

State-of-the-art in biomonitoring

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Acronym: BIOLAWEB
Boosting Institute of Chemistry,
Technology and Metallurgy in
Water Biomonitoring

Grant No: 101079234

Type of action: HORIZON Coordination and
Support Actions (HORIZON - CSA)

Starting Date: 01/10/2022

Budget: € 899 410

Duration: 36 months



BgF Summer school, Belgrade, October 2023

BIOLAWEB

General overview

Dr Miloš Ćirić, the coordinator



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HORIZON Europe programme

Call: Twinning (HORIZON-WIDERA-2021-ACCESS-03)

Budget: €149 000 000

Expected outcomes:

- ✓ Improved excellence capacity and resources in Widening countries
- ✓ Enhanced strategic networking activities between the research institutions
- ✓ Raised **REPUTATION**... and attractiveness of the coordinating institution
- ✓ Strengthened research management capacities and administrative skills of the staff
- ✓ Improved creativity, new approaches in R&I, increased mobility of scientists



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HORIZON Europe programme

Call: Twinning (HORIZON-WIDERA-2021-ACCESS-03)

Budget: €149 000 000

Expected impacts:

- ✓ Increased science and innovation capacities for all actors in the R&I system in widening countries
- ✓ Higher participation success in Horizon Europe and more consortium leadership roles



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Background motivation (topic)

General problems



In local context



With general solution!



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BIOLAWEB consortium



Recognized taxonomists and ecologists



Excellence in developing indices for lake



Leader in DNA-based biomonitoring



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Need analysis

- ✓ More than 50% of Europe's rivers and many lakes have been **degraded** by human activities.
- ✓ The good ecological status of European surface waters as required by the EU Water Framework Directive is **not achieved** in many European water bodies.
- ✓ New DNA-based methods **will** most likely **replace** the "traditional" in the near future.
- ✓ UB-ICTM **recognized** the need **to build** capacities in development of the new methods through collaborations and training with research institutions.



BIOLAWEB objectives

Fact Sheet

Project description



Serbia builds capacity in cutting-edge biodiversity monitoring

The growing negative impact of humans on the environment and natural ecosystems has increased the urgency of improved monitoring to support biodiversity conservation. Environmental DNA, or eDNA, metabarcoding is a pioneering survey method for the large-scale taxonomic identification of complex terrestrial and aquatic samples to assess biodiversity. It can identify multiple species based on high-throughput sequencing. The EU-funded BIOLAWEB project will strengthen the research and innovation capacity in biodiversity assessment and biomonitoring at the Institute of Chemistry, Technology and Metallurgy, University of Belgrade via application of such cutting-edge methods. The advances accomplished by the twinning project will attract talented researchers and be applied to water bodies monitoring in and around Serbia.

Hide the project objective



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Project Information

BIOLAWEB

Grant agreement ID: 101079234

DOI

10.3030/101079234 [↗](#)

Start date

1 October 2022

End date

30 September 2025

Funded under

Widening participation and spreading excellence

Total cost

€ 899 410

EU contribution

€ 899 410



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BIOLAWEB specific objectives (SO)



SO1. To develop a tailor-made scientific strategy for UB-ICTM



SO2. To scale up UB-ICTM's staff competence and knowledge on how indices for the EU WFD are developed

BIOLAWEB specific objectives (SO)



SO3. To raise the competence and skills of UB-ICTM researchers in DNA-based biomonitoring methods

BIOLAWEB specific objectives (SO)

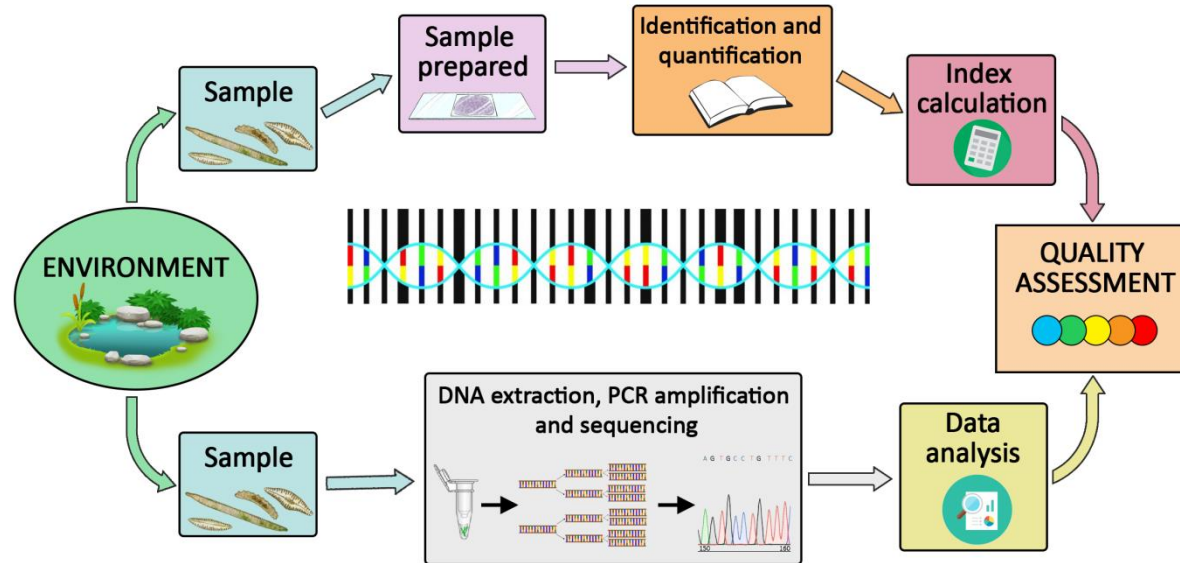


Figure from Vidaković, 2020

SO4. To develop new approaches in the field of biomonitoring through joint research

