

What is W.A.T.E.R. 2025?

W.A.T.E.R.: Workshop on Advanced measurement Techniques and Experimental Research is a Summer School started in 2016 by the Vrije Universiteit Brussel (www.vub.ac.be) and the IAHR Experimental Methods and Instrumentation Committee (EMI) (www.iahr.org). The 9th edition will be held in the Institute of Hydro-Engineering of the Polish Academy of Sciences (IBW PAN), from September 1 to September 5, 2025. This Summer School is focused on experimental methods applied in different hydraulics fields. It combines theoretical sessions and hands-on measurement exercises in the laboratory. It is aimed at PhD and Master students as well as practitioners who are willing to get training in advanced hydraulic measurement techniques.

Topics covered

1. Hydraulic measurement fundamentals
2. Image analysis methods: particle image and particle tracking velocimetry (PIV and PTV)
3. Acoustic Doppler measurement fundamentals
4. Measurement of sediment transport
5. Field Measurements
6. Data processing and data visualization

ECTS Credits

Course certificate will be awarded with 3 ECTS

Lecturers

Dawid Majewski (IBW PAN, Poland)
Jarosław Biegowski (IBW PAN, Poland)
Maciej Paprota (IBW PAN, Poland)
Margaret Chen (VUB, Belgium)
Marie Burckbuchler (Ubertone, France)
Massimo Guerrero (UniBo, Italy)
Rui Aleixo (IBW-PAN, Poland)
Rui Ferreira (IST, Portugal)
Yannic Fuchs (TUM, Germany)

Venue

Institute of Hydro-Engineering of the Polish Academy of Sciences (IBW PAN) ul. Kościarska 7, 80–328 Gdańsk, Poland.

Gdańsk

Gdańsk is a vibrant city known for its rich history, maritime heritage, and architectural beauty located in the Polish coast of the Baltic Sea. For more information: <https://visitgdansk.com/>



How to arrive

Gdańsk's Lech Walesa international airport is served by several airlines connecting Gdańsk to most of European cities. It is also served by internal flights connecting the major Polish cities. The airport is well connected to the city by means of train and bus lines.

There are train connections between Gdańsk and major Polish cities (Warsaw, Kraków, Wrocław). You can plan your train trip at <https://www.pkp.pl/en/>. The closest train station to IBW is Gdańsk Oliwa.

More information can be found in the W.A.T.E.R. Summer School website:

watersummerschool.wordpress.com

For more information

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IBW PAN

Workshop on Advanced measurement Techniques and Experimental Research

W.A.T.E.R. 2025

A hands on experimental research in Hydraulics

9th Edition

1st - 5th September 2025

Gdańsk, Poland

Organized by

**Institute of Hydro-Engineering
of the Polish Academy of
Sciences**

Vrije Universiteit Brussels

**IAHR – Experimental Methods
and Instrumentation Committee**



RICHARD LOUNSBERY FOUNDATION
EST. 1959



A hands-on experimental approach

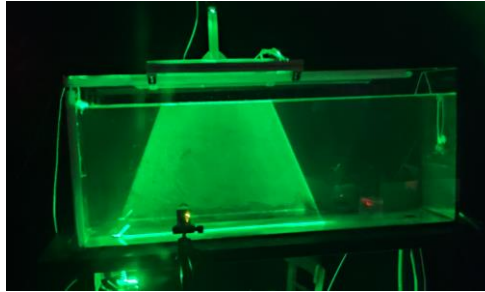


The W.A.T.E.R. Summer School is aimed at providing training of different measurement techniques applied in hydraulics considering both laboratory and field environments. To achieve this goal a training program consisting of both technique fundamentals and their applications is presented. The participants will have the opportunity to perform real-time measurements of different physical variables (e.g. turbulence, velocity profiles, bottom topography, sediment flux, etc.) using state of the art techniques including PIV, PTV and UVP. The W.A.T.E.R. Summer School is also a meeting point of young researchers to foster the exchange and cooperation between different institutions, and at the same time to provide the participants with an international research environment.

Laboratory measurements



Laboratory measurements will include the application of imaging-based techniques such as PIV and PTV, and acoustical techniques such as UVP.



Every participant will have the opportunity to perform experiments in different experimental setups, to acquire and process data. Problem-solving orientated sessions are organized for the participants addressing the crucial issues regarding different types of measurements.

A field trip will be organized where the participants will have the opportunity to carry measurements in a real case scenario.



A Masterclass session is also included whereby each participant will have the opportunity to present and discuss their research with peers and lecturers to share knowledge, experience and insights.

How to apply

Applicants should send a 1-page CV and a motivation letter (250 words) to rui.aleixo@ibwpan.gda.pl manifesting their interest in participating in the W.A.T.E.R. Summer School by 31 May 2025

To maximize each participant hands-on opportunity the maximum number of attendees is limited to 20. The registration will be closed when the maximum number of attendees is reached.

Key dates (2025)

	Early bird	Late bird
Manifestation of interest	31 May	11 July
Communication of acceptance	6 June	18 July
Payment deadline	15 July	15 August

Fees

Fees (Euro)	Early bird	Late bird
Students	600	700
IAHR Members	700	800
Non-IAHR members	800	900

Fees include:

Coffee-breaks, Summer School dinner, course materials, access to laboratory, field and social programs.

