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**EDUCATION AND SCIENTIFIC DEGREES**

- 2009 D.Sc. (habilitation) degree in technical sciences (biocybernetics and biomedical engineering) at the Nalecz Institute of Biocybernetics and Biomedical Engineering PAS (IBBE PAS),
- 1997 Ph.D. degree in technical sciences at IBBE PAS,  
Thesis title: „*Support of the intensive insulin treatment realized by means of multi-injections technique in ambulatory care settings*”,
- 1990 M.Sc. degree in mechanics in specialization of biomedical engineering at the Faculty of Fine Mechanics, Warsaw University of Technology.

**PROFESSIONAL EXPERIENCE**

- since 2018 Deputy Director for External Projects at IBBE PAS,
- since 2014 Director of the International Centre of Biocybernetics PAS,
- 2014 – 2014 Deputy Director for Research at IBBE PAS,
- since 2010 Professor at IBBE PAS,
- since 2010 Member of the Council of International Centre of Biocybernetics,
- 2010 – 2014 Head of the Department of Biomedical Systems and Technologies at IBBE PAS,
- since 2010 Member of the Scientific Council of IBBE PAS,
- 2009 – 2010 Associate Professor at IBBE PAS,
- 2007 – 2018 Deputy Director for General Affairs at IBBE PAS,
- 2001 – 2009 Senior researcher in the Lab. of Biomedical Engineering Methods for Support of Intensive Therapies at IBBE PAS,
- 2000 – 2001 Postdoctoral Fellow in the Image Processing Laboratory at the Institute of Science and Technology, Graduate School of Information Science, Nara, Japan (fellowship founded by the Japan Society for the Promotion of Science in the framework of Postdoctoral Fellowship for Foreign Researchers Program),
- 1990 – 2003 Assistant, Senior Assistant and Senior researcher in the Lab. of Drug Delivery Systems and Membrane Research at IBBE PAS.

**Short-term scientific visits**

- 2011 Faculty of Biomedical Engineering, Osaka Electro-Communication University, Osaka (Japan),
- 2010 College of Electrical Engineering and Computer Science, Department of Electronic Engineering, Chung Yuan Christian University, Chung Li (Taiwan Republic of China),
- 2006 Dept. of Pure and Applied Biochemistry, Lund University, Lund (Sweden),

- 2003 Institute of Science and Technology, Graduate School of Information Science, Nara (Japan),
- 2002 Cheltenham General Hospital, Cheltenham (United Kingdom),
- 1999 Dipartimento di Medicina Clinica e Biotecnologia Applicata, Università degli Studi di Bologna, Policlinico S. Orsola, Bologna (Italy),
- 1998 Bioengineering Unit, University of Strathclyde, Glasgow (Scotland, UK),
- 1997 Centre of Measurements and Information in Medicine, System Sciences Dept., City University, London (United Kingdom),
- 1997 Institute für Physiologie und Biochemie der Ernährung at Bundesanstalt für Milchforschung, Kiel (Germany),
- 1996 Semmelweis University of Medicine, Budapest (Hungary).

## **SCIENTIFIC RESEARCH AND INTERESTS**

Artificial internal organs including artificial pancreas and the diabetes treatment, technical support methods for monitoring and intensive treatment of chronic diseases, application of the information and telecommunication technologies in medicine, tele-homecare, telemonitoring and telemedicine, bio-measurements and decision support systems in medicine.

## **GRANTS**

Leader (Principle investigator) and executor of 15 research grants, developmental grants, expedient grants and applied grants from the Committee for Scientific Research, Ministry of Science and Higher Education, National Science Centre, National Centre for Research and Development and structural funds of the European Union with budgets from 100k to 650k Euro.

## **PUBLICATIONS**

Author of 122 publications including 5 monographs, 15 chapters and 61 peer reviewed journal papers and 41 materials in conference proceedings. Author of 4 patents, 1 industrial standard and 8 expert reports. According to Web of Science these publications were cited more than 450 times. Hirsch factor is 13 (in Google Scholar ca. 730 citations and H = 17).

## **TEACHING EXPERIENCE**

- 2006-2007 Lecturer for physicians at the Medical Centre of Postgraduate Education on telemonitoring and home telecare in treatment of diabetes and its complications.
- since 1994 Lecturer on technical support of diabetes treatment and artificial pancreas for Ph.D. students at IBBE PAS and the Doctoral School on Information and Biomedical Technologies of Institutes of the Polish Academy of Sciences (TIB), and for M.Sc. students at the Faculty of Mechatronics of the Warsaw Technical University, Faculty of Physics and Applied Informatics of the AGH University of Science and Technology, and Faculty of Electronics of the Warsaw Technical University.

