

## Curriculum Vitae

Name: **Marek Miśkiewicz**

Nationality: Polish

Scientific degree: D. Sc. (habilitation), Ph. D.

Present position held: Associate Professor  
AGH University of Science and Technology  
Department of Measurements and Electronics  
Al. Mickiewicza 30  
30-059 Kraków  
Poland  
Tel: + 48 12 617 50 49  
Email: [miskow@agh.edu.pl](mailto:miskow@agh.edu.pl)

Previous positions: Assistant (1995-2004), Department of Electronics, AGH-UST  
Assistant Professor (2004-2010), Department of Electronics, AGH-UST

Scientific degrees: M. Sc. (1995) in electronic engineering, Faculty of Electrical Engineering, Automatics, and Electronics, AGH-UST, Cracow, Poland  
Ph. D. (2004) in electronic engineering, Faculty of Electrical Engineering, Automatics, and Electronics, AGH-UST, Cracow, Poland  
D. Sc. (habilitation) (2010) in telecommunication, Faculty of Electrical Engineering, Automatics, and Electronics, AGH-UST, Cracow, Poland

National distinction: *Brązowy Medal za Długoletnią Służbę* granted by President of Republic of Poland, 2009

Teaching Topics: Digital Communication Systems  
Wireless Communication  
Networked Sensor and Control Systems  
Electronic Instrumentation in Digital Communication

Research topics: Event-Triggered Architectures of Circuits and Systems  
Event-Based Communication and Signal Processing  
Performance Analysis of Networked Sensor and Control Systems

Foreign languages: English:  
- Listening: Independent User (B2),  
- Reading: Proficient User (C1),  
- Spoken interaction: Independent User (B2),  
- Spoken production: Independent User (B2),  
  
German:  
- Listening: Basic User (A2),  
- Reading: Basic User (A2),  
- Spoken interaction: Basic User (A2),  
- Spoken production: Basic User (A2),

Membership in Committees and Scientific Societies:

Senior Member of IEEE (*Institute of Electrical and Electronics Engineers*)

Chair of IEEE Industrial Electronics Society Technical Subcommittee on Event-Based Control and Signal Processing in Factory Automation (2014-2016)

Member of IEEE Industrial Electronics Society Technical Committee on Network-Based Control Systems and Applications (2011-2013)

Member of IEEE Emerging Technologies and Factory Automation (ETFA) Conference Steering Committee

Co-founder of International Conference on Event-Based Control, Communication, and Signal Processing EBCCSP

General Co-Chair at 17<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation ETFA 2012, Kraków, Poland

General Co-Chair at International Conference on Event-Based Control, Communication, and Signal Processing EBCCSP 2015 (Kraków, Poland), EBCCSP 2016 (Kraków, Poland), EBCCSP 2017 (Funchal, Portugal), EBCCSP 2018 (Perpignan, France), EBCCSP 2019 (Vienna, Austria), EBCCSP 2020 (virtual), EBCCSP 2021 (virtual)

Program Committee Co-Chair at 18<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation ETFA 2013, Cagliari, Italy

Work-in-Progress Co-Chair at 10<sup>th</sup> IEEE Workshop on Factory Communication Systems WFCS 2015, Toulouse, France

Organizer and Program Committee Co-Chair at Workshop on Event-Based Systems EBS 2014, Barcelona, Spain

Local Organizing Co-Chair at 11th IEEE International Symposium on Industrial Embedded Systems SIES 2016, Kraków, Poland

Program Committee Co-Chair of Technical Track on “Intelligent Sensors, Sensor Networks, and Information Processing” at IEEE 20<sup>th</sup> International Conference on Emerging Technologies and Factory Automation ETFA 2015, Luxembourg

Special Sessions Co-Chair at 12<sup>th</sup> IEEE Workshop on Factory Communication Systems WFCS 2017, Trondheim, Norway

Finance Co-Chair at 22<sup>nd</sup> IEEE International Conference on Emerging Technologies and Factory Automation ETFA 2017, Limassol, Cyprus

Expert of The Italian Ministry for Education, University and Research (MIUR) for Research Projects Evaluation

Referee in The Italian Evaluation of Research Quality program (VQR 2004-2010) ordered by Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)

International Expert for Evaluation of Proposal in PISCOPIA Fellowship Programme (2014) within EU 7<sup>th</sup> Framework Programme at University of Padova, Italy

Member of Board of Experts of *European Coordinated Research on Long-term Challenges in Information and Communication Sciences & Technologies ERA-Net* (CHIST-ERA)

Member of Board of External Experts of National Foresight Programme “Poland 2020”

Member of Board of Experts for evaluation of research proposals in National Science Centre, Poland

Member of Board of External Experts in National Centre for Research and Development, Poland

Guest Editor in *IEEE Transactions on Industrial Informatics*, *IEEE Transactions on Circuits and Systems II – Express Briefs*, *Measurement*

Review Editor in Control and Automation Systems (special section of *Frontiers in Control Engineering*)

Member of Program Committees of 50+ international scientific conferences

Awards:

*Gold medal with mention* at The World Exhibition of Invention, Research and Industrial Innovation INNOVA 2008, Brussels, Belgium for the invention “Asynchronous Sigma-Delta Analog-to-Digital Converter” (inventors: D. Kościelnik and M. Miśkiewicz)

