

## CONFERENCE LOCATION

**Jelitkowo** is one of the quarters of the city of Gdansk situated close to the border of the city of Sopot. This location, placed in the heart of the Gdansk Metropolitan Area (also called Threecity) and close to the estuary of the Oliwski Stream, was in the past a former fisherman village. At the turn of the XIX and XX centuries Jelitkowo began to transform into a health resort. At the present time Jelitkowo appears to be a small and peaceful district of little houses and pensions, surrounded with parks and beaches of the Gdansk Bay. Only a four kilometers long walk through a picturesque see promenade is needed to reach the renowned Sopot pier from the conference hotel. Convenient tram and train connections to the historic center of Gdansk are suitable for making attractive historical excursions. The conference hotel, Dwor Prawdzica, is situated only 150 m from a picturesque sandy beach. There are a lot of hotels, restaurants, pubs and centers of aquatic sports along the see side. Moreover, the famous Oliva Cathedral and the ancient Cistercian abbey situated in the Oliva Park are not far from the conference hotel, Prawdzic Dwor (manor-house).

## CORRESPONDING ADDRESSES

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## DEADLINES

Participation statement  
and a full paper proposition  
not exceeding 8 pages  
by  
**25<sup>th</sup> of January 2009**

Notification  
of provisional acceptance  
and editorial requirements  
by  
**25<sup>th</sup> of March 2009**

Submission  
of the final papers  
and registration of the authors  
by  
**5<sup>th</sup> of May 2009**

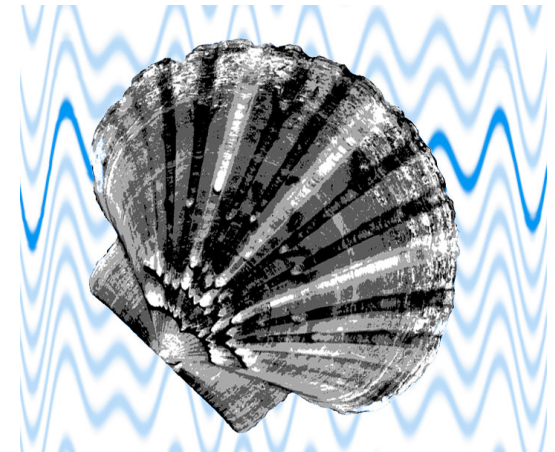
Registration  
of other participants and  
payment of the conference fee  
by  
**1<sup>st</sup> of June 2009**

DPS'2009 conference place,  
the manor-house *Prawdzic*  
in Gdańsk, Poland  
**7<sup>th</sup>-9<sup>th</sup> of September 2009**

IX International Scientific and  
Technical Conference

**Diagnosics of  
Processes  
and Systems**  
**DPS'2009**

Gdańsk – Jelitkowo  
2009, September 7-9



## PATRONAGE

Committee for Automatic Control  
of Polish Academy of Science  
Polish Consultants Society  
Polish Society for Measurement, Automatic  
Control and Robotics

## ORGANISERS

Gdansk University of Technology  
Warsaw University of Technology  
University of Zielona Gora

## PRINCIPAL ORGANIZER

Faculty of Electronics Telecommunication and Informatics  
Gdańsk University of Technology

## PRINCIPAL CO-ORGANIZERS

Institute of Automation and Robotics  
Warsaw University of Technology  
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Youmin Zhang (Montreal, CDN)  
Jacek M. Żurada (Louisville, US)

## CONFERENCE HISTORY

The conference on **Diagnostics of Processes and Systems (DPS'09)** is a continuation of a series of conferences on **Diagnostics of Industrial Processes (DPP)** organized each year since 1996 by the Warsaw University of Technology (DPP 2005), the University of Zielona Góra (DPP 2001, DPS 2007) and the Gdańsk University of Technology (DPP 2003). The annual meetings originally were titled **Diagnostics of Industrial Processes**. Since 1999 the conference have been organized in a two-year cycle, and since the year 2007 we make this meeting international and call it the **Diagnostics of Processes and Systems**.

The subject matter of the conference is a response to the expectations and demands of research and industrial centers for safe modern diagnostics systems, process monitoring systems and expert systems. In general, conference topics correspond to the subject area of the

IFAC symposium on **Fault Detection, Supervision and Safety for Technical Processes, SAFEPROCESS**.

## CONFERENCE SCOPE

The conference is generally concerned with solving various scientific and technical problems of diagnostics of processes and systems based on mathematical and engineering methods and techniques. The conference makes both an international and a national forum of exchange of scientific and technological information and engineering experience on technical diagnosis, which can be placed in a common area of automatic control, measurements and signal processing, and computer networks, using mathematical theories and practical tools of modeling and identification, artificial intelligence and computer science. The conference is thus focused on combination of these domains of engineering and system knowledge for fault detection and its applications, including detection, isolation, localization, identification, diagnosis, reconfiguration and control. An important task for this forum is also integration of scientists and engineers and managers from different branches of industry and services (like chemistry, power systems, machine tools, manufacturing, nutritive industry, medicine, biotechnology, environmental protection, etc.) as well as the makers of hardware and software for computer control and diagnostic systems.

## PRINCIPAL TOPICS

- Modeling and simulation of faults and fault-symptom relationships
- Methods of fault diagnosis, using:
  - mathematical modeling
  - parameter identification and state estimation
  - qualitative models
  - statistical and signal processing
  - artificial intelligence
  - fuzzy logic and rough sets
  - expert systems
  - neural networks
- Diagnostic systems and their applications in:
  - monitoring and alarming
  - fault tolerant systems
  - computer systems and networks
  - diagnostic software
  - medicine and therapy
  - environment protection
  - other industrial applications: electronics, power systems, chemistry, material technology, production control, etc.
- Safety in industrial processes, quality monitoring, software reliability and others.