178th Seminar of the International Centre of Biocybernetics

III European Forum:

BME from Research to Commercialization

19-21 November, 2026

Warsaw Poland

PROGRAMME of the Forum

ORGANIZERS:

NALECZ INSTITUTE OF BIOCYBERNETICS AND BIOMEDICAL ENGINEERING POLISH ACADEMY OF SCIENCES

INTERNATIONAL CENTRE OF BIOCYBERNETICS

ADDRESS:
TROJDENA 4, 02-109 WARSZAWA

CONTACT:
MCB@IBIB.WAW.PL
TEL. +48 22 592 59 70

FUNDING:

Fundusze Europejskie dla Rozwoju Społecznego

Rzeczpospolita Polska

Dofinansowane przez Unię Europejską

NAWA

178th Seminar of the International Centre of Biocybernetics

3rd EUROPEAN FORUM
BIOMEDICAL ENGINEERING
FROM RESEARCH TO COMMERCIALIZATION

November 19-21, 2026

International Centre of Biocybernetics and
Nalecz Institute of Biocybernetics and Biomedical Engineering
Polish Academy of Sciences (IBBE PAS)
4 Trojdena street, Warsaw, Poland

Chairmen:

Prof. Dr. Ratko Magjarević, Zagreb, Croatia

Faculty of Electrical Engineering and Computing, University of Zagreb
President of the International Union for Physical and Engineering Sciences in Medicine
Past President of the International Federation for Medical and Biological Engineering

Prof. Dr. Piotr Ładyżyński, Warsaw, Poland

Nalecz Institute of Biocybernetics and Biomedical Engineering PAS
Chairman of the Innovation and Industry Committee of IFMBE

Secretary:

Mrs. Marta Baranowska-Szynkiewicz, Warsaw, Poland

International Centre of Biocybernetics PAS

Sponsors:

International Federation for Medical and Biological Engineering
Polish National Agency for Academic Exchange
International Centre of Biocybernetics PAS
Nalecz Institute of Biocybernetics and Biomedical Engineering PAS

Thursday, November 19, 2026

14:00 – 14:30 Registration and Welcome Coffee

14:30 – 16:00 **OPENING OF THE FORUM**
Location: IBBE PAS, Lecture hall

Chairs: Prof. Ratko Magjarević
Prof. Piotr Ładyżyński

14:30 – 14:45 **Prof. Piotr Ładyżyński** *(Poland)*
International Centre of Biocybernetics PAS
WELCOME ADDRESS

14:45 – 15:00 **Prof. Ratko Magjarević** *(Croatia)*
Faculty of Electrical Engineering and Computing, University of Zagreb
International Federation for Medical and Biological Engineering
International Federation for Medical and Biological Engineering

15:00 – 15:15 **Prof. Piotr Ładyżyński** *(Poland)*
Nalecz Institute of Biocybernetics and Biomedical Engineering PAS
Activities of the Innovation and Industry Committee of IFMBE

15:15 – 15:45 **Prof. Michał Wszoła** *(Poland)*
CEO Polbionica JSC, Warsaw
Commercializing Biomedical Innovation: Lessons from the Bionic Pancreas Journey

15:45 – 16:00 *Discussion*

16:00 – 16:30 *Coffee break*

Thursday, November 19, 2026

16:30 – 18:40 **SESSION I.** **From Research Funding to Clinical and Market Impact**
Location: IBBE PAS, Lecture Hall

Chairmen: Prof. Johan Stiens (Belgium)
Prof. Luis E. Fernández (Mexico)

16:30 – 17:00 **Bogna Hryniszyn** *(Poland)*
Director of the Excellence in Science Department, Polish Academy of Sciences
ERC Supporting Mechanisms

17:00 – 17:10 *Discussion*

17:10 – 17:40 **Prof. Kristina Bliznakova** and **Prof. Nikolay Dukov** *(Bulgaria)*
Electronic and Information Technologies in Healthcare, Medical University of Varna
From Research to Clinical Innovation: Clinical Applications of Breast-Imaging Phantoms and X-ray Technologies and Their Path toward Commercialization

17:40 – 17:50 *Discussion*

17:50 – 18:30 **Prof. Tomasz Ciach** *(Poland)*
Founder Board member at NanoGroup, Founder Science4Beauty, NanoVelos, NanoSanguis, NanoThea, StenoCoat; Head of Department of Biotechnology and Bioprocess Engineering, Department of Biotechnology and Bioprocess Engineering, Faculty of Chemical and Process Engineering, Warsaw University of Technology, Warsaw
From Scientific Discovery to Medical Product: Research, Translation and Market Reality

