



19th IFAC Conference on
PROGRAMMABLE DEVICES and EMBEDDED SYSTEMS

PDES 2027

1st Call for Papers



Organized by

Department of Cybernetics and Biomedical Engineering
Faculty of Electrical Engineering and Computer Science
VSB Technical University of Ostrava
Czech Republic

In cooperation with

Department of Control and Instrumentation
Faculty of Electrical Engineering and Communication
Brno University of Technology
Czech Republic

Ostrava, Czech Republic

May 19th-21st, 2027

<https://pdes-conference.eu>

Sponsored by

IFAC – International Federation of Automatic Control
on Computers for Control (*Main Sponsor Technical Committee*)
on Human Machine Systems (*Co-sponsoring Technical Committee*)

Aim and Scope

The conference is organized by the Department of Cybernetics and Biomedical Engineering of the Faculty of Electrical Engineering and Computer Science, VSB Technical University of Ostrava. It is considered to be a continuation of previous PDES conferences. On the basis of organizers' experiences and participants' opinions it has been decided to follow this scope of IFAC/IEEE PDES 2024 conference.

The main goal is to provide a forum to present the latest research results and experiences in the area of the design and application of programmable devices and embedded systems and a forum to discuss the current status and future trends of this particular branch of applied electronics in control and information technology.

General Information

This is an invitation to submit papers and to take part in the conference. The program will include few topics covering the main areas listed on the other side of this announcement.

Papers or posters accepted by the International Program Committee will be published in the IFAC online series electronic proceedings. The authors will be asked to send camera-ready-copy manuscripts according to the required format. The conference official language is English.

Workshop Fees

- | | |
|--|-------|
| • Registration Fee | 600 € |
| • Early (till April 10 th , 2027) | 500 € |
| • Late (after May 21 st , 2027) | 700 € |
| • Student Registration Fee | 350 € |
| • Early (till April 10 th , 2027) | 300 € |
| • Late (after May 21 st , 2027) | 400 € |

Copyright Conditions

All publication material submitted for presentation at an IFAC-sponsored meeting (Congress, Symposium, Conference, Workshop) must be original and hence cannot be already published, nor can it be under review elsewhere. The authors take responsibility for the material that has been submitted. IFAC-sponsored conferences will abide by the highest standard of ethical behavior in the review process as explained on the Elsevier webpage (<https://www.elsevier.com/authors/journal-authors/policies-and-ethics>), and the authors will abide by the IFAC publication ethics guidelines (<http://www.ifac-control.org/events/organizers-guide/PublicationEthicsGuidelines.pdf/view>).

Accepted papers that have been presented at an IFAC meeting will be published in the proceedings of the event using the open-access IFAC-PapersOnLine series hosted on ScienceDirect (<http://www.sciencedirect.com>). To this end, the author(s) must confer the copyright to IFAC when they submit the final version of the paper through the paper submission process. The author(s) retain the right to use a copy of the paper for personal use, internal institutional use at the author(s)' institution, or scholarly posting at an open web site operated by the author(s) or their institution, limited to noncommercial use. Any other use of the paper requires approval by IFAC.

Important Dates

- **October 1st, 2026**
Draft Papers Submissions
- **March 1st, 2027**
Acceptance/Rejection Papers
- **April 1st, 2027**
Camera-ready Papers, Binding Registration
- **May 19th-21st, 2027**
Conference will be held

Conference Venue

PDES 2027 conference will be held in VSB-TU Ostrava campus, Ostrava (Czech Republic).

[National Organizing Committee](#)

Zdenek Slanina (NOC chair & editor)

IFAC PDES 2027 Conference Secretariat

Department of Cybernetics and Biomedical Engineering
Faculty of Electrical Engineering and Computer Science
VSB Technical University of Ostrava
17. listopadu 15
708 33 Ostrava-Poruba
Czech Republic
Email: pdes@vsb.cz

[International Program Committee](#)

Radek Martinek (Czech Republic, **IPC chair**)

Zdenek Bradac (Czech Republic, **IPC vice-chair**)

Petr Zmij (Czech Republic, **IPC chair from industry**)

IPC Members

Jakub Arm (Czech Republic)
Pavel Balda (Czech Republic)
Pavol Bistak (Slovakia)
Zane Broka (Latvia)
Andreas Drauschke (Austria)
Frantisek Duchon (Slovakia)
Petr Fiedler (Czech Republic)
Antonio Gordillo-Guerrero (Spain)
Radovan Hajovsky (Czech Republic)
Tilo Heimbald (Germany)
Mikulas Huba (Slovakia)
Dagmar Janacova (Czech Republic)
Dejan Jokic (Bosnia and Herzegovina)
Vaclav Kaczmarczyk (Czech Republic)
Dariusz Kania (Poland)
Aleksandra Kawala-Sterniuk (Poland)
Jiri Koziorek (Czech Republic)
Ondrej Krejcar (Czech Republic)
Mihai Machedon-Pisu (Romania)
Adam Milik (Poland)
Seyedali Mirjalili (Australia)
Stepan Ozana (Czech Republic)
Peter Papcun (Slovakia)
Andrzej Pulka (Poland)

Vladimir Rajovic (Serbia)
Mose Rossi (Italy)
Axel Sikora (Germany)
Vlastimil Slany (Czech Republic)
Jiri Spale (Germany)
Rozsa Szabolcs (Hungary)
Vladimir Vasek (Czech Republic)
Wojciech Walendziuk (Poland)
Marek Wegrzyn (Poland)
Katarina Zakova (Slovakia)
Jozef Zivcak (Slovakia)
Iveta Zolotova (Slovakia)

[Topics](#)

- **Programmable Devices and Embedded Hardware Architectures**
 - **FPGA, SoC, heterogeneous embedded platforms**
- **Embedded Systems Design and Real-Time Implementation**
 - **microprocessors, microcontrollers, real-time systems**
- **Industrial Programmable Control Systems**
 - **PLCs, industrial PCs, embedded automation**
- **Control Systems and Control Theory in Embedded Applications**
- **Signal Processing and Control for Embedded and Biomedical Systems**
- **Communication and Networking for Embedded Systems**
 - **industrial and distributed embedded networks**
- **Reliability, Safety and Cybersecurity of Embedded Systems**
- **Embedded Systems for Energy and Power Applications**
 - **renewable energy, power electronics, smart grids**
- **Embedded Systems in Industrial and Critical Applications**
- **Education in Embedded and Programmable Control Systems**