Oceanology, Faculty of Science, University of Zagreb, Croatia

**6th July 2004** – MSc degree, master's thesis "Metallothionein and trace metal levels in some fish species from the coastal area of the Adriatic Sea in Croatia", supervisor dr. sc. Biserka Raspor from the Division for Marine and Environmental Research, Ruđer Bošković Institute

**2004-2009** PhD in Biology, Faculty of Science, University of Zagreb, Croatia

**27th March 2009** - PhD degree, PhD dissertation “Distribution of selected essential and toxic metals in intestinal tissue, cytosol and gut parasites of chub (*Squalius cephalus* L.)“, supervisor dr. sc. Biserka Raspor from the Division for Marine and Environmental Research, Ruđer Bošković Institute

**Academic degree**

**2009** - PhD in Natural Sciences, field of Biology

**Scientific title**

30th June 2010 **Research Associate** in Natural Sciences, field of Interdisciplinary Natural Sciences (National Council for Natural Sciences)

20th April 2016 **Senior Research Associate** in Natural Sciences, field of Interdisciplinary Natural Sciences (National Council for Natural Sciences)

**Professional experience**

I am employed in the Laboratory for Biological Effects of Metals, Division for Marine and Environmental Research, Ruđer Bošković Institute from 19th September 2000:

2000-2004 Junior Assistant, Ruđer Bošković Institute, Zagreb, Croatia

2004-2009 Research Assistant, Ruđer Bošković Institute, Zagreb, Croatia

2009-2013 Senior Research Assistant, Ruđer Bošković Institute, Zagreb, Croatia

2013- Research Associate, Ruđer Bošković Institute, Zagreb, Croatia

(maternity leave during 2004 and 2010)

**Short description of the research interests**

**Biological effects of metals; aquatic ecotoxicology; biomonitoring; biomarkers**

* evaluation of the water quality of marine and freshwater ecosystems by application of different chemical and biological indicators
* determination of essential and nonessential metals and biomarkers of exposure and effect in the target organs of indicator organisms (bivalves, crustaceans, fish, acanthocephalans)

**Social skills and competencies**

Field and laboratory teamwork with national and international researchers of different profiles (biologists, chemists, biochemists, veterinarians, biotechnologist). Leader of scientific projects and experiments, which resulted in many papers published in internationally recognised journals. Member of the committees for evaluation of PhD thesis and of the assessment committees, supervisor of scientific research for Baccalaureate Diploma, Graduate Diplomas, research awarded by the Rector’s award of the University of Zagreb and laboratory research practices for students of Biology Department at the Faculty of Science. Currently, supervisor of one PhD student of Biology. Member of few national and international professional societies. Actively involved in popularisation of science and work with pupils and students and their professional orientation towards STEM field.

**Organisational skills and competencies**

Participation in the organization of the field work on marine and river ecosystems as a part of national and international projects. Presentation of scientific activities of the Laboratory for Biological Effects of Metals and of the Ruđer Bošković Institute to general public during Open Days of the Ruđer Bošković Institute as a presenter (2004, 2008, 2014), member (2013, 2014) and president of the organising committee (2015, 2016). Participated in the organization of national and international scientific meetings as a member of the the organising committees. Reviewer of papers in the national and international scientific journals and of the international scientific projects.

**Technical skills and competencies**

1. **Work experience on application of different biochemical and analytical techniques:**
* spectrophotometric methods for biomarker determination
* electrochemical method for metallothionein determination (differential pulse voltammetry)
* kinetic measurement of activity of the respiratory electron transport system (ETS) and enzyme activity
* metal determination by atomic absorption spectrometry (flame and electrothermal technique) and high resolution inductively coupled plasma mass spectroscopy (HR ICP-MS)
* microwave digestion of biological material
1. **Over 15 years of experience in the field work** and application of the field equipment
2. **Licensed for work with laboratory animals (FELASA category C equivalent,** personal license No. 111.3-14, HR 191/02/P)
3. **Computer skills:** Active use of MS Office, Adobe Photoshop, Corel DRAW, internet applications
4. **Active use of statistical programmes**: STATISTICA, SPSS, Sigma Stat
5. **Web page design –** website administrator for the Laboratory for biological effects of metals
6. **Driving licence** category B
7. **Languages:** mother tongue - Croatian; other languages - English (active speaker), German (passive speaker)