BIOLAWEB specific objectives (SO)



SO4. To develop new approaches in the field of biomonitoring through joint research

BIOLAWEB specific objectives (SO)



SO5. To set up a fully operational Research Management Office at UB-ICTM

BIOLAWEB specific objectives (SO)



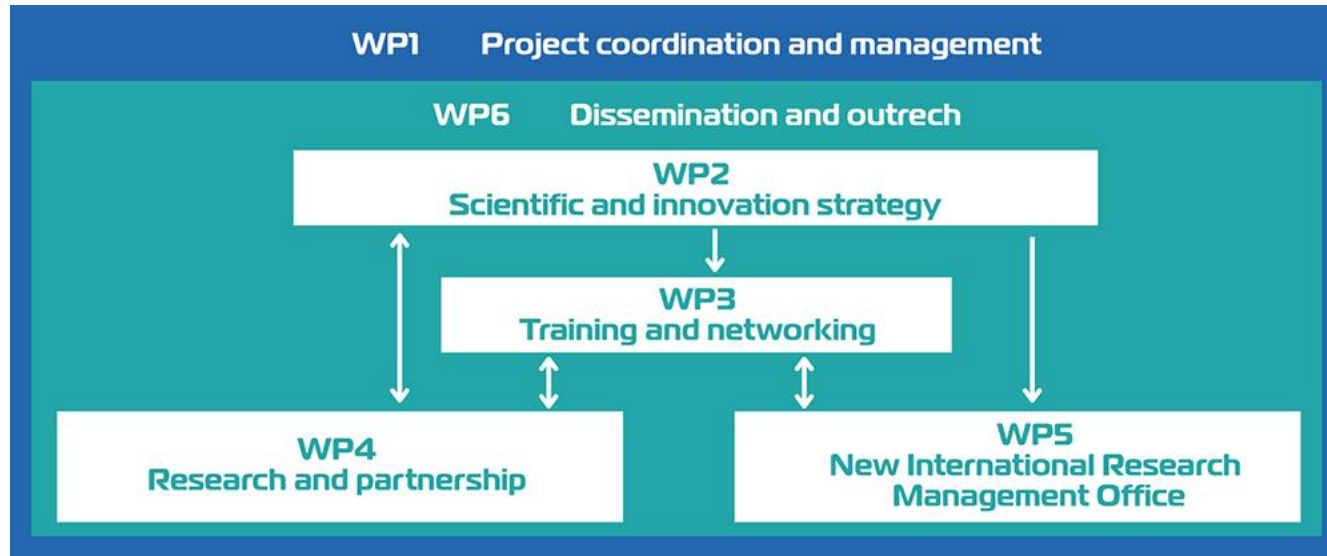
SO6. To enhance strategic networking activities with leading research institutions

BIOLAWEB communication



Researchers' night - Belgrade, October 2023

BIOLAWEB Work Plan



Acknowledgement



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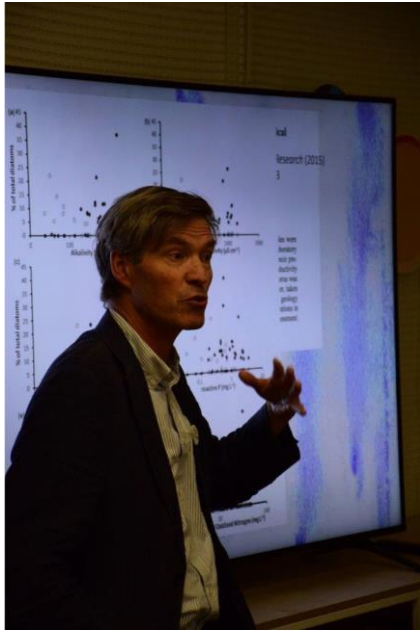


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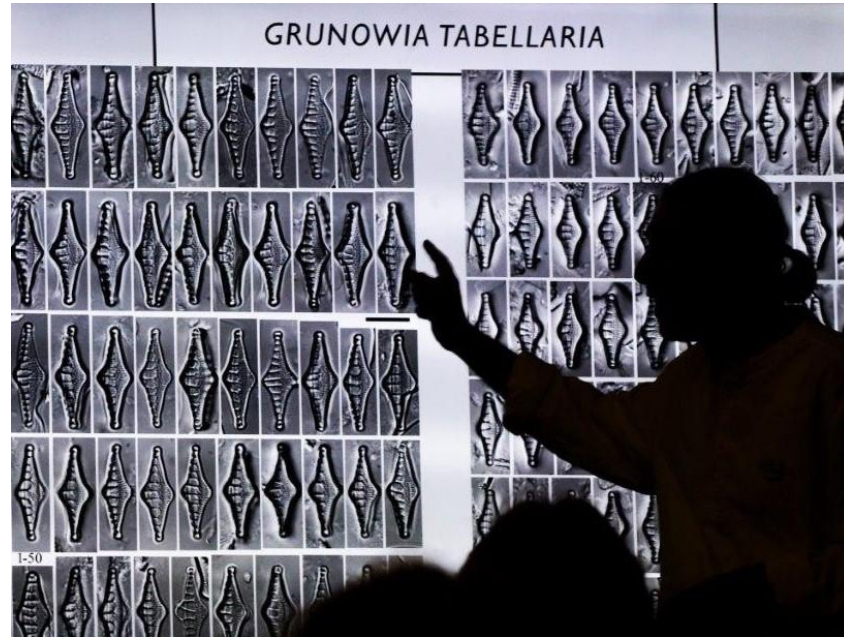
Thank you for your attention!

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Dr Martyn Kelly

[S3]



Prof Dr Zlatko Levkov



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