

## 9<sup>th</sup> W.A.T.E.R. Summer School

The 9<sup>th</sup> W.A.T.E.R. Summer School was hosted by [Instytut Budownictwa Wodnego Polskiej Akademii Nauk](#) (Institute of Hydro-Engineering of the Polish Academy of Sciences) from 1 to 5 September 2025. The local organizing committee was composed by Dawid Majewski, Jarosław Biegowski, Krzysztof Piłczyński, Maciej Paprota, Małgorzata Robakiewicz, Rui Aleixo and Zuzanna Cuban.

As usual, the W.A.T.E.R. Summer brought together a diverse group of students, leading experts in the field of experimental hydraulics and manufacturers of the latest technologies and instrumentation for fluid mechanics and hydraulics. It was a week of intense hard work, engaging discussions and imagination to solve the different assignments. This edition welcomed thirteen participants from Finland (2), Germany (1), Italy (1), Luxembourg (1), Netherlands (2), Poland (3), Portugal (1), and Switzerland (2). The panel of invited experts Rui M. L. Ferreira (Instituto Superior Técnico, Universidade de Lisboa), Massimo Guerrero (University of Bologna), Yannic Fuchs (Technical University of Munich), Marie Burckbuchler (Ubertone), and Anne Pallarès and Philippe Schmitt (University of Strasbourg) much contributed to the high scientific level of this event.

This edition showcased different measurement techniques such as Particle Image Velocimetry, Acoustic Doppler Techniques, Particle Tracking Velocimetry, Photogrammetry and instrumentation to be deployed in the field (river and coastal areas). The field measurements session was organized at the Lubiatowo Field station located on the Baltic shore, demonstrating how measurements can be carried out in the sea and in the nearby streams.

The now traditional masterclass allowed the participants to present in front of an attentive audience their current research and challenges faced. An excellent opportunity for debating ideas and solutions.

The 9<sup>th</sup> edition of the W.A.T.E.R. Summer School would not be possible without the crucial contributions of the IBW PAN personnel (academics and technicians) and the support of its direction (Prof. Ryszard Staroszczyk and Prof. Piotr Szmytkiewicz, and Prof. Rafał Ostrowski responsible for Lubiatowo Field station). Special thanks to the sponsors of the 9<sup>th</sup> edition, namely Ubertone, Dantec Dynamics, Eurotek International Sp. z o.o., Teledyne Marine, Aquatec, Water Survey Tech and Olpas, that enriched the event by means of special sessions and demonstration classes. Taking advantage of the participation of so many companies, for the first time a Business-2-Business session was

organized during the W.A.T.E.R. bringing together end-users and instrumentation manufacturers.

The W.A.T.E.R. Summer School is the flagship event of the Experimental Methods and Instrumentation (EMI) committee of the IAHR and it was started by Prof. Margaret Chen from the Vrije Universiteit Brussel in 2016. Prof. Margaret Chen is currently the chairwoman of the EMI committee.



Figure 1: Visit to the different infrastructures of IBW PAN



Figure 2: Field measurements carried at a stream outlet.



Figure 3: Group photo at Lubiato



Figure 4: Prof. Rui Ferreira presenting the PIV technique



Figure 5: Setting up the PIV system in the wave channel



Figure 6: Sediment transport laboratory



Figure 7: Teledyne Maritime session and instruments for field measurements



Figure 8: Dantec session with emphasis on optical techniques



Figure 9: Large scale experiments (dune erosion)



Figure 10: W.A.T.E.R. diner

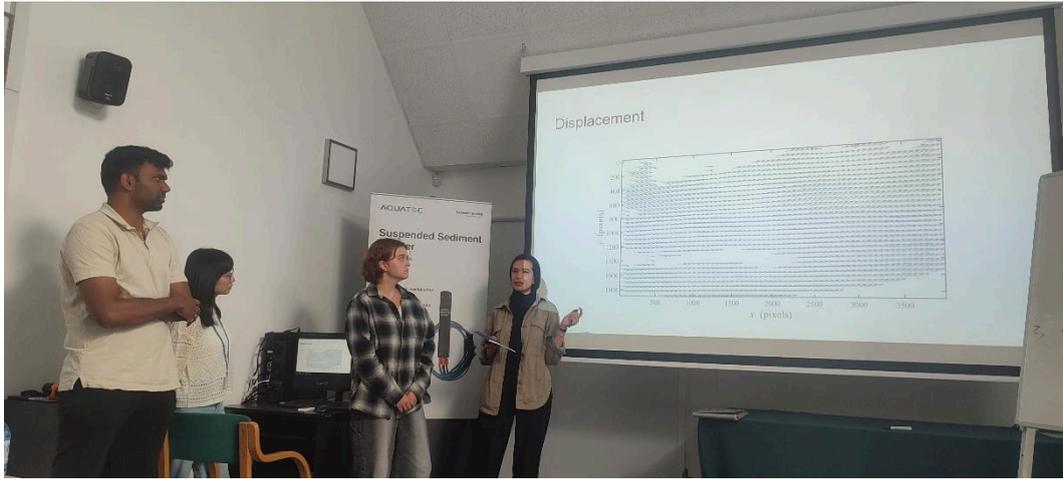


Figure 11: Students presenting their report for evaluation