**Research projects**

1. **Collaborator on completed research projects:**
	* **Projects financed by Ministry of Science, Education and Sport of the Republic of Croatia**:
* 00981511 "Biomarkers and the biological effects of metals on organisms" (2000-2002)
* 0098130 "Metals and cellular biomarkers" (2002-2006)
* 098-0982934-2721 "Metal-induced cellular changes in the aquatic organisms" (2007-2014)
	+ Croatian National Monitoring Programme **"Adriatic"** (2000-2004)
	+ Croatian-Norwegian project **CroWat**: "An integrated environmental monitoring system for Croatian freshwater, estuarine and coastal marine areas", in collaboration with Norwegian Institute for Water Research (NIVA), financed by the Research Council of Norway (2001-2005)
	+ **EU FP6 projekt- SARIB** "Sava River Basin: Sustainable use, management and protection of resources" (No. INCO-CT-2004-509160); WP3.B Availability and impact of pollutants on biota) (2006-2007)
	+ **Croatian-Macedonian bilateral project** „The assessment of metal availability and effects on feral fish in the rivers under the impact of mining activities“ (2012-2014)
	+ **Croatian-French programme** **"Cogito"** - „Intracellular mapping of essential and nonessential trace elements in the organs of indigenous fish by NanoSIMS" (2013-2014)
	+ **Croatian Academy of Science and Arts Foundation** „Heavy metals in clams – food safety and anthropogenic impact“ (2015-2016)
	+ **Croatian Academy of Science and Arts Foundation** „Urban ecology of streams in the Town of Zagreb – preliminary project“ (2015-2016)
1. **Project leader of completed research projects:**
* Project financed by the **“Adris” Foundation**- „Evaluation of the Krka River water quality and potential risk to the Krka National Park by application of new bioindicators and biomarkers“ (2015-2016)
* **Croatian Academy of Science and Arts Foundation** „Open day of the Ruđer Bošković Institute" (2016, 2017)
* **HEP group contest „Light on our way“** - „Open day of the Ruđer Bošković Institute" (2016)
1. **Collaborator on ongoing research projects:**
* **Croatian Science Foundation:** Accumulation, Subcellular Mapping and Effects of Trace Metals in Aquatic Organisms (AQUAMAPMET) (2015-2019)
* **COST action** „Network on technology-critical elements - from environmental processes to human health threats“ – TD1407 (http://www.cost.eu/COST\_Actions/tdp/TD1407?) – memebers from 11th September 2015
1. **Project leader on ongoing research projects:**
* **Croatian waters,** commercial projekt **-** Development of methodology for monitoring the elements of chemical status in biota of freshwater ecosystem and the implementation of preliminary monitoring (2017-2018)
* **Croatian-Austrian bilateral project** **-** Investigation of novel bioindicators of metal exposure in the aquatic ecosystems: fish intestinal parasites, cell cytosol and calcified structures (2018-2019)
* **European Structural and Investment Funds –** “Ja raSTEM! – a multi-year interdisciplinary STEM program of innovative teaching of gifted elementary school students“ – main coordinator at the Ruđer Bošković Institute
* **European Social Fund** - “Improving literacy - investment for lifelong learning“ – main coordinator at the Ruđer Bošković Institute
* **CEEPUS programme for exchange of students among EU universities** (collaboration with Faculty of Agriculture from the University of Zagreb): "EcoResNet - Aquatic ecosystem research: interdisciplinary challenges and management issues in inland waters and coastal environments and their catchments"

**Training**

* **International workshop "The Croatian and Norwegian coastal zone: Ecosystem dynamics and environmental challenge"**, organized within the framework of Croatian-Norwegian project with Norwegian Institute for Water Research (NIVA)

University of Tromsø, Norwegian College of Fishery Science, Tromsø, Norway (2002)

* **Workshop organised within the Croatian Monitoring Programme "Adriatic"**: „Systematic investigation of the Adriatic Sea as a basis for sustainable development of the Republic of Croatia“.

Malinska, Croatia (2002)

* **Croatian-Norwegian workshop "Aquaculture, coastal management and environmental impact"**, organized within the framework of Croatian-Norwegian project with Norwegian Institute for Water Research (NIVA).

Vodice, Croatia (2003)

* **International workshop “Biogeochemical processes in anoxic marine environments”,** Laboratory for physico-chemical separations, Ruđer Bošković Institute

Zagreb, Croatia (2004)

* **Statistical course on meta-analysis,** lecturer professor Ingram Olkin, Stanford University, USA

Zagreb, Croatia (2007)

* **International workshop "13th International Chromatography School"**, Faculty of Chemical Engineering and Technology, University of Zagreb

Zagreb, Croatia (2012)

* **International seminar "Total Solutions for Environmental Monitoring and Analysis From Sampling to Results"**, Instrumentalia Adria d.o.o.