## **AWARDS (selected)**

- 2021 The Economic Award of the President of the Republic of Poland in the "Research & Development" category for the development of an innovative device enabling independent lung ventilation (Ventil).

- 2021 Polish Product of the Future Award in the category *“Product of the Future of Institutions of Higher Education and Science”* for the development of an innovative device enabling independent lung ventilation using one ventilator (Ventil).
- 2009 Award *„Innovation for Health 2009”* in a category of the Innovative Medical Technologies for Computerized system controlling treatment of the diabetic foot syndrome patients (TeleDiaFoS) in a contest organized by Working Group for Innovations in Health Care.
- 2005 Gold Cross of Merit.
- 2002 II-Grade Scientific Award of the Rector of the Medical Academy of Warsaw for design and evaluation of the clinical efficacy of the system for monitoring and control of the intensive insulin treatment realized by means of multi-injections technique in pregnant diabetic women.
- 1996 Distinction of the doctoral thesis from the Scientific Council of the IBBE PAS.
- 1994 II-Grade Scientific Award of the Rector of the Medical Academy of Warsaw for scientific achievements in a project entitled *„Multidisciplinary model of the medical care in pregnant diabetic women in Poland”*.

## ACTIVITY IN PROFESSIONAL AND SCIENTIFIC ORGANIZATIONS

- since 2006 International Federation for Medical and Biological Engineering  
**Head of the Industry Working Group (since 2016)**  
 Secretary of the Industry Working Group (2008-2015)  
 Member of the Publication and Publicity Committee (since 2013)
- since 1998 Polish Society for Biomedical Engineering (PSBE) – founding member  
 Member of the Executive Board of PSBE (2002-2007), **Treasurer (2005-2007)**,
- since 1997 European Society for Artificial Organs (ESAO)  
 Governor at the ESAO Board (2007-2012),  
 Secretary of the XXIII ESAO Congress (in 1996),  
 Chairman of the Local Organizing Committee of the XXXI ESAO Congress (in 2004),  
 President of the XLIII ESAO Congress (in 2004).
- 2017-2019 President Elect of ESAO  
**2019-2021 President of ESAO**
- since 2021 Past President of ESAO

## EXPERT ACTIVITY

### Supervisor and reviewer in D.Sc. and Ph.D. procedures

- Supervisor of 2 defended and one on-going Ph.D. theses (incl. one defended with distinctions) is biocybernetics and biomedical engineering
- Reviewer in 2 D.Sc. (habilitation) procedures in information technology and biomedical engineering and chairman, secretary or member in 6 Habilitation Committees.
- Reviewer of Ph.D. theses in technical sciences in Canada, India, Poland and Spain, and a Member of over 40 Doctoral Committees.

### Journal editor

- since 2017 Editor-in-Chief of *Biocybernetics and Biomedical Engineering (IF=4.314)*.
- 2012-2019 Deputy Editor of *IFMBE Proceedings*.

### **Journal editorial board member**

since 2021      Nutrients (a member of the Topical Advisory Panel),  
2015-2016      SpringerPlus,  
since 2013      Advanced Biomedical Engineering (Japan),  
2011-2016      Biocybernetics and Biomedical Engineering,  
since 2002      Acta Bio-optica et Informatica Medica.

### **Invited lecturer**

- Invited or plenary speaker during 20 international and 7 national scientific conferences, and 9 seminars and workshops of the International Centre for Biocybernetics, Polish Academy of Sciences.

### **Expert for public or commercial organizations**

- European Commission (Horizon 2020 FETOPEN RIA, ERA PerMed, Horizon EIC PATHFINDEROPEN and EIC programs),
- Qatar National Fund,
- National Science Centre,
- National Centre for Research and Development,
- Operational Program Innovative Economy (founded by the European Commission),
- Program of the Ministry of Science and Higher Education for Support of the Research Infrastructure in framework of the Fund of Polish Science and Technology,
- Advisory Team in Biomedical Engineering on scientific journals and peer-reviewed materials from international conferences – chairman (Journal of Laws RP from Nov 16, 2018, item 2152, Ordinance of the Minister of Science and Higher Education from Oct 7, 2018),
- Interdisciplinary Team on projects applications in the framework of program “Support for scientific journals” (Official Journal of the Ministry of Science and Higher education from Oct 2, 2018, item 49, Ordinance of the Minister of Science and Higher Education from Sep 28, 2018),
- Commission for Medical Products in the Office for Registration of Medical Products, Medical Devices and Biocidal Products (since 2016),
- National Medicines Institute,
- Ames-Bayer, Novo Nordisk, Abbot Inc.

### **Journal paper reviewer**

- Reviewer in 40 international scientific peer-reviewed journals.