

# BIOMEDICAL ENGINEERING meets MEDICAL FACULTY

Wrocław University of Science and Technology

Faculty of Fundamental Problems of Technology

28 November 2023, 12:45 – 15:15

Building H-14, "Sala Dziekańska"

## PROGRAM

**12:45 Welcome:** Snacks, tea, coffee

**13:00 Opening of the meeting**

Prof. Paweł Machnikowski – Dean of the Faculty of Fundamental Problems of Technology

Prof. Dariusz Jagielski – Dean of the Faculty of Medicine

### Signal analysis, bioinformatics, head/neck studies

Chair: Prof. Małgorzata Kotulska

1. Prof. D. Robert Iskander, *OCT speckle as a source of information supporting medical diagnosis.*
2. Dr hab. inż. Magda Kasprowicz, prof. PWr, *Advancements in Neuroengineering: From Brain Monitoring to AI Predictive Model.*
3. Dr hab. inż. Cezary Sielużycki, prof. PWr, *Can maths aid neuroscience? A working example.*
4. Prof. Krystian Kubica, *Mathematical model of ticagrelor pharmacokinetics.*
5. Dr hab. inż. Mirosław Łątka, prof. PWr, *Smartphones and wearable devices in medicine.*
6. Dr hab. inż. Sebastian Kraszewski, *Advanced numerical tools in modern 3P medicine - from molecular design to mobile apps.*
7. Dr hab. inż. Witold Dyrka, prof. PWr, *Development and application of machine learning methods for protein analyses.*
8. Prof. Małgorzata Kotulska, *Amyloid proteins and their interactions at the onset of neurodegenerative diseases.*

### Bio-optics

Chair: Prof. D. Robert Iskander

9. Prof. Halina Podbielska, *Monitoring outcomes of medical procedures by thermal imaging.*
10. Dr hab. inż. Marta Kopaczyńska, prof. PWr, *Biofunctionalization of cardiovascular stents.*
11. Dr inż. Igor Buzalewicz, Dr hab. inż. Agnieszka Ulatowska-Jarża, prof. PWr, *Biomedical engineering and beyond - how engineers are playing with tissues and cells.*
12. Dr hab. inż. Magdalena Przybyło, prof. PWr, Prof. Marek Langner, *Liposomes for delivery of biologically active compounds.*
13. Dr hab. inż. Sławek Drobczyński, prof. PWr, *Optical micromanipulation of living cells.*
14. Prof. Artur Podhorodecki, *Colloidal Nanostructures – high-resolution fluorescence imaging methods and inorganic nanomaterials for biomedical applications.*
15. Dr hab. inż. Magdalena Asejczyk, prof. PWr, *Research on the optical properties of eye structures.*