Zagreb, Croatia (2012)

* **Seminar "Solving toughest challenges in food analysis by advanced technology"**, Kobis d.o.o.,

Zagreb, Croatia (2014)

* **Licence training course for persons involved in animal experiments and use of animals for the production of biological products (FELASA C category),** Faculty of Natural Science, University of Zagreb

Zagreb, Croatia (2014)

* **International workshop "4th Edition NanoSIMS International Workshop"**, Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie Museum National d'Histoire Naturelle

Paris, France (2014)

* **International workshop of EU FP7 project InnoMol "The InnoMol Bioimaging Workshop"**, Institut Ruđer Bošković

Zagreb, Croatia (2014)

* **Workshop "56721 TAIEX WS Workshop on Requirements and implementation of the legislation on the protection of animals used for scientific purposes"** organised for adequate implementation of requirements set out in Directive 2010/63/EU on the protection of animals used for scientific purposes, TAIEX (Technical Assistance and Information Exchange Instrument)

Zagreb, Croatia (2014)

* **Workshop of Croatian Laboratory Animal Science Association (CroLASA) „Experimental animals in the scientific research“**, Faculty of Veterinary Medicine

Zagreb, Hrvatska (2015)

* **Seminar "AnAs – spectroscopic day"**

Zagreb, Croatia (2015)

* **Workshop of Croatian Laboratory Animal Science Association (CroLASA) "Application of 3R approach when hadling laboratory animals“**, Croatian Institute for Brain Research

Zagreb, Croatia (2015)

* **Workshop "Establishment of higher education qualification standards in the sector of international relations, diplomacy and sustainable development"** within the project "Development and Perspectives of International Relations" of theUniversity College of International Relations and Diplomacy Dag Hammarskjőld, The Institute for Development and International Relations and the Ruđer Bošković Institute

Zagreb, Croatia (2015)

* **Scholarship stay at the University of SS. Cyril and Methodius in Trnava,** one month stay at the Faculty of Natural Sciences, Department of Chemistry (collaborators dr. Dáša Kružlicová i dr. Peter Nemeček) within the Contest of the National Scholarship Programme of the Slovak Republic (SAIA)

Trnava, Slovakia (2016)

* **Workshop "Best practice and alternatives to animal experiments in education and training“**, Ministry of Agriculture, Department for Veterinary and Food Safety and Animal Friend Association

Zagreb, Croatia (2016)

* **Workshop of Croatian Laboratory Animal Science Association (CroLASA) „How to propose an experiment on laboratory animals?** Ruđer Bošković Institute

Zagreb, Croatia (2017)

* **Seminar „ICP MS User Meeting“,** AlphaChrom

Zagreb, Croatia (2017)

**Professional societies**

**a) Member of the scientific organizations:**

* Member of Croatian Biological Society 1885
* Member of Croatian Toxicological Society
* Croatian Laboratory Animal Science Association (CroLASA)

**b) Representative of the scientific council:**

* Division for Marine and Environmental Research at the Board of Assistants at Ruđer Rošković Institute (2009)
1. **Member of the scientific council:**
* the working group in Croatia: FELASA-AALAS Working Group on Health Monitoring for Fish in Research
* the scientific council of Oceanology
1. **Representative of the organising committees:**
* popular scientific event “Open Days at the Ruđer Bošković Institute” (2015, 2016)
* „STEM. GROW. EXPLORE.“ - popular scientific workshops at the Ruđer Bošković Institute in collaboration with the Foundation „Znanje na djelu“ (2015/2016/2017)
* Ruđer interactive laboratory 2 - popular scientific workshops within the 56th International Children’s Festival in Šibenik (2016)
1. **Member of the organising committees:**
* symposium “Scientifing meetings of the 3rd kind” at the Ruđer Bošković Institute (2011)
* international scientific workshop “Influence of active mines on freshwater ecosystems” at the Ruđer Bošković Institute (2014)
* popular scientific events “Open Days at the Ruđer Bošković Institute” (2013, 2014, 2017, 2018)
* 4th SOELA- Solar electrical automobile race, board for design (Sisak 2016)
* 5th SOELA- Solar electrical automobile race, board for design (Sisak 2017)
* 2nd Symposium on Freshwater Biology at Biology Department, Faculty of Science, University of Zagreb (Zagreb, 2017)

**Reviewer for international scientific journals:**

* *African Journal of Agricultural Research*
* *African Journal of Microbiology Research*
* *Archives of Industrial Hygiene and Toxicology (Arhiv za higijenu rada i toksikologiju)*
* *Chinese Journal of Oceanology and Limnology*
* *Croatian Journal of Fisheries (Ribarstvo)*
* *Ecological Indicators*
* *Ecotoxicology and Environmental Safety*
* *Environmental Monitoring and Assessment*
* *Fresenius Environmental Bulletin*
* *International Journal of Application or Innovation in Engineering & Management (IJAIEM)*
* *International Review of Hydrobiology*
* *Journal of Environmental and Occupational Science*
* *Journal of Food and Nutritional Disorders*
* *Journal of Trace Elements in Medicine and Biology*
* *Journal of Marine Biology and Oceanography*
* *Marine Pollution Bulletin*
* *PlosOne*
* *Science of the Total Environment*
* *Walailak Journal of Science and Technology*

