

PROGRAM OF THE SUMMER SCHOOL

May 18th 2022

- 8.00 - 9.00 **Registration**
9.00 - 9.10 **Opening ceremony**
9.10 - 10.40 Dr. A. Brzyska, Molecular modelling and intermolecular interactions – a theoretical approach
10.40 - 10.50 **Coffee break**
10.50 - 12.20 Prof. M. Maciejewska, Introduction to TG/DSC theory and data analysis
12.20 - 12.50 **Coffee break & Poster session I**
12.50 - 14.20 Prof. R. Zaleski, Applications of positron annihilation lifetime spectroscopy
14.20 - 16.00 **Lunch**
16.00 - 18.15 **Workshops:**
 I - Molecular modelling and intermolecular interactions – a theoretical approach
 II - Introduction to TG/DSC theory and data analysis
 III - Applications of positron annihilation lifetime spectroscopy
19.00 - 21.00 **City Game** – In the traces of Lublin legends and city mysteries

May 19th 2022

- 9.00 - 10.30 Prof. C. Bravo-Díaz, Exploring and quantifying ion-exchange effects in micellar solutions (conductivity). Location of analytes in micellar systems and determination of structural parameters (¹H NMR and fluorescence)
10.30 - 10.40 **Coffee break**
10.40 - 12.20 **Oral session I**
10.40 - 10.50 K. Kłosok, R. Welc, A. Nawrocka, Supplementation of *p*-coumaric and 4-hydroxybenzoic acids enhances antioxidant properties of gluten proteins
10.50 - 11.00 M. Krekora, A. Nawrocka, Influence of gallic acid and its derivatives on the structure of the gluten network in wheat gluten dough
11.00 - 11.10 K. Łupina, D. Kowalczyk, Comparison of physicochemical, release and antioxidant properties of ascorbyl palmitate-loaded polysaccharide/gelatin edible films
11.10 - 11.20 K. Szafran, M. Jurak, R. Mroczka, A.E. Wiącek, Surface analysis of polymer-made implants
11.20 - 11.30 K. Młynarczyk, B. Podkościelna, Aging studies of crosslinked polymeric composites
11.30 - 11.40 M. Kravets, I. Misztalewska-Turkiewicz, V. Sashuk, Visual discrimination of α,ω -alkanedicarboxylic acids
11.40 - 11.50 K. Kravets, M. Kravets, H. Butkiewicz, S. Kosiorek, V. Sashuk, O. Danylyuk, Crystalline host-guest complexes of pillar[n]pyridiniums and *p*-sulfonato-calix[4]arene
11.50 - 12.00 P. Woźnicki, M. Stankevič, Copper-catalyzed tandem halogen exchange/C-P cross-coupling of (cyclo)alkenyl/aryl bromides and secondary phosphine oxides
12.20 - 12.30 **Coffee break**
12.30 - 14.00 Prof. C. Bravo-Díaz, Investigating the mechanisms of arenediazonium ions in aqueous solution and structural changes in micellar solutions (HPLC, UV-vis). Electrochemical detection, formation and decomposition of intermediates (DPP, LSV)
14.00 - 16.00 **Lunch**
16.00 - 18.15 **Workshops:**
 I - Applications of positron annihilation lifetime spectroscopy
 II - Molecular modelling and intermolecular interactions – a theoretical approach
 III - Introduction to TG/DSC theory and data analysis
19.00 **MOJO Kitchen & Friends** – pizza and beer

