

DISC2025

**5th International Student
Conference**

ABSTRACT BOOK



DEPARTMENT OF
ENVIRONMENTAL
ENGINEERING AND
OCCUPATIONAL
SAFETY AND HEALTH



5th DIFENEW INTERNATIONAL STUDENT CONFERENCE DISC2025



**Faculty of Technical Sciences
University of Novi Sad**

**Hybrid event
11th & 12th December, 2025
Novi Sad, Serbia**

Organizers:

Department of Environmental Engineering and Occupational Safety and Health
Faculty of Technical Sciences, University of Novi Sad, Serbia

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PREFACE

This Abstract Book presents the collected contributions of the International Student Conference DISC2025, a hybrid academic event held on 11–12 December 2025 at the Science Technology Park Novi Sad. DISC2025 continues the conference's mission of fostering interdisciplinary dialogue and encouraging the active involvement of students, early-career researchers, and professionals in addressing contemporary sustainability challenges.

Under the central theme *Sustainability in Action*, this year's conference emphasizes the transition from conceptual frameworks to practical implementation. The abstracts included in this volume reflect a broad spectrum of research and project-based contributions that connect academic knowledge with real-world applications across environmental protection, occupational safety and health, sustainable project management, strategic human resource and business management, civil engineering and infrastructure, and Education 3.0, with a particular focus on digital and inclusive learning.

DISC2025 provides a collaborative platform where participants from academia, industry, and the public sector engage through paper presentations, interactive panels, and applied project exhibitions. Particular attention is devoted to emerging topics such as the Green Agenda, ESG principles, circular economy models, and digital innovation in engineering and management practices, underscoring their importance for sustainable development at local, regional, and global levels. In addition to the main conference sessions, DISC2025 features a dedicated *Project Promotion* session within Jean Monnet Square, highlighting project-based initiatives that strengthen the link between academic research, European policy frameworks, and practical implementation.

We extend our sincere appreciation to all authors whose work contributes to the quality and diversity of this publication, as well as to the members of the Scientific, Program, and Organizing Committees for their dedication and professionalism. Their collective efforts have been instrumental in shaping a conference that promotes knowledge exchange, critical thinking, and interdisciplinary cooperation.

It is our hope that the abstracts presented in this book will serve not only as a record of DISC2025, but also as a source of inspiration for further research, collaboration, and innovation in the development of a more sustainable future. Looking ahead, the DISC conference series will continue with DISC2026, further strengthening its role as an international platform for student engagement, interdisciplinary research, and applied sustainability initiatives.

With kind regards,

Dr. Maja Petrović

President of the Organizing Committee and Editor



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MONITORING AND EVALUATION OF LEAD AND NICKEL CONTAMINATION IN SURFACE WATERS IN SERBIA

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Abstract: The quality of surface waters in Serbia is systematically monitored by competent authorities such as the Environmental Protection Agency. For the purposes of this publication, data on lead (Pb) and nickel (Ni) concentrations of the 79 water bodies (2016-2022) were selected as indicators of the trends in surface water quality (Environmental Protection Agency, 2016–2022). Evaluation of the water quality was based on the limit values for priority and priority hazardous substances in surface waters (Environmental Quality Standards - EQS) which are established by the "Official Gazette of RS", No. 24/2014. EQS is concentration which cannot be exceeded to protect the environment and human health. The EQS is linked to the maximum allowed concentration (MDK) and to the values of average annual concentration (PGK) of priority substances. Descriptive statistics showed a median value of 1.0 µg/L for Pb and 3.9 µg/L for Ni. Considering both metals, only a few percent of the values exceeded the MDK values, while over 50 % of the results indicate low pollution. The most polluted water bodies were detected on the rivers Ibar (profiles Raška and Kraljevo), Velika Morava (profile Ljubičevo bridge), and Tisa (profile Titel). In summary, the continuous monitoring of surface water quality in Serbia ensures compliance with regulatory standards aimed safeguarding environmental and human health. While elevated Pb and Ni concentrations do exist, overall trends suggest relatively low pollution levels in the majority of monitored water bodies.

Keywords: *Surface water quality; Lead (Pb); Nickel (Ni); Environmental quality standards (EQS); Monitoring.*