18:30 – 18:40 *Discussion*

18:40 – 21:00 **GET TOGETHER**
Location: IBBE PAS, Exhibition hall

Friday, November 20, 2026

9:00 – 11:00 **SESSION II.** **Funding and Ecosystems for Biomedical Innovation**
Location: IBBE PAS, Lecture Hall

Chairmen: Prof. Domenec Puig Valls *(Spain)*
Prof. Anna Korzyńska *(Poland)*

9:00 – 9:30 **Miroslaw Raba, Natalia Stempak** *(Poland)*

National Contact Point for EU Research Programmes, National Centre for Research and Development, Warsaw

Horizon Europe: Turning Research into Market Success with NCP Support

9:30 – 9:40 *Discussion*

9:40 – 10:10 **Prof. Johan Stiens** *(Belgium)*

ETRO.RDI, VUB, Pleinlaan 2, B-1050 Brussels

The Fourth Generation of Innovation: From Technology Readiness to Antifragile Biomedical Innovation Ecosystems

10:10 – 10:20 *Discussion*

10:20 – 10:50 **Prof. Sio Hang (Lodge) Pun** *(China)*

State Key Laboratory of Analog and Mixed-Signal VLSI, AMSV, University of Macaua, Taipa, Macau

Bridging Research and Market: Commercializing BME Innovation across Cross-Border Innovation Zones

10:50 – 11:00 *Discussion*

11:00 – 11:30 *Coffee break*

Friday, November 20, 2026

11:30 – 13:30 **SESSION III. From Intellectual Property to Patient Impact**
Location: IBBE PAS, Lecture Hall

Chairmen: Prof. Sudesh Sivarasu *(South Africa)*
Prof. Jan Poleszczuk *(Poland)*

11:30 – 12:00 **Dr. Magdalena Tagowska** and **dr Agnieszka Żebrowska-Kucharzyk** *(Poland)*

Patpol Patent & Trademark Attorneys Ltd., Warsaw

From Research to Market: Will Your Patent Survive the Journey?

12:00 – 12:10 *Discussion*

12:10 – 12:40 **Prof. Murilo Contó** *(Brazil)*

Director of Health Economics and Research at Boston Scientific; Coordinator of Health Technology Assessment Committee of the Brazilian Innovative Health Industry Association; Advisor-elected of the Brazilian Society of Biomedical Engineering; Past Chair of Health Technology Assessment Division of the IFMBE

Beyond the Prototype: Navigating the Journey from Biomedical Research to Patient Impact

12:40 – 12:50 *Discussion*

12:50 – 13:20 **Prof. Andrzej Swinarew** *(Poland)*

V-ce director of Institute of Biomedical Engineering Institute; Faculty of Science and Technology, University of Silesia, Chorzów; Department of Training and Nutrition in Sports, Faculty of Physical Education, The Jerzy Kukuczka Academy of Physical Education, Katowice

From Patents to Patients: Translating Biomedical Research into Clinical Innovation

13:20 – 13:30 *Discussion*

13:30 – 14:30 *Lunch break*

Friday, November 20, 2026

14:30 – 16:30 **SESSION IV. AI, Clinical Data and Digital Health Innovation**
Location: IBBE PAS, Lecture Hall

Chairmen: Prof. Piotr Ładyżyński *(Poland)*
Prof. Nicolae Marius Roman *(Romania)*

14:30 – 15:00 **Prof. Domenec Puig Valls** *(Spain)*

Department of Computer Engineering and Mathematics, School of Engineering, Universitat Rovira i Virgili – Sescelades Campus, Avinguda dels Països Catalans, Tarragona, Catalunya

Bridging AI Research and Clinical Innovation: The BosomShield Pathway towards Commercialisation

15:00 – 15:10 *Discussion*

15:10 – 15:40 **Prof. Jan Poleszczuk** *(Poland)*

Nalecz Institute of Biocybernetics and Biomedical Engineering,
Polish Academy of Sciences, Warsaw

From Hospital Records to Clinical Products: Turning Messy Data into Models and Solutions

15:40 – 15:50 *Discussion*

15:50 – 16:20 **Prof. Martha Zequera** *(Colombia)*

Head of the Bioengineering Research Group “BASPI”, Department of Electronics, School of Engineering, Pontificia Universidad Javeriana, Bogota; Chair of the IFMBE Students and Recent Graduate Working Group; Vice-Chair of the IFMBE Innovation and Industry Committee

From Research to Innovation: Diapetics as a Telemedicine Platform for Early Detection and Prevention of Diabetic Foot Complications

16:20 – 16:30 *Discussion*

16:30 – 17:00 *Coffee break*

Friday, November 20, 2026

17:00 – 19:00 **SESSION V.** **Translating Clinical Needs into Medical Technologies**
Location: IBBE PAS, Lecture Hall

