

# Physical Chemistry for Medical Applications

## *European Meeting on Physical Organic Chemistry*

Organized by Faculty of Chemistry, University of Wrocław, Poland  
and Section of Physical Organic Chemistry of Polish Chemical Society

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### Timetable

#### Monday, 01.06.2026

15.00	The conference office (in Wojcieszce) is open
16.00	Conference bus departs from Chemistry Department (Joliot-Curie 14, Wrocław)
19.00	Dinner
20.00	Get together party

#### Tuesday, 02.06.2026

7.30-9.00	Breakfast
9.00	Opening of the conference

#### *Chairman of the morning session Prof. Adam Proń*

9.10	<b>Małgorzata Barańska</b>	Challenges in spectroscopic imaging of cells: an analytical and physical chemistry perspective
9.45	<b>Sylwester Mazurek</b>	Discriminant analysis of seminal plasma samples using FTIR-ATR spectroscopy
10.10		Coffee break
10.40	<b>Barbara Zupančič</b>	Identifying diabetes-related biochemical changes in human tissues using infrared spectroscopy

11.15	<b>Zbigniew Galewski</b>	Liquid crystals in medical science
11.40	<b>Amanda Bartkowiak</b>	SGLT-2 inhibition improves red blood cell oxygenation and elasticity: another positive effect of flozin therapy.
11.55	<b>Iwona Płowaś-Korus</b>	Osmolityes in humans - biological significance and clinical implications
12.20	<b>Kazimierz Orzechowski</b>	Dielectric methods in assessing the cleanliness of surgical margins in breast cancer
13.00		Lunch and break

***Chairwoman of the afternoon session Prof. Małgorzata Barańska***

15.00	<b>Andrzej Teisseyre</b>	The inhibitory effects of selected flavonoids on the activity of voltage-gated potassium channels Kv1.3
15.35	<b>Marta Gordel-Wójcik</b>	Ultrafast excited-state dynamics in trimethoxysilylazachalcone-functionalized colloidal gold nanoshells
16.00	<b>Justyna Krupa</b>	UV-induced chemistry in interstellar ice analogues: from simple molecules to complex systems
16.25	<b>Teobald Kupka</b>	Toward accurate NMR shieldings in fluoromethanes
18.00		Barbecue

**Wednesday, 03.06.2026**

7.30-9.00 Breakfast

***Chairwoman of the morning session Prof. Halina Szatyłowicz***

9.00	<b>Adam Proń</b>	Donor–acceptor macromolecular organic semiconductors as precursors of novel
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		electronic, electrochromic, and photoelectrocatalytic materials
9.35	<b>Barbara Hachuła</b>	Rigid cage, variable nature: spectroscopic study of phase transition in adamantane-based active pharmaceutical ingredients
10.00		Coffee break
10.30	<b>Hansen Poul Erik</b>	Drugs, natural products and hydrogen bonding (online lecture)
11.05	<b>Rafał Szabla</b>	Quantifying photoinduced electron transfer in biological systems
11.40	<b>Michał Pocheć</b>	Machine learning in RNA atomistic simulations
11.55	<b>Dawid Dębowski</b>	From molecular structure to biological activity: Novel sulfonamide derivatives
12.20	<b>Paweł Wieczorkiewicz</b>	Decoding chemical resonance in $\pi$ -conjugated systems with bond delocalization function (BDF)
12.35	<b>Barbara Lech</b>	Computational insights into the role of 2-thiouracil in RNA self-replication
12.50	<b>Kamil Wojtkowiak</b>	pH dependence of protoribosomal RNA conformational flexibility: MD simulation parameters benchmark and preliminary results
13.00		Lunch and break
	<b><i>Chairman of the afternoon session Prof. Rafał Szabla</i></b>	
15.00	<b>Piotr Cysewski</b>	Solubility advantage of (natural) deep eutectic solvents: insight from measurements, quantum chemistry and machine learning
15.25	<b>Karol Kułacz</b>	High temperature deintercalation of DMSO smectite

15.40	<b>Mirosław Jabłoński</b>	A thorough Systematic conformational study of an experimentally known lantern-like superphane
16.05	<b>Vlada Pashynska</b>	Nanocomposites of MoS <sub>2</sub> with anticancer drugs for drug delivery: experimental and theoretical characterization
16.30	<b>Natalina Makieieva</b>	Towards the structure-activity correlation for selected thiosulfonates - spectroscopic studies and molecular modelling
16.45	<b>Patrycja Piękoś</b>	Meso-benzodioxole-BODIPY as pH-sensitive fluorophores
17.00		Coffee break
18.00		Dinner

#### **Thursday, 04.06.2026**

7.30-9.00	Breakfast
9.00	Walking tour/ free time
14.00	Lunch (Lunch can be extended for hikers. Advance notice required.)

#### ***Chairman of the afternoon session Prof. Andrzej Teisseyre***

16.00	Poster flash presentation (3')
17.00	Poster session and coffee
19.30	Conference dinner and closing the meeting

#### **Friday, 05.06.2026**

7.30-8.30	Breakfast
9.00	The bus departs to Wrocław