

# IMYAC

1st International Meeting for Young Analytical Chemists

27-28th September 2021



**Program**

# FRIDAY, 24th September 2021



10:00 - 11:00 Microsoft Teams Test Session

17:00 - 18:00 Microsoft Teams Test Session

# MONDAY, 27th September 2021



9:30 Opening ceremony



9:45 Opening lecture  
**Witold Reczyński** *My Hobby*



10:15 Coffee break + discussion

## 1<sup>st</sup> Plenary Session - Separation techniques (chairperson: Anna Górka)



- |       |  |  |
|-------|--|--|
| 10:30 | Alice Šimonová<br>Prague, Czech Republic       | Capillary electrophoresis method for analysis of monosaccharides found in glycopeptides                          |
| 10:45 | Kateřina Čokrtová<br>Prague, Czech Republic    | Online labelling of monosaccharides for capillary electrophoresis  |
| 11:00 | Anastasia Kravchenko<br>St. Petersburg, Russia | The electrophoretic separation of biologically active compounds with using modifiers based on imidazolium cation |
| 11:15 | Daria Janiszewska<br>Toruń, Poland             | Determination and identification of antibiotic drugs and bacterial strains in post-operative wounds              |



11:30 Coffee break+ discussion

## 2<sup>nd</sup> Plenary Session – Electrochemistry (chairperson: Szymon Wójcik)



- |       |   |  |
|-------|---|--|
| 12:00 | Marlena Martyna<br>Lublin, Poland         | The catalytic influence of 2-thiocytosine on the electroreduction of Bi(III) ions in chlorates (VII) solutions with varied water activity; application of the R-AgLAFe electrode |
| 12:15 | Karolina Pietrzak<br>Lublin, Poland       | Influence of the doped ion on the properties of polyaniline nanofibers and the parameters of solid contact ion-selective electrodes based on them                                |
| 12:30 | Sara Guerrero<br>Madrid, Spain            | Electrochemical immunosensors for monitoring autoimmune diseases biomarkers  |
| 12:45 | Sofia Tvorynska<br>Prague, Czech Republic | Flow amperometric biosensors based on the enzymatic mini-reactor and silver solid amalgam electrode  |



13:00 Lunch break + discussion

## Poster session (chairpersons: Katarzyna Jedlińska and Nikola Lenar)

<b>14:00</b>	Adrian Gołębiowski Toruń, Poland	Determination of silicon and cadmium concentrations in Pea plant
<b>14:05</b>	Daria Janiszewska Toruń, Poland	Application of MIP-SPME-LC/MS for the therapeutic drug monitoring in biological samples from patients in the intensive care unit
<b>14:10</b>	Ewelina Maślak Toruń, Poland	Study of the of bacteria viability treated with an antibiotic by using capillary zone electrophoresis and flow cytometry approaches
<b>14:15</b>	Agnieszka Rogowska Toruń, Poland	Investigation of the protein interactions with metal ions
<b>14:20</b>	Yulia Maksimova Moscow, Russian Federation	Procedure design of sorption preconcentration of high-field-strength elements for routine ICP-MS analysis of ultramafic rocks
<b>14:25</b>	Jacek Sikorski Warszawa, Poland	Application of CE-ICP-MS/MS for investigation of Fe <sub>3</sub> O <sub>4</sub> nanoparticles and human serum proteins interactions
<b>14:30</b>	Anna Król-Górniak Toruń, Poland	Determination of the zinc-casein binding using CE-ICP-MS
<b>14:35</b>	Jakub Lisiecki Lublin, Poland	Halogenated PAHs in the Ullmann on-surface reaction - theoretical model
<b>14:40</b>	Paloma de Oro-Carretero Madrid, Spain	Alternative method to study the bioaccumulation and biotransformation of BDE-47 using zebrafish larvae (Danio rerio)
<b>14:45</b>	Rodrigo de Miguel-Salado Madrid, Spain	Development of a SPE-GC-MS method for determining NSAIDs in waste water
<b>14:50</b>	Vita Saska Kyiv, Ukraine	Application of nanostructured carbon electrodes modified with CuO-SiO <sub>2</sub> composite coating for voltammetric determination of H <sub>2</sub> O <sub>2</sub>
<b>14:55</b>	Nikola Lenar Kraków, Poland	How to choose the best material for solid-contact layer in ion-selective electrodes? - A comparative study.
<b>15:00</b>	Justyna Lipińska Kraków, Poland	Modifications of the surface of working electrodes used in voltammetry
<b>15:05</b>	Anna Górská Kraków, Poland	Application of carbon nanomaterials in the modification of glassy carbon electrodes
<b>15:10</b>	Radosław Porada Kraków, Poland	Methods for pyridoxine determination – an overview
<b>15:15</b>	Szymon Wójcik Kraków, Poland	Deep learning for voltammetry



**15:20** Coffee break + discussion



**15:30** Integration session

# TUESDAY, 28th September 2021



**10:00**    **Opening lecture**  
Katarzyna Jedlińska

Improving the visibility in presenting research results

## 3<sup>rd</sup> Plenary Session – Chromatography (chairperson: Justyna Lipińska)



**10:15**    Esther Gómez-Mejía  
Madrid, Spain    Chemical characterization and bioactivity  
evaluation of black mulberry and grape seeds

**10:30**    Anton Korban  
Prague, Czech Republic    Fluctuation of internal standard method calibration  
factors using GC-MS

**10:45**    Filip Vymyslicky  
Prague, Czech Republic    Abacavir: comparison of approaches to active  
pharmaceutical ingredient oxidation studies

**11:00**    Katarína Molnárová  
Prague, Czech Republic    Separation of human IgG glycopeptides in mixed-mode  
hydrophilic interaction/ion-exchange liquid  
chromatography



**11:15**    Coffee break + discussion

## 4<sup>th</sup> Plenary Session – Electrochemistry (chairperson: Radosław Porada)



**11:45**    Alona Usenko  
Pardubice, Czech Republic    Voltammetric determination of the new growth regulator  
Revysol® (mefentrifluconazole) by using a boron doped  
diamond electrode

**12:00**    Oleksandr Matvieiev  
Pardubice, Czech Republic    Electrochemical properties of screen-printed sensors with  
chemically deposited boron doped diamond electrode and  
their applications in electroanalysis

**12:15**    Anna Górská  
Kraków, Poland    Atorvastatin determination on glassy carbon electrode  
modified with carbon nanofibers and cobalt nanoparticles

**12:30**    Barbara Niemiec  
Kraków, Poland    Graphene flakes modified with gold nanoparticles  
as intermediate layer for ion-selective electrodes

**12:45**    Nikola Lenar  
Kraków, Poland    How can we modify materials for solid-contact layers in  
ion-selective electrodes? - Modifications of ruthenium  
dioxide

















**13:00**    Voting for the best PhD student presentations  
Coffee break



**13:30**    Award for the best presentations  
Closing ceremony

# IMYAC

	<b>MONDAY</b>	<b>TUESDAY</b>	
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10	9:30 - 10:15  Opening	10:00 - 10:15 Opening	10
	10:15 - 10:30  Break	10:15 - 11:15  Presentations	
11	10:30 - 11:30  Presentations	11:15 - 11:45  Break	11
	11:30 - 12:00  Break	11:45 - 13:00  Presentations	
12	12:00 - 13:00  Presentations	13:00 - 13:30  Voting	12
	13:00 - 14:00  Break	from 13:30  Closing	
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14	14:00 - 15:15  Posters		14
	15:15 - 15:30  Break		
15	from 15:30  Integration		15
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