Chairmen: Prof. Sio Hang (Lodge) Pun *(China)*
Prof. Zbigniew Nawrat *(Poland)*

17:00 – 17:30 **Prof. Luis E. Fernández** *(Mexico)*

TINC Tecnología en Ingeniería Clínica

Needs-Driven Innovation in Clinical Engineering: Lessons from Taking a CMMS from Paper Prototype to 17 Countries

17:30 – 17:40 *Discussion*

17:40 – 18:10 **Prof. Jolanta Pauk** *(Poland)*

Institute of Biomedical Engineering, Faculty of Mechanical Engineering, Bialystok University of Technology; Bialystok; Chair of the Committee on Applied Research and Implementation in the Committee for Biocybernetics and Biomedical Engineering of the Polish Academy of Sciences

Why Innovation Pathways Differ: Stakeholder Perspectives on Technology Transfer and Commercialization

18:10 – 18:20 *Discussion*

18:20 – 18:50 **Prof. Anna Korzyńska** *(Poland)*

Nalecz Institute of Biocybernetics and Biomedical Engineering,
Polish Academy of Sciences, Warsaw

The Role of Computational Histopathology in Driving Biomedical Convergence

18:50 – 19:00 *Discussion*

Evening *Networking and Collaboration Evening*

Saturday, November 21, 2026

9:00 – 11:00 **SESSION VI. Emerging Directions in BME Research and Innovation**
Location: IBBE PAS, Lecture Hall

Chairmen: Prof. Jolanta Pauk *(Poland)*
Prof. Murilo Contó *(Brazil)*

9:00 – 9:30 **Dr. Stanisław Wojtkiewicz** *(Poland)*
Brain Optics Ltd., Bialystok
qNIRS: Quantitative Near-Infrared Spectroscopy. From R&D Project Outcomes to Commercial Technology

9:30 – 9:40 *Discussion*

9:40 – 10:10 **Prof. Nicolae Marius Roman** *(Romania)*
Professor Emeritus at Technical University of Cluj-Napoca, Cluj-Napoca;
President of Romanian National Society for Biomedical Engineering and Biological Technology, Cluj-Napoca
Key Aspects in the Evolution of BME Research in Romania

10:10 – 10:20 *Discussion*

10:20 – 10:50 **Prof. Katarzyna Arkusz** *(Poland)*
Director of the Institute of Materials and Biomedical Engineering
at the University of Zielona Gora
From Research to Market: Assessing the Commercialization Potential of Electrochemical Biosensors Using the CIMIT Framework

10:50 – 11:00 *Discussion*

11:00 – 11:30 *Coffee break*

Saturday, November 21, 2026

11:30 – 13:30 **SESSION VII. Medical Technologies from Development to Market: Regulation, Robotics and Diagnostics**
Location: IBBE PAS, Lecture hall

Chairmen: Prof. Kristina Bliznakova *(Bulgaria)*
Prof. Martha Zequera *(Colombia)*

11:30 – 12:00 **Prof. Sudesh Sivarasu** *(South Africa)*

Biomedical Engineering Research Centre, Department of Human Biology, University of Cape Town

Regulated by Design: How an ISO 13485 University Lab Bridges Research and Commercialisation in Africa

12:00 – 12:10 *Discussion*

12:10 – 12:40 **Prof. Zbigniew Nawrat** *(Poland)*

Department of Biophysics, School of Medicine with the Division of Dentistry in Zabrze, Medical University of Silesia, Zabrze; Creative Director of the Prof. Zbigniew Religa Foundation of Cardiac Surgery Development, Zabrze; President of the International Society for Medical Robotics

Robin Heart AI: Why Medicine Needs Intelligent Robots

12:40 – 12:50 *Discussion*

12:50 – 13:20 **Dr. Krysztof Zieliński** *(Poland)*

Nalecz Institute of Biocybernetics and Biomedical Engineering,
Polish Academy of Sciences, Warsaw

MedTech Solutions for Cardiovascular and Respiratory Systems Support – IBBE PAS Experience

13:20 – 13:30 *Discussion*

13:30 – 14:30 *Lunch break*

Saturday, November 21, 2026

14:30 – 14:45 **CLOSING OF THE FORUM**

Location: IBBE PAS, Lecture Hall

Prof. Ratko Magjarević *(Croatia)*
Faculty of Electrical Engineering and Computing, University of Zagreb

Prof. Piotr Ładyżyński *(Poland)*
Nalecz Institute of Biocybernetics and Biomedical Engineering,
Polish Academy of Sciences, Warsaw

Fundusze Europejskie dla Rozwoju Społecznego
Rzeczpospolita Polska
Dofinansowane przez Unię Europejską
NAWA NARODOWA AGENCJA WYMIANY AKADEMICKIEJ