

## The Venue

Wrocław, commonly known by its German and English name Breslau before 1945 is the largest city and capital of Lower Silesian Voivodeship. Wrocław is also the historic capital of Silesia. It lies on the banks of the River Oder (Odra), 40 km from the Sudeten Mountains. The population of Wrocław in 2018 was 640,648, making it the fourth-largest city in Poland and is among one of the republic's major manufacturing, banking, industrial, tourist and cultural centers. Thanks to hosting events such as the Euro 2012 Championship and the 2016 European Capital of Culture, Wrocław is gaining a larger European and international profile, drawing in a growing amount of tourists for its historic city center, picturesque bridges and islands, and the city's relaxed liberal culture. The city is also known for its high quality of life.

Wrocław is located in southwestern Poland, 160 km from Germany and 120 km from the Czech Republic. It is well equipped with communication facilities: international airport, railways, highways and river ports. The city with its charming historical centre, parks, good restaurants and friendly people is a pleasant place to visit.

For more information see:

[https://www.staypoland.com/about\\_wroclaw.htm](https://www.staypoland.com/about_wroclaw.htm)  
<https://visitwroclaw.eu/en/top-10-attractions-wroclaw>  
<https://visitwroclaw.eu/en/>



## Travel Arrangement

**Air:** Wrocław is served by Wrocław-Copernicus Airport (IATA: WRO) a small yet modern airport, located 10 km on west of the city center, near the A8 motorway. Airlines flying into the city include Lufthansa, SAS Scandinavian Airlines and Polish national carrier LOT. Additional low cost airlines servicing the city include Eurowings, Ryanair and Wizz Air.

**Rail:** Direct international railway connections to Wrocław from several European Cities are available. It is also linked with all other main towns and cities in Poland. The Intercity train trip to Warsaw takes about 5 hours and to Berlin 4 hours. See <http://www.pkp.pl> for most up-to-date schedule.

**Road:** Wrocław can be easily reached by road from major cities in Europe. The most important is national highway A4 connecting Wrocław with Germany and Ukraine.

## Accommodation

The conference will be held in a hotel located in the city centre. The accommodation will be offered for the conference participants at the conference site.

## Deadlines

Intended authors should note the following deadlines:

|                                           |                                       |
|-------------------------------------------|---------------------------------------|
| Receipt of papers                         | <b>February 29<sup>th</sup>, 2020</b> |
| Notification of acceptance of papers      | <b>April 25<sup>th</sup>, 2020</b>    |
| Final paper versions and 1-page abstracts | <b>May 15<sup>th</sup>, 2020</b>      |

## Price Information

|                                                                |          |
|----------------------------------------------------------------|----------|
| Standard registration fee                                      | 360 Euro |
| IEEE Members registration fee                                  | 300 Euro |
| Student registration fee                                       | 260 Euro |
| Late registration fee (paid after May 15 <sup>th</sup> , 2020) | 450 Euro |
| Accompanying person social events fee                          | 150 Euro |

Conference fee includes: participation in all sessions, MIXDES 2020 Proceedings CD and other conference materials, coffee and tea during the breaks, all lunches, the Welcome Party and Conference Banquet, tourist activities (student fee does not include welcome party and closing ceremony).

Conference fee does not include accommodation and transport



## Enquiries

Mariusz Orlikowski (Conference Secretary)  
Lodz University of Technology  
Department of Microelectronics and Computer Science (K-25)  
ul. Wólczajska 221/223 (building B18), 90-924 Łódź, Poland  
tel.: +48 604397239, fax: +48 426360327

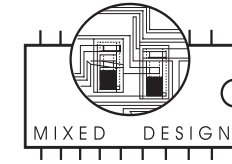
e-mail: [mixdes2020@dmcs.p.lodz.pl](mailto:mixdes2020@dmcs.p.lodz.pl)

## WWW

Information on MIXDES 2020 will be available on the World Wide Web at the following location:

<http://www.mixdes.org>

# CALL FOR PAPERS



## MIXDES 2020

# 27<sup>th</sup> International Conference MIXED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS



## An invitation to submit paper proposals and attend the Conference



**Wrocław, POLAND, 25 - 27 June 2020**





**MIXDES 2020**  
**27<sup>th</sup> International Conference**  
**MIXED DESIGN OF INTEGRATED**  
**CIRCUITS AND SYSTEMS**  
**Wrocław, POLAND, 25-27 June 2020**

