

**PROGRAMME OF MINDLAB ON FUNCTIONAL MATERIALS AND 19<sup>TH</sup> WORKSHOP  
ON MOLECULAR ACOUSTICS, RELAXATION AND CALORIMETRIC METHODS**

MindLab on Functional Materials and 19th Winter Workshop on  
Molecular Acoustics, Relaxation and Calorimetric Methods



**Szczyrk, 26 February – 29 February 2024**

<b>26.02.2024 Monday</b>	
14:00	<i>Lunch</i>
15:00-15:10	<b>OPENING CEREMONY of the Conferences</b> <b>18<sup>th</sup> IOS'2024</b> <b>51<sup>st</sup> WSEAV</b> <b>52<sup>nd</sup> WSWQA</b>
15:10-16:00	<b>JUBILEE OF PROF. WIESŁAW WOLIŃSKI</b> <b>AND PROF. ANTONI ŚLIWIŃSKI</b>
15:10-16:00	<i>Addresses and speeches</i>
16.00 – 17.00	<i>Coffee Break</i>
17.00 – 18.30	<b>JUBILEE PLENARY SESSION</b>
17.00 – 17.30	<i>Plenary lecture of IOS Conference</i> <b>Photonic integrated circuits – on the road from telecom to sensing</b> <b>R. PIRAMIDOWICZ, S. STOPIŃSKI, K. ANDERS, A. JUSZA, A. PAŚNIKOWSKA, M. LELIT, A. POŁATYŃSKI, A. BIENIEK-KACZOREK, A. KAŻMIERCZAK, M.A. BUTT, P. WIŚNIEWSKI, M. SŁOWIKOWSKI, M. JUCHNIEWICZ, K. PAVŁOV, K. PIERŚCIŃSKI, D. PIERŚCIŃSKA, J. JUREŃCZYK, M. LIEBERT</b>
17.30 – 18.00	<i>Plenary lecture of WSWQA Conference</i> <b>The essence of a pulse compression and SAW technology application for signal processing in a modern radar systems</b> <b><u>A. KAWALEC</u></b>
18.00 – 18.30	<i>Plenary lecture of WSEAV Conference</i> <b>Advancements in Computational Techniques for Analyzing Aircraft Noise: Addressing Challenges and Refining Models</b> <b>A. CHYLA, O. ZAPOROZHETS, A. NOWOŚWIAT, <u>M. BUKAŁA</u></b>
18:30-19:30	<i>Supper</i>
19:30	<b>MUSIC GLANCE</b>

27.02.2024 Tuesday	
8:00	<i>Breakfast</i>
13:00	<i>Lunch</i>
	SESSION
14:00-14:45	<b>Covalent organic frameworks – a bridge between soft and crystalline semiconductors</b> D. PEREPICHKA
14:45-15:30	<b>Tuning energy levels in <math>\pi</math>-conjugated homopolymers by side-chain functionalization: donor-acceptor interactions between the backbone and side groups</b> I. PEREPICHKA
15:30-16:00	<b>(Electro)chemically deposited organic photosensitizers as light-activated antimicrobial coatings</b> A. BLACHA-GRZECHNIK
16:00-16:30	<i>Coffee break</i>
16:30-17:00	<b>Functionalization of metal-organic frameworks for proton conduction</b> D. MATOGA
17:00-17:30	<b>The impact of structural modification on electrochromic and electroluminescent properties of thiophene/benzothiadiazole D-A-D derivatives</b> S. PLUCZYK-MAŁEK, R. GANCZARCZYK, R. RYBAKIEWICZ-SEKITA, M. ZAWADZKA, P. PANDER P. LEDWOŃ, D. NASTULA
17:30-17:45	<b>Dimensional scan of IoNanoFluid stability – from 0D to 3D nanocarbons in ionic liquids</b> S. RUCZKA, R. JĘDRYSIAK, S. BONCEL
17:45-18:00	<b>Infrared electrochromic properties of the s-tetrazine derivative</b> D. NASTULA, S. PLUCZYK-MAŁEK, A. BLACHA-GRZECHNIK, P. WAGNER
20:00	<i>Festive Supper</i>

28.02.2024 Wednesday	
8:00	<i>Breakfast</i>
13:00	<i>Lunch</i>
<b>14:00-19:00</b>	<b>SESSION</b>
14:00-14:50	<b>Thermal management and storage through smart materials</b> L. VALLESE, G. LOMBARDO, D. MENEGAZZO, S. BORDIGNON, M. DE CARLI, G. FERRARINI, S. BOBBO, F. AGRESTI, S. BARISON, A.A. AYDIN, H. JAVADI, B. BADENES, J.F. URCHUEGUÍA, Z. URE, M. BOTTARELLI, S. CESARI, E. BACCEGA, <u>L. FEDELE</u>
14:50-15:20	<b>From functionalization to functionality – physicochemistry of nanocarbons toward applications</b> S. BONCEL
15:20-15:50	<b>Comparison and characterization of different methods of carbon nanotubes functionalization</b> <u>A. KOLANOWSKA</u> , S. BONCEL, M. DZIDA
15:50-16:10	<b>Low-viscosity ionanofluids with remarkable thermal conductivity – the latest developments in ionanofluids</b> <u>K. CWYNAR</u> , A. KOLANOWSKA, S. BONCEL, M. DZIDA
16:10-16:30	<b>A critical overview of literature data on the isobaric heat capacity of ionanofluids</b> <u>K. KACZMAREK</u> , K. CWYNAR, M. MUSIAŁ, A. TARGIEL, E. ZORĘBSKI, M. DZIDA
16:30-17:00	<i>Coffee break</i>
17:00-17:30	<b>Exploring the relationship between crystal structure and the properties of organic materials</b> C.E.S. BERNARDES
17:30-18:00	<b>Charge, polar, and nonpolar interactions - theoretical approach</b> M. MAKOWSKI
18:00-18:30	<b>Nanoparticles in complex advanced materials – an introduction to nanofluids</b> G. ŻYŁA
18:30-19:00	<b>Structural, spectroscopic and thermophysical studies of ionanofluids composed of long multi-walled carbon nanotubes and pyrrolidinium-based ionic liquid</b> <u>M. DZIDA</u> , S. BONCEL, B. JÓŻWIAK, H. F. GREER, M. DULSKI, A. GOLBA, R. FLAMHOLC, G. DZIDO, J. DZIADOSZ, A. KOLANOWSKA, R. JĘDRYSIAK, Ł. SCHELLER, K. CWYNAR, E. ZORĘBSKI, C.E.S. BERNARDES, M.J.V. LOURENÇO, C.A. NIETO DE CASTRO
19:00-20:00	<i>Supper</i>

20:00	<p style="text-align: center;"><b>POSTER SESSION</b></p> <p><b>Black gold – how to improve the service life of a key element in the synthesis of multi-walled carbon nanotubes, such as a quartz tube?</b></p> <p style="text-align: center;">R. <u>JĘDRYSIAK</u>, S. RUCZKA, A. KOLANOWSKA, S. BONCEL</p>
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<b>29.02.2024 Thursday</b>	
8:00	<i>Breakfast</i>