**Important awards and grants:**

* **ECETOC Young Scientist Award** (2006) for the best poster presentationat 43th Congress of the European Societies of Toxicology (EUROTOX 2006) held in Cavtat for the poster “Metal exposure assessment in native fish, *Mullus barbatus* L., from the Eastern Adriatic Sea”, by V. Filipović Marijić and B. Raspor (2006)
* in accordance to the ECETOC Young Scientist Award, I was **invited to publish the article in special issue of the journal Toxicology Letters**, in which the most outstanding studies in the field of toxicology presented at EUROTOX 2006 conference were published, including the paper: Filipović Marijić, V., Raspor, B. (2007) Metal exposure assessment in native fish, *Mullus barbatus* L., from the Eastern Adriatic Sea. Toxicology Letters 168 (3) 292-301.
* **ECETOC Travel Award** - in accordance to the ECETOC Young Scientist Award, I was invited to attend 44th Congress of the European Societies of Toxicology (EUROTOX 2007) in Amsterdam, by the financial support of the ECETOC. At this conference I participted in the poster section: Filipović Marijić, V., Raspor, B. “Metal Distribution among Gut Content, Intestinal Tissue and Cytosol of Chub (*Leuciscus cephalus* L.) from Sava River”. (2007)
* **Elsevier Highly Cited Author Award** as a co-author of the paper: Ivanković, D., Pavičić, J., Erk, M., Filipović Marijić, V., Raspor, B. (2005) Evaluation of the *Mytilus galloprovincialis* Lam. digestive gland metallothionein as a biomarker in a long-term field study: seasonal and spatial variability. Marine Pollution Bulletin 50, 1303-1313. At the “6th International Conference on Marine Pollution and Ecotoxicology (ICMPE)” held in Hong Kong (May 31st–June 03rd, 2010) Elsevier announced this paper as a 50 top cited articles published from 2005 till 2009 in their journal Marine Pollution Bulletin (2010)
* **Certificate of Appreciation of the Ruđer Bošković Institute for the contribution in organisation of the Open Day** of theRuđer Bošković Institute and popularisation of science during 2015 and 2016 (2015, 2016)
* **Scholarship holder for one month stay at the University of SS. Cyril and Methodius in Trnava, Slovakia** within theContest of the The National Scholarship Programme of the Slovak Republic (SAIA) (2016)
* **Certificate of Appreciation for the contribution in organisation of 4th and 5th SOELA** (Solar electrical automobile race) (Sisak, 2016, 2017)

**Menthorship and evaluation of scientific research**

* supervisor of Petra Kovačević from High School of Natural Sciences “Vladimir Prelog“ in Zagreb for her High School research “Determination of hepatic cellular proteins in European chub“(2008)
* member of the assessment committee for the PhD thesis of Mirna Velki, M. Sc. in Biology, at postgraduate doctoral study of Biology, Faculty of Science, University of Zagreb (April, 2012)
* supervisor of the scientific research “Metal exposure assesment of the freshwater ecosystems using amphipod *Gammarus fossarum* Koch as a bioindicatior” for Graduate Diploma of Vesna Gulin, student at graduate study of Environmental Sciences at Department of Biology, Faculty of Science, University of Zagreb (2012-2013)
* supervisor of one part of the scientific research “Essential and toxic metals, antioxidative enzymes and metallothioneins in men with testicular and prostate cancer“ for PhD diploma of Blanka Tariba, research assistant at the Institute for Medical Research and Occupational Health (2012.-2015.)
* member of the assessment committee for the scientific title Research Associate in Natural Sciences, field of Interdisciplinary Natural Sciences for dr. Tina Šilović (March 2013)
* supervisor of the scientific research “Seasonal changes in biomarkers of oxidative stress in the amphipod *Gammarus fossarum* Koch” for Graduate Diploma of Ivana Kovarik, student at graduate study of Ecology and environment protection at Department of Biology, Faculty of Science, University of Zagreb (2013)
* member of the assessment committee for the PhD thesis of Marijana Matijić Cvjetović, M.Sc. in Biology, at postgraduate doctoral study of Biology, Faculty of Science, University of Zagreb (April, 2014)
* supervisor of the laboratory research practice of Zuzana Redžović, graduate student at Department of Biology, Faculty of Science, University of Zagreb (March-June 2015)
* supervisor of the laboratory research practice of Ivana Grgić, graduate student at Department of Biology, Faculty of Science, University of Zagreb (March-June 2015)
* member of the assessment committee for the scientific title Research Associate in Natural Sciences, field of Biology for dr. Mirna Velki (June 2015)
* member of the assessment committee for the PhD thesis of Sanja Babić, M. Sc. in Biology, at postgraduate doctoral study of Biology, Faculty of Science, University of Zagreb (September 2015)
* supervisor of the research awarded by the Rector’s award of the University of Zagreb in 2016 (graduate students Zuzana Redžović and Ivana Grgić at Department of Biology, Faculty of Science, University of Zagreb) (2015/2016)
* supervisor of the professional orientation of highschool student Lara Cišper organised within the project “OBSERVE. TRY. EXPERIENCE.” with foundation “Znanje na djelu“
* supervisor of the scientific research ”Biological indicators of metal exposure in the brown trout (*Salmo trutta* Linnaeus, 1758) from the Krka River” for Graduate Diploma of Zuzana Redžović, student at graduate study of Experimental biology (module Zoology) at Department of Biology, Faculty of Science, University of Zagreb (2017)
* supervisor of the scientific research „Evaluation of the wastewater effluent impact on the Krka River water quality and on specific biomarkers of the brown trout (*Salmo trutta* Linnaeus, 1758)” for Graduate Diploma of Marina Veseli, student at graduate study of Ecology and environment protection at Department of Biology, Faculty of Science, University of Zagreb (2018)

