Newcastle University / Centre for Water

NATIONAL UNIVERSITY OF WATER AND ENVIRONMENTAL ENGINEERING

This is to certify that

Prof Serhii Martynov

has attended the Summer School organized in the project ***Programme to Enhance Academic Collaboration for Enabling Regenerative Reconstruction in Ukraine*** **(PEACE-R2UK)** funded by **UKRI** through **Universities UK International**

17 – 21 July 2023, Newcastle upon Tyne, UK

Richard Davies

Prof Richard Davies
Pro-Vice-Chancellor, Global and Sustainability

#TwinForHope

Programme of internship
Enhance Academic Collaboration for Enabling Regenerative Reconstruction in Ukraine **PEACE-R2UK Summer School**
17th to 21st July 2023
Newcastle upon Tyne, UK

No	Title	Academic hours
1	Potential application of the self-healing concrete in wastewater infrastructure	1
2	Efficient new generation concretes using man-made raw materials and industrial waste	1
3	Sustainable construction	1
4	Structures and elements with new generation concrete use: Structural calculation for static loads of elements with new generation concrete.	1
5	Design-led material development; biomaterials; hybrid-waste-based materials; from concept to commercialization.	1
6	Concretes and mortars for 3-D printers using industrial waste	1
7	Water pollution remediation techniques and examples (online)	1
8	Strategies for upgrading wastewater treatment systems and protecting public health in the context of Ukraine's recovery	1
9	Polystyrene foam filters in technological schemes of water treatment	1
10	Innovative solutions for wastewater treatment	1
11	Features of rainwater drainage from urban areas: the Rivne example	1
12	A Digital Twin for managing sewer overflows.	1
13	Integrating multi-scale real-time data for safe and resilient communities.	1
14	Improvement of the theory of turbulent flow in pipes	1
15	Hydraulic regimes of water reservoirs and open channels flows	1
16	Estimation of parameters of riverbed processes	1
17	Innovative solutions for hydraulic problems	1
18	A Local Multi-Layer Approach to Modelling Interactions between Shallow Water Flows and Obstructions	1
19	COst optimisatioN Framework for Implementing blue-Green infrastructURE (CONFIGURE)	1
20	Climate resilient infrastructure	1
21	Group work, self-study	10
Total hours		30