May 20th 2022

- 9.00 - 10.40 **Oral session II**
- 9.00 - 9.10 L. Baran, W. Rżysko, Hierarchical self-assembly of tetratopic building blocks
- 9.10 - 9.20 K. Kowalska, M. Barczak, P. Borowski, Formaldehyde and water adsorption on functionalised graphene surfaces – a theoretical investigation
- 9.20 - 9.30 M. Rycewicz, A. Nosek, P. Jakóbczyk, M. Ficek, J. Buijnsters, R. Bogdanowicz, The effect of boron concentration on the electrical, electrochemical, morphological and optical properties of boron-doped diamond sheets
- 9.30 - 9.40 K. Pietrzak, C. Wardak, Application of nanomaterials as a solid contact in ion-selective electrodes
- 9.40 - 9.50 E. Rekiel, A. Zdziennicka, B. Jańczuk, Adsorption of rhamnolipid and surfactin from mixed water-ethanol solvent
- 9.50 - 10.00 H. Nikolaichuk, I.M. Choma, Bio-profiling of plants via effect directed analysis coupling high-resolution mass spectrometry
- 10.00 - 10.10 A. Kozub, A. Stachniuk, H. Nikolaichuk, K. Przykaza, J. Tomaszewska-Gras, E. Fornal, Application of LC-QTOF in lipidomic profiling of cold pressed seed oils
- 10.10 - 10.20 B. Kowalczyk, K. Pastuszak, M. Jurak, M. Palusińska-Szys, Antimicrobial activity of the LL-37 peptide as a result of interaction with *Legionella gormanii* phospholipids
- 10.40 - 11.10 **Coffee break & Poster session II**
- 11.10 - 12.40 **Oral session III**
- 11.10 - 11.20 S. Dudek, D. Kołodyńska, Arsenic removal using the iron oxide sorbent modified with lanthanum(III) ions
- 11.20 - 11.30 W. Babiak, D. Wiącek, M. Czemińska, A. Jarosz-Wilkolazka, I. Krzemińska, Cadmium and lead sorption by exopolysaccharide isolated from *Chlorella vulgaris* culture
- 11.30 - 11.40 M. Białoszewska, L. Bandura, W. Franus, Characterization of the organically modified fly-ash derived zeolite and its sorption properties toward ketoprofen
- 11.40 - 11.50 M. Kalbarczyk, A. Szczeń, The synthesis of calcium phosphate based materials using agricultural waste as a calcium donor for environmental applications
- 11.50 - 12.00 A. Krzyszczyk, B. Czech, The effect of physical aging on the contents of polycyclic aromatic hydrocarbons and their derivatives in biochars
- 12.00 - 12.10 A. Bosacka, M. Zienkiewicz-Strzałka, A. Deryło-Marczewska, A. Chrzanowska, M. Wasilewska, D. Sternik, Physicochemical, structural, and adsorption properties of chemically and thermally modified activated carbons
- 12.10 - 12.20 M. Zięzio, E. Bailón-García, A.I. Moral-Rodríguez, F. Carrasco-Marín, B. Charmaş, Characterization of photocatalysts based on activated carbons used for photodegradation of pharmaceuticals
- 12.40 - 14.30 **Lunch**
- 14.30 - 16.45 **Workshops:**
- I - Introduction to TG/DSC theory and data analysis
- II - Applications of positron annihilation lifetime spectroscopy
- III - Molecular modelling and intermolecular interactions – a theoretical approach
- 17.00 - 17.15 **Closing ceremony** – certificates, best oral and best poster presentation awards

Venue

Opening/closing ceremony, lectures and oral sessions
 Registration, coffee breaks and poster sessions
 W: Applications of positron annihilation lifetime spectroscopy
 W: Molecular modelling and intermolecular interactions
 W: Introduction to TG/DSC theory and data analysis
 Lunch (two-course meal, dessert, coffee/tea)
 Pub meeting – pizza and beer
 City Game – In the traces of Lublin legends and city mysteries

Institute of Computer Science: 9 Akademicka St., room 217
 Institute of Computer Science: 9 Akademicka St., 2nd floor hall
 Institute of Physics: 1 Maria Curie-Skłodowska Sq., room 138
 Institute of Chemical Sciences: 3 Maria Curie-Skłodowska Sq., room 616
 Institute of Chemical Sciences: 33 Gliniana St., room 61
 Trójka: 16 Langiewicza St.
 MOJO Kitchen & Friends: 8 Idziego Radziszewskiego St.
 Tourist Inspiration Center: 1 Jezuicka St., room 3