**Reviewer of international scientific projects:**

* member of the committee for evaluation of projects funded by The National Science Centre from Poland (2015, 2016, 2017)

**Popularisation of science:**

* presentation of the research acitivities of the Laboratory for biological effects of metals to PhD students of the Faculty of Nature and Environment Protection, University of Osijek (2004)
* Open Days of the Ruđer Bošković Institute (May 2004 and April 2008)
* presentation of scientific topic "Quantification of mussel metallothionein using differential pulse voltammetry (DPV)" and training course within the seminar Chemistry of the sea organised within the framework of the international project "Marine Science and Coastal Management in the Adriatic, Western Balkans, An Education and Research Network" (2007)
* presentation of the research acitivities of the Laboratory for biological effects of metals during Open Days of the Ruđer Bošković Institute: scientific station- „Contamination or pollution? Parasites, mussels and fish will give you the answer!“ (2014)
* Open Days of the Ruđer Bošković Institute – guide, coordinator for scientific activities, president of the organising committee (2014.-2018.)
* Ruđer's interactive laboratory - presentation of the environmental research on the Ruđer Bošković Institute within the „Scientific quart“, programme „Market of knowledge“ organised within the International Book and Teaching Appliances Fair “Interliber“ (2015)
* „STEM. GROW. EXPLORE“ – main coordinator of popular scientific workshops for professors and highschool students at the Ruđer Bošković Institute in collaboration with the Foundation „Znanje na djelu“ (2016, 2017, 2018)
* Ruđer's interactive laboratory 2 - main coordinator of popular scientific workshops organised within the 56th International Children’s Festival in Šibenik (2016)
* "STEM career aspirations during primary schooling: A cohort-sequential longitudinal study of relations between achievement, self-competence beliefs and career interests" (JOBSTEM) - main coordinator of popular scientific workshops within the Croatian Science Foundation project of Institute of Social Sciences Ivo Pilar (IRB – February 2017)
* Open days at the Office of the President of the Republic of Croatia, topic: Popularisation of STEM field - main coordinator for presentation of of scientific activities of the Ruđer Bošković Institute (2017)
* "Creative chalenges with micro:bit" – robotics competition in elementary and highschools of the Ruđer Bošković Institute and the Institute for Youth Development and Innovativity - main coordinator for activities on the Ruđer Bošković Institute (2017)
* European Structural and Investment Funds – “Ja raSTEM! – a multi-year interdisciplinary STEM program of innovative teaching of gifted elementary school students“ – main coordinator at the Ruđer Bošković Institute (2017-2018)
* European social fund - “Improving literacy - investment for lifelong learning“ – main coordinator at the Ruđer Bošković Institute (2017-2018)