**Organized by:**

Department of Microelectronics and Computer Science,  
Technical University of Lodz, Poland

Institute of Micro- and Optoelectronics  
Warsaw University of Technology, Poland

**In cooperation with:**

Poland Section IEEE - CAS & ED Chapters

Section of Microelectronics and Electron Technology  
of the Committee of Electronics and Telecommunication  
of the Polish Academy of Sciences

Commission of Electronics and Photonics  
of Polish National Committee  
of International Union of Radio Science - URSI

**International Programme Committee**

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| Prof. M. Bucher      | Technical University of Crete, Greece                       |
| Prof. J. Cabestany   | Universitat Politècnica de Catalunya, Spain                 |
| Prof. J. Collet      | LAAS - CNRS, Toulouse, France                               |
| Prof. A. Dąbrowski   | Poznan University of Technology, Poland                     |
| Prof. G. De Mey      | University of Ghent, Belgium<br><b>(Vice-Chairman)</b>      |
| Prof. J. Deen        | McMaster University, Canada                                 |
| Prof. M.H. Fino      | Universidade Nova de Lisboa, Portugal                       |
| Dr. D. Foty          | Gilgamesh Associates, USA                                   |
| Prof. L. Golonka     | Wrocław University of Technology, Poland                    |
| Prof. K. Górecki     | Gdynia Maritime University, Poland                          |
| Dr. W. Grabiński     | GMC, Switzerland                                            |
| Prof. P. Gryboś      | AGH University of Science and Technology, Poland            |
| Prof. V. Hahanov     | Kharkiv National Univ. of Radioelectronics, Ukraine         |
| Prof. A. Handkiewicz | Poznan University of Technology, Poland                     |
| Prof. A. Hatzopoulos | Aristotle University of Thessaloniki, Greece                |
| Dr. S. Hausman       | Lodz University of Technology, Poland                       |
| Dr. G. Jabłoński     | Lodz University of Technology, Poland                       |
| Prof. A. Jakubowski  | Warsaw University of Technology, Poland                     |
| Prof. A. Kos         | AGH University of Science and Technology, Poland            |
| Prof. W. Kuźmicz     | Warsaw University of Technology, Poland                     |
| Prof. C. Lallement   | Strasbourg University, France                               |
| Prof. M. Lobur       | Lviv Polytechnical National University, Ukraine             |
| Dr. M.M. Louerat     | Université Pierre et Marie Curie, Paris, France             |
| Prof. T. Łuba        | Warsaw University of Technology, Poland                     |
| Prof. B. Macukow     | Warsaw University of Technology, Poland                     |
| Prof. J. Madrenas    | Universitat Politècnica de Catalunya, Spain                 |
| Dr. D. Makowski      | Lodz University of Technology, Poland                       |
| Prof. A. Martinez    | LAAS - CNRS, Toulouse, France<br><b>(Honorary Chairman)</b> |

Prof. A. Materka  
Prof. W. Mathis  
Prof. J.M. Moreno  
Dr. M. Napieralska  
Prof. A. Napieralski

Prof. J. Nishizawa  
Dr. J.L. Noullet  
Prof. L. Opalski  
Prof. A. Pfitzner

Prof. E. Piętko  
Prof. W. Pleskacz  
Dr. B.F. Romanowicz  
Prof. J.A. Rubio  
Prof. A. Rybarczyk  
Dr. J.-M. Sallèse  
Prof. D. Sankowski  
Dr. M. Schwarz  
Prof. N. Stojadinović  
Prof. T. Szmuc  
Dr. P. Śniatała  
Prof. M. Tadeusiewicz  
Dr. D. Tomaszewski  
Dr. P. Tounsi  
Dr. M. Turowski  
Prof. R. Ubar  
Prof. G. Wachutka  
Prof. K. Wawryn  
Prof. B. Więcek  
Prof. S. Yoshitomi  
Prof. J. Zarębski  
Prof. M. Zubert

Lodz University of Technology, Poland  
University of Magdeburg, Germany  
Universitat Politècnica de Catalunya, Spain  
Lodz University of Technology, Poland  
Lodz University of Technology, Poland  
**(General Chairman)**