First award at Innovation Leaders Competition (*Krajowi Liderzy Innowacji*), category: Innovation Project, Małopolska Region (2008) for the invention “Asynchronous Sigma-Delta Analog-to-Digital Converter” (inventors: D. Kościelnik and M. Miśkiewicz)

Award of Minister of Science and Higher Education “for international invention achievements”, Warsaw, March 2009

## Research and R&D Projects:

Signal processing techniques based on extrema sampling, National Science Centre, Poland (research project, Principal Investigator) (since 2019)

Design and implementation of optimized and metastability-insensitive successive approximation time-to-digital converter, National Science Centre, Poland, (PhD programme research project, Supervisor) (since 2018)

Event-based signal analysis, recognition and detection, (research project, Investigator) (since 2018)

Sub-Nyquist rate event-driven signal processing with sporadic data records, National Science Centre, Poland, (research project, Principal Investigator) (2013-2018)

Clockless analog-to-digital converters with charge redistribution (IniTech program research and development project, Principal Investigator) (2010-2013)

Asynchronous analog-to-digital converters with output signal compression (research project, Principal Investigator) (2009-2012)

Asynchronous digital-to-analog converters and quasi-digital-to-analog converters (research project, Investigator) (2009-2011)

Asynchronous analog-to-digital converters with I2C interface" (research & development project, Investigator) (2009-2011)

Adaptive CSMA protocol for sensor networks with dynamic shaping of slot selection probability density function (research & development project, Principal Investigator) (2008-2009)

Performance limits of predictive CSMA protocols for sensor networks (research project, Principal Investigator) (2008-2009)

The asynchronous analog-to-digital conversion (research project, Principal Investigator) (2005-2008)

The event-triggered intelligent sampling algorithms (research project, Investigator) (2003-2004)

ModimNet – multimedia course of *modimes* languages for francophones, Socrates Lingua D no. 72087-C9-1-1999-1-FR-Lingua D (1999-2001)

The simulations of control network MAC protocols for soft real-time applications (research project, Principal Investigator) (2000-2001)

Modification of education programs in teaching of advanced communication networks and systems, Tempus No JEP-07589/94 (1995-1996)

Patent protection for inventions of asynchronous instantaneous and mean value analog-to-digital converters with charge redistribution, Innovative Economy Programme, Sub-measure 1.3.2 (Principal Investigator) (2011-2013)

„Patent protection in USA and Europe for invention *Interface for communication between sensing devices and I2C bus*”, Innovative Economy Programme, Sub-measure 1.3.2 (Principal Investigator) (2011-2012)

Patent protection in USA and Europe for invention *Method of controlling access of devices to communication medium in distributed networks*, Innovative Economy Programme, Sub-measure 1.3.2 (Principal Investigator) (2011-2012)

PCT patent application and commercialization support for the invention *Interface for communication between sensing devices and I2C bus*, PATENT PLUS program (Principal Investigator) (2009-2010)

PCT patent application and commercialization support for the invention *Method of controlling access of devices to communication medium in distributed networks*, PATENT PLUS program (Principal Investigator) (2009-2010)

PCT patent application and commercialization support for the invention *Method and apparatus for analog-to-digital conversion using asynchronous Sigma-Delta modulation*, PATENT PLUS program (Principal Investigator) (2007-2009)

Number of scientific publications: 100+

Number of patents: 40+

Full list scientific publications:

<https://scholar.google.pl/citations?user=Zi5C9ZsAAAAJ&hl=pl&oi=ao>

Listed in the ranking of the world's top 2% most cited researchers according to:

J.P.A. Ioannidis, K.W. Boyack, J. Baas, „Updated science-wide author databases of standardized citation indicators”, *Public Library of Science Biology*, 2020

Reviews for journals:

IEEE Transactions on Industrial Electronics  
IEEE Transactions on Industrial Informatics  
IEEE Transactions on Circuits and Systems II: Express Briefs  
IEEE Transactions on Control Systems Technology  
IEEE Transactions on Mobile Computing  
IEEE Transactions on Signal Processing  
IEEE Transactions on Vehicular Technology  
IEEE Transactions on Instrumentation and Measurement  
IEEE Communications Letters  
IEEE Signal Processing Letters  
IEEE Industrial Electronics Magazine  
ACM Transactions on Design Automation of Electronic Systems  
KSII Transactions on Internet and Information Systems  
ISA Transactions  
Measurement  
Sensors  
Applied Sciences  
Electronics  
Symmetry  
International Journal of Adaptive Control and Signal Processing  
International Journal of Distributed Sensor Networks  
International Journal of Electronics and Communications  
Computer Communications  
Computational Statistics and Data Analysis  
International Journal of Computing and Digital Systems  
International Journal of Applied Mathematics and Computer Science  
Computers & Electrical Engineering  
International Journal of Robust and Nonlinear Control

Annual Reviews in Control

Reviews of research proposals for:

National Science Centre (NCN), Poland

National Centre for Research and Development (NCBiR), Poland

European Coordinated Research on Long-term Challenges in Information and Communication Sciences & Technologies ERA-Net (CHIST-ERA)

Italian Ministry for Education, University and Research (MIUR), Italy

French National Research Agency (ANR), France

Natural Sciences and Engineering Research Council (NSERC), Canada

Research Grants Council, Hong Kong

Research Foundation Flanders, Belgium

University of Luxembourg, Luxembourg

Katholieke Universiteit Leuven, Belgium