**Scientific activities within national and international projects**

1. **Attendence and presentations at consortium meetings and workshops**:
* **Croatian-Norwegian project** **CroWat** “An integrated environmental monitoring system for Croatian freshwater, estuarine and coastal marine areas“
* Annual project meetings – Zagreb (Ruđer Bošković Institute), Osijek (Department of Biology, Josip Juraj Strossmayer University in Osijek), Oslo (Norwegian Institute for Water Research) (2001-2004)
* Workshop organised within the framework of the CroWat project at the Norwegian Institute for Water Research, Oslo; oral presentation: “Metallothionein as a biomarker of metal exposure in demersal fishes and mussels” (2001)
* Croatian-Norwegian workshop “Aquaculture, coastal management and environmental impact“, Vodice (2003)
* Final CroWat conference “Biomarkers, risk and environmental assessment“, Cavtat; oral presentation: „CROWAT project: Metallothionein and metal levels in cytosol of different organs of Mediterranean feral fish species“ (April 2005)
* **Croatian-Macedonian bilateral project** „The assessment of metal availability and effects on feral fish in the rivers under the impact of mining activities“
* Annual project meetings – Zagreb (Ruđer Bošković Institute), Skopje (Ss. Cyril and Methodius University), Ohrid (Institute of Hydrobiology) (2012-2014)
* International scientific workshop “Influence of active mines on freshwater ecosystems“, Zagreb (Ruđer Bošković Institute); oral presentations: “Evaluation of dietary metal exposure of *Squalius vardarensis* dwelling in mining impacted rivers in the north-eastern Macedonia” and “Acanthocephalans, fish intestinal parasites, as bioindicators of metal exposure in rivers impacted by mining waste” (2014)
* **Croatian-French bilateral project** **„Cogito"** - „Intracellular mapping of essential and nonessential trace elements in the organs of indigenous fish by NanoSIMS"
* Annual project meetings – Zagreb (Ruđer Bošković Institute), Pau (Université de Pau et des Pays de l’Adour/CNRS), Paris (CAMECA) (2013-2014)
* **Croatian Science Foundation: Accumulation, Subcellular Mapping and Effects of Trace Metals in Aquatic Organisms (AQUAMAPMET)**
* „Kick-off Meeting“ – Zagreb (Ruđer Bošković Institute); oral presentation „Krka River – ADRIS project: Evaluation of the Krka River water quality and potential risk to the Krka National Park by application of new bioindicators and biomarkers“ (2015)
* Project meeting – Zagreb (Ruđer Bošković Institute); oral presentation „Metal accumulation in fish intestinal parasites, acanthocephalans“ (2017)
1. **Scientific activities and stays outside Croatia**
* **Croatian-Norwegian project** **CroWat**: "An integrated environmental monitoring system for Croatian freshwater, estuarine and coastal marine areas"
* Project meetings at the Norwegian Institute for Water Research in Oslo and the University of Tromsø in Tromsø, Norwey (2001-2002)
* visit of marine station of the Norwegian Institute for Water Research, Oslo Fjord (2001)
* participant at the workshop at the Norwegian Institute for Water Research (Oslo); oral presentation: “Metallothionein as a biomarker of metal exposure in demersal fishes and mussels” (2001)
* participant at the international workshop „The Croatian and Norwegian coastal zone: Ecosystem dynamics and environmental challenge“ at the University of Tromsø, Tromsø, Norwey (2002)
* **Croatian-Macedonian bilateral project** „The assessment of metal availability and effects on feral fish in the rivers under the impact of mining activities“
* Project meetings at the Ss. Cyril and Methodius University in Skopje and Institute of Hydrobiology in Ohrid (2012-2014)
* Field sampling on the Bregalnica, Zletovska and Kriva River (2012)
* participant at the international scientific congress „4th Congress of Ecologists of the Republic of Macedonia with International Participation“, oral presentation: “Cytosolic protein concentrations and metal distribution in acanthocephalans, as potential indicators of metal exposure, their intermediate (crustacean *Gammarus fossarum*) and definitive host (fish *Squalius cephalus*)”; poster presentation: “Distribution and molecular characterisation of *Pomphorhynchus laevis*, acanthocephalan parasite of *Squalius cephalus* from the Sutla River, Croatia”, Ohrid (2012)
* **Croatian-French bilateral project** **„Cogito"** - „Intracellular mapping of essential and nonessential trace elements in the organs of indigenous fish by NanoSIMS"
* Project meetings at the Université de Pau et des Pays de l’Adour/CNRS (2013)
* participant at the international scientific workshop „4th Edition NanoSIMS International Workshop“, Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie Museum National d'Histoire Naturelle, Paris (2014)
* Practical work on NanoSIMS (Nanoscale secondary ion mass spectrometry) in the CAMECA Inc. laboratory in Paris (2014)
* **SAIA scholarship** – one month scholarship stay at the University of SS. Cyril and Methodius in Trnava, Faculty of Natural Sciences, Department of Chemistry (collaborators dr. Dáša Kružlicová and dr. Peter Nemeček) within the National Scholarship Programme of the Slovak Republic (June 2016)

