



## Important dates

**25th of March 2022**

Full-length Paper Submission  
Deadline

**25th of March 2022**

Invited and Special Sessions  
Proposals

**1st May 2022**

Paper Acceptance  
Notification

**15th May 2022**

Final Paper Submission

**20th May 2022**

Early Registration Deadline

**30th June 2022**

Regular Registration  
Deadline

**5th September 2022**

Symposium Start Date

**7th September 2022**

Symposium End Date

## Call for papers

The **15th International Conference on Diagnostics of Processes and Systems (DPS)**, hosted by the Gdańsk University of Technology, will be held in Kashubia (Pomerania, Poland), on September 5-7, 2022.

### Conference history and motivation

In the last few decades, the diagnostics of processes and systems has developed significantly both in theory and in practice. Both the scope and applications of technical diagnostics cover many well-established topics, and numerous emerging advances in the fields of control and systems engineering, robotics and mechatronics, aerospace, applied mathematics, artificial intelligence, decision support, statistics and signal processing. More and more effective methods of fault diagnosis and their various applications are considered in the classical areas of electrical, mechanical, medical and chemical as well as in inter-sort or completely new fields of human activity. These methods are of key importance for the early identification of emerging failures and ensuring the safe, economic and ecological operation of machines, devices and systems. In the field of automation and robotics, special attention is paid to fault-tolerant control, which combines diagnostics with control methods to deal with faults intelligently and efficiently, thus reducing the risk to the safety of systems.

The International Conference on Diagnostics of Processes and Systems (initially called Diagnostics of Industrial Processes) has been organized since 1996 (usually every two years) by the Warsaw University of Technology, University of Zielona Góra and Gdańsk University of Technology.

This series of conferences is an excellent forum for the exchange of knowledge and experience, discussion of scientific and technological challenges, showing open problems and future research directions in the broad field of diagnostics and monitoring. The conference is also an opportunity for young people to acquire specialist knowledge, experience the atmosphere of science, and present and discuss their own theoretical research results or practical applications.

An important task of this forum is the integration of scientists, engineers and managers from various industries and services, as well as developers of hardware and software for computer control systems, signal processing state-estimation and diagnostics. The subjects of the DPS conference are in line with the topics of the IFAC Symposia on Fault Detection, Supervision and Safety of Technical Processes (SAFEPROCESS), as well as the International Conferences on Control and Fault-Tolerant Systems (SysTol).

### Location and history: Kashubia (Pomerania):

Pomerania, including the Kashubian Cultural Area, is a geographic region in northern Poland. In its thousand-year history, after the territory was taken over by the Teutonic Knights in 1308-1454, it was then regained by Poland. In 1772 it was annexed to Prussia. Only a small part of it was assigned to Poland after World War I, but after World War II the entire Pomeranian region was returned to Poland.

Gdańsk Pomerania is a culturally rich and picturesque region of Poland. The indigenous people of the region are the Slavic Kashubians who speak the Kashubian dialect of the Pomeranian language, Kociewiaczy and Borowiacy. Kashubia hide many secrets and undiscovered stories. You can admire unusual villages full of white houses cut with a brown chessboard beam, sculptures of local artists, cemeteries of ancient tribes, Lobel lakes and Pomeranian hydrotechnical monuments. Kashubia is not only a land with a unique history, traditions and customs cultivated for centuries, but also one of the most beautiful and picturesque natural regions of Poland. The central and southern part of Kashubia is covered with numerous lakes, dense forests and hills. At 329 m above sea level, Wierzyca is the highest peak in the entire European Lowlands. The northern part of Kashubia is dominated by a classic seaside landscape - beaches, lighthouses, fishermen's huts, seaside manors and palaces. Moving dunes in the Stowiński National Park are a must-see in the northern part of Kashubia. Historic Gdańsk, the spa town of Sopot and modern Gdynia constitute one unique Tri-City, where everyone will find something for themselves. The main city of the region - Gdańsk, is on the list of the 20 fastest growing cities in the EU.

Original and high-quality articles will be reviewed by the members of the International Program Committee and published in the conference proceedings in a Springer book, in the series Lecture Notes in Networks and Systems. Selected works will be recommended to publishers of more than ten agreed journals (as shown on our pages: <http://dps2022.konsulting.gda.pl>). As before, Polish works will be published in the form of a book by PWNT.

We are looking forward to meeting you in Gdańsk.

## Organizing committee

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## DPS'2022 Secretary

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