Semiconductor Research Institute, Japan  
INSA de Toulouse, France  
Warsaw University of Technology, Poland  
Warsaw University of Technology, Poland  
**(Programme Chairman)**

Silesian University of Technology, Poland  
Warsaw University of Technology, Poland  
Nano Science and Technology Institute, USA  
Universitat Politècnica de Catalunya, Spain  
Poznan University of Technology, Poland  
Swiss Federal Institute of Technology, Switzerland  
Lodz University of Technology, Poland  
Robert Bosch GmbH, Germany  
University of Niš, Serbia  
AGH University of Science and Technology, Poland  
Poznan University of Technology, Poland  
Lodz University of Technology, Poland  
Institute of Electron Technology, Warsaw, Poland  
INSA de Toulouse, France  
Alphacore Inc., USA  
Tallin Technical University, Estonia  
Technische Universität Muenchen, Germany  
Technical University of Koszalin, Poland  
Lodz University of Technology, Poland  
Toshiba Corp., Japan  
Gdynia Maritime University, Poland  
Lodz University of Technology, Poland

**Organizing Committee**

Prof. A. Napieralski (Chairman)  
Dr. M. Orlikowski (Secretary)  
Dr. M. Napieralska (Vice-Chairman)  
Dr. G. Jabłoński  
Department of Microelectronics and Computer Science  
Technical University of Lodz, Poland

Prof. W. Kuźmicz  
Institute of Micro- and Optoelectronics  
Warsaw University of Technology, Poland

**The MIXDES Conference**

The MIXDES conference series started in Dębe near Warsaw in 1994 and has been organised yearly in the most interesting Polish cities. In 2020 we would like to continue the tradition of inviting you to the most attractive places in Poland and the conference will take place in Wrocław.

In short period of time the conference has become an important event in the Central Europe allowing to discuss the recent research progress in the field of design, modelling, simulation, testing and manufacturing in various areas such as micro- and nanoelectronics, semiconductors, sensors, actuators and power devices as well as their interdisciplinary applications.

**Areas of Interest**

The topics of the Conference include:

- 1. Design of Integrated Circuits and Microsystems**  
Design methodologies. Digital and analog synthesis. Hardware-software codesign. Reconfigurable hardware. Hardware description languages. Intellectual property-based design. Design reuse.
- 2. Thermal Issues in Microelectronics**  
Thermal and electro-thermal modelling, simulation methods and tools. Thermal mapping. Thermal protection circuits.
- 3. Analysis and Modelling of ICs and Microsystems**  
Simulation methods and algorithms. Behavioural modelling with VHDL-AMS and other advanced modelling languages. Microsystems modelling. Model reduction. Parameter identification.
- 4. Microelectronics Technology and Packaging**  
New microelectronic technologies. Packaging. Sensors and actuators.
- 5. Testing and Reliability**  
Design for testability and manufacturability. Measurement instruments and techniques.
- 6. Power Electronics**  
Design, manufacturing, and simulation of power semiconductor devices. Hybrid and monolithic Smart Power circuits. Power integration.
- 7. Signal Processing**  
Digital and analogue filters, telecommunication circuits. Neural networks. Artificial intelligence. Fuzzy logic. Low voltage and low power solutions.
- 8. Embedded Systems**  
Design, verification and applications.
- 9. Medical Applications**  
Medical and biotechnology applications. Biometrics. Thermography in medicine.

**Official Language**

Official language of the Conference is English, neither translation nor interpretation will be provided.

**Call for Papers and Contributions**

A call is made for papers, contributions and other conference activities on the topics mentioned above.

Full papers should be submitted till February 29<sup>th</sup>, 2020 - only in electronic form (MS Word, RTF, Open Office Writer, LaTeX, together with a generated PDF file).

The paper submission form and required format is available on our Web page. Authors are asked to indicate the topic into which their papers fall. The papers will be reviewed by at least two referees from the International Programme Committee. The papers will be published in the proceedings from the author's electronic submission.

**Tutorials and Special Sessions - Call for Proposals**

Several tutorials/special sessions will be held prior to the conference. Authors willing to propose a tutorial at MIXDES 2020 are invited to send a proposal to the Organizing Committee. The proposal should consist of a three-page summary including tutorial title, name and affiliation of the lecturer(s), tutorial objectives and audience, topical outline and provisional schedule of the tutorial.