**Oral presentations at the Ruđer Bošković Institute**

* "Pollutant Responses in Marine Organisms (PRIMO 12)" (in Croatian) – oral presentation within the scientific colloquium of the Division for Marine and Environmental Research (2003)
* „Metallothionein and trace metal levels in some fish species from the coastal area of the Adriatic Sea in Croatia“ (in Croatian) – M.Sc. thesis defense (2004)
* “Efficiency of dietborne metal uptake to the gastrointestinal tissue, cytosol and intestinal parasites of European chub (*Squalius cephalus* L.)” (in Croatian) – PhD thesis defense (2009)
* “Evaluation of metal exposure to aquatic organisms“ – oral presentation at symposium “Scientifing meetings of the 3rd kind” (in Croatian) (2011)
* “Determination of metallothioneins by differential pulse voltammetry – application in biomonitoring studies“ (in Croatian) – oral presentation at symposium 3rd Electrochemistry Day (2012)
* „Biological indicators of metal exposure in marine and freshwater ecosystems in the Republic of Croatia“ (in Croatian) - oral presentation in front of the assessment committee for the scientific title Research Associate (2012)
* “Application of differential pulse voltammetry in the evaluation of metal exposure in the aquatic ecosystems” (in Croatian) - oral presentation at 3rd ISE Satellite Student Regional Symposium on Electrochemistry (2013)
* “Evaluation of dietary metal exposure of *Squalius vardarensis* dwelling in mining impacted rivers in the north-eastern Macedonia” – oral presentation at international scientific workshop “Influence of active mines on freshwater ecosystems“ (2014).
* “Acanthocephalans, fish intestinal parasites, as bioindicators of metal exposure in rivers impacted by mining waste” – oral presentation at international scientific workshop “Influence of active mines on freshwater ecosystems“ (2014).
* „Krka River – ADRIS project: Evaluation of the Krka River water quality and potential risk to the Krka National Park by application of new bioindicators and biomarkers“- oral presentation at the „Kick-off Meeting“ of the Croatian Science Foundation project Accumulation, Subcellular Mapping and Effects of Trace Metals in Aquatic Organisms (AQUAMAPMET) (2015)
* "From the scholarship programmes in Slovakia to evaluation of anthropogenic influences on the Krka River" (in Croatian) – oral presentation within the scientific colloquium of the Division for Marine and Environmental Research (2016)
* „Metal accumulation in fish intestinal parasites, acanthocephalans“ – oral presentation at theproject meeting of the Croatian Science Foundation project Accumulation, Subcellular Mapping and Effects of Trace Metals in Aquatic Organisms (AQUAMAPMET) (2017)

**Invited lectures**

* “How can we use biota in environmental quality assessment?”, **Days of Natural Sciences, Sisak** (2014)
* “Evaluation of the Krka River water quality and potential risk to the Krka National Park by application of new bioindicators and biomarkers“, presentation of donation and scholarship holders of the “Adris“ Foundation in 2014 in the **Museum of Contemporary Art, Zagreb** (2014)
* “Metal exposure assessment in the aquatic ecosystem in Croatia“ - **University of SS. Cyril and Methodius, Faculty of Natural Sciences, Department of Chemistry, Trnava** (2016)

