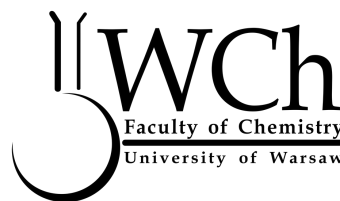
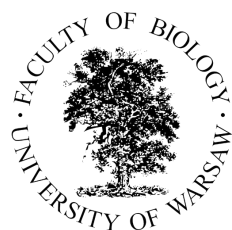
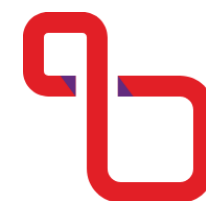




UNIVERSITY
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University of Warsaw
Biological and Chemical
Research Centre



EXCELLENCE INITIATIVE
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SCIENCE FOR THE PLANET

FROM A MOLECULE TO AN ECOSYSTEM

Reporting symposium on activities conducted within Priority Research Area 1 (POB1)

9:30-10:00 – Opening of the symposium

- Prof. Zygmunt Lalak, Vice-Rector for Research, IDUB Programme Manager
- Dr hab. Magdalena Popowska, assoc. prof., Member of the IDUB Coordinating Committee

10:00-11:30 – Challenges of the modern world – report from the research within IDUB Action I.3.4.

- **10:00-10:30** – Dr Dominika Buchberger (Faculty of Chemistry)
“Towards a circular battery future: advancing characterization and recycling pathways for Li-ion batteries”
- **10:30-11:00** – Dr hab. Anna Malik (Faculty of Biology)
“Glial cells in brain disorders: can we modulate their activity to shape the disease outcomes?”
- **11:00-11:30** – Dr hab. Kenneth De Baets, assoc. prof. (Faculty of Biology)
“Evolutionary warnings: how the past predicts parasite risks in a changing world”

11:30-12:00 – Coffee break

12:00-13:30 – New ideas for the modern world, pt. I in POB1 IDUB

- **12:00-12:15** – Prof. dr hab. Beata Krasnodębska-Ostręga (Faculty of Chemistry)
“Technologically critical elements are a new challenge in assessing the risk resulting from soil contamination”
- **12:15-12:30** – Dr Łukasz Kozub (Faculty of Biology)
“Changes in carbon and nitrogen stable isotope composition of plant biomass over the last century”
- **12:30-12:45** – Dr hab. Michał Chmielewski, assoc. prof. (Faculty of Chemistry)
“Towards switchable drug transporters: a new approach to targeted drug delivery”
- **12:45-13:00** – Dr Monika Wojciechowska (Centre of New Technologies)
“Stapled membrane-targeting peptides as antibacterials: efforts towards overcoming resistance crisis”
- **13:00-13:15** – Dr hab. Dorota Matyszewska (Faculty of Chemistry)
“Influence of drug lipophilicity on the interactions with model biological membranes - implications for increasing the effectivity of disease treatment”
- **13:15-13:30** – Dr hab. Agnieszka Kwiatek (Faculty of Biology)
“NS2 - non-structural protein of hRSV – component of oncolytic virus”

13:30-14:30 – Lunch break

14:30-16:00 – New ideas for the modern world, pt. II in POB1 IDUB

- **14:30-14:45** – Dr hab. Wiktor Lewandowski, assoc. prof. (Faculty of Chemistry)
“Chiral nanomaterials in medical diagnostics”
- **14:45-15:00** – Dr Joanna Wójtowicz (Faculty of Biology)
“Shrink or expand? Just relax! Bidirectional grana structural dynamics as early light-induced regulator of photosynthesis”
- **15:00-15:15** – Dr Agata Królikowska (Faculty of Chemistry)
“Sensitivity and precision meet flexibility: nanogap-controlled SERS spectroscopy for clean water”
- **15:15-15:30** – Dr hab. Marta Wiśniewska, assoc. prof. (Centre of New Technologies)
“Modelling astrocytic TCF7L2 deficiency in human iPSC-derived system”
- **15:30-15:45** – Dr hab. Agnieszka Dąbrowska (Faculty of Chemistry)
“Holistic approach to the marine microplastic and plastisphere”
- **15:45-16:00** – Dr hab. Piotr Bębas, assoc. prof. (Faculty of Biology)
“How the mammalian body fights the cold: new insights into frostbite prevention”