**Participation and presentation at scientific meetings**

* Oslo, September 2001, **workshop organised within the framework of the CroWat project at the Norwegian Institute for Water Research,** oral presentation “Metallothionein as a biomarker of metal exposure in dermesal fish and mussels”.
* Zagreb, June 2002, **“Electrochemistry Day”** organised by The Croatian Society of Chemical Engineers and Technologists at the Ruđer Bošković Institute.
* Tromsø, August 2002, **workshop: "The Croatian and Norwegian coastal zone: Ecosystem dynamics and environmental challenge"**, organized within the framework of Croatian-Norwegian project with "Norwegian Institute for Water Research" (NIVA).
* Malinska, September 2002, **workshop organised within the Croatian National Monitoring Programme "Adriatic".**
* Tampa, Florida, May 2003, poster presentation “Correlation of biometric parameters with metallothionein and metal levels (Zn, Cu, Cd) in liver, kidney and brain of *Mullus surmuletus* L. and *Liza aurata* L. from the Eastern Adriatic Sea” at the international symposium **PRIMO12 ("Pollutant responses in marine organisms").**
* Osijek, May 2003, **3rd Croatian water conference "Croatian waters in the 21th century"**, poster presentation “Determination of metallothioneins, biomarkers of metal exposure, in edible fish of the Adriatic Sea“.
* Zagreb, September-October 2003, **8th Croatian Biological Congress with international participation**, poster presentation “Metallothionein dependence on tissue selection, metal bioavailability and biometric parameters in *Mullus surmuletus* (striped red mullet) and *Liza aurata* (golden grey mullet) from the Kaštela Bay”.
* Vodice, October 2003, **Croatian-Norwegian workshop "Aquaculture, coastal management and environmental impact"**.
* Zagreb, January 2004, international **workshop “Biogeochemical processes in anoxic marine environments”** organised by the Laboratory for physico-chemical separations, Ruđer Bošković Institute.
* Prague, April 2004, **SETAC (Society of Environmental Toxicology and Chemistry) congress**, oral presentation "Relationship of metallothionein and metal levels with biometric parameters in different tissues of *Mullus* sp. from the Eastern Adriatic Sea".
* Zagreb, November 2004 – **1st Congress of Croatian Scientists from the Homeland and Abroad**, poster presentation “Correlation of biometric parameters with metallothionein and metal levels (Zn, Cu, Cd) in liver, kidney and brain of *Mullus surmuletus* L. and *Liza aurata* L. from the Eastern Adriatic Sea”
* Cavtat, April 2005, **Biomarkers, risk and environmental assessment, CroWat final conference**, oral presentation "[CROWAT project: Metallothionein and metal levels in cytosol of different organs of Mediterranean feral fish species](http://bib.irb.hr/prikazi-rad?&rad=220523)".
* Cavtat, October 2006, **43rd Congress of the European Societies of Toxicology (EUROTOX 2006)**, poster presentation “Metal exposure assessment in native fish, *Mullus barbatus* L., from the Eastern Adriatic Sea”.
* Amsterdam, October 2007, **44th Congress of the European Societies of Toxicology (EUROTOX 2007)**, poster presentation “Metal Distribution among Gut Content, Intestinal Tissue and Cytosol of Chub (*Leuciscus cephalus* L.) from Sava River.
* Zagreb, November 2007 - **seminar Marine Chemistry** organized within the framework of the project “Analytical methods, trace elements and organic matter in marine environment“, oral presentation: “[Quantification of mussel metallothionein using differential pulse voltammetry (DPV)](http://bib.irb.hr/prikazi-rad?&rad=311608)“.
* Osijek, September 2009, **10th Croatian Biological Congress with international participation**, oral presentation: “Application of acanthocephalans, fish intestinal parasites, as possible bioindicators of chub metal exposure)” and poster presentation “Accumulation efficiency of metals from the diet to intestinal tissue and cytosol of chub (*Squalius cephalus* L.)”.
* Zagreb, July 2011 - **Scientifing meetings of the 3rd kind**, oral presentation: “Evaluation of metal exposure to aquatic organisms”
* Zagreb, April 2012 – **3rd Electrochemistry Day**, oral presentation: “Determination of metallothioneins by differential pulse voltammetry – application in biomonitoring studies“
* Zagreb, June 2012 - **13th International Chromatography School**, poster presentation: “Distribution of Cu, Fe and Cd among SE-HPLC separated cytosolic proteins isolated from liver, gills and intestinal parasite of European chub (*Squalius cephalus* L.)”
* Šibenik, September 2012 – **11th Croatian Biological Congress with international participation**, oral presentation: “Metal exposure assessment using fish intestine as an indicator organ”
* Ohrid, October 2012 - **4th Congress of Ecologists of the Republic of Macedonia with International Participation**, oral presentation: “Cytosolic protein concentrations and metal distribution in acanthocephalans, as potential indicators of metal exposure, their intermediate (crustacean *Gammarus fossarum*) and definitive host (fish *Squalius cephalus*)”; poster presentation “Distribution and molecular characterisation of *Pomphorhynchus laevis*, acanthocephalan parasite of *Squalius cephalus* from the Sutla River, Croatia”
* Zagreb, April 2013 – **3rd ISE Satellite Student Regional Symposium on Electrochemistry**, oral presentation “Application of differential pulse voltammetry in the evaluation of metal exposure in the aquatic ecosystems”
* Vukovar, May 2013 – **9th International meeting on aquaculture: “Croatian aquaculture in European Union- present and future“**, poster presentation “Seasonal differences in metal concentrations in the gut content and intestinal tissue of European chub (*Squalius cephalus* L.) from the Sava River“
* Struga, September 2013 - **Days of Veterinary Medicine**, poster presentation “The role of fish intestinal parasites (Acanthocephalans) in metal exposure assessment and protection of fish against metal accumulation“
* Zagreb, May 2014 – **international scientific workshop “Influence of active mines on freshwater ecosystems“**, oral presentation “Evaluation of dietary metal exposure of *Squalius vardarensis* dwelling in mining impacted rivers in the north-eastern Macedonia” and “Acanthocephalans, fish intestinal parasites, as bioindicators of metal exposure in rivers impacted by mining waste”
* Sisak, September 2014 – **Days of Natural Sciences**, oral presentation “How can we use biota in environmental quality assessment?”
* Ghent, Belgium, September 2016 - **18th International Conference on Heavy Metals in the Environment**, oral presentation “Water Quality and Metal Exposure Assessment in the Krka River, Karstic Phenomenon and National Park in Croatia“.
* Zagreb, February 2017 - **2nd Symposium on Freshwater Biology**, oral presentation “Assessment of the Krka River water quality by evaluation of biological indicators in the brown trout (*Salmo trutta* Linnaeus, 1758)“.

**Scientific publications**

List of all scientific publications, published or accepted for publication, as well as papers and abstracts from the scientific meetings, list of MSc and PhD thesis which I supervised or of my own are available on the official web page of the Croatian Scientific Bibliography (CROSBI): <http://bib.irb.hr/lista-radova?autor=235740>