



The 4th Polish-Slovenian International Seminar on  
Young 4 Soft Matter DAY  
**2<sup>nd</sup> February 2026**



# Young4SoftMatter DAY

## SCHEDULE

ONLINE EDITION



**DIRECTORS:** Aleksandra DROZD-RZOSKA (POLAND) & Samo KRALJ (SLOVENIA)



The 4th Polish-Slovenian International Seminar on  
Young 4 Soft Matter DAY  
**2<sup>nd</sup> February 2026**



## **‘Young 4 Soft Matter’ DAY**

**10:00 – 10:30**

### **Aleksandra Drozd-Rzoska \_ OPENING LECTURE**

#### **ORAL Presentations**

**10:40 – 11:00**

*Global Population, Carrying Capacity, and High Quality Foods*

**Agata Angelika Sojecka \_ Poland**

**11:00 – 11:20**

*Phase Equilibria in Mixtures with Limited Miscibility – New Perspective*

**Jakub Kalabinski \_ Poland**

**11:20 – 11:40**

*High Pressure Treatment of Sodium Olivine-Like Glass: Increased Conductivity  
in the Possible Future Cathode Material*

**Aleksander Szpakiewicz-Szatan \_ Poland**

**11:40 – 12:00**

*Structural Properties of  $V_2O_5$  Glasses Compressed under High Pressure. Combined  
Experimental and Computational Study*

**Adam Puchalski \_ Poland**

**12:00 – 12:20**

*Si-doped  $Na_2VFe_2(PO_4)_3$  Nanocrystalline Alluaudites as Prospective Cathodes  
for Sodium-Ion Batteries*

**Martyna Jankowska \_ Poland**

**12:20 – 12:45 BREAK**



**DIRECTORS: Aleksandra DROZD-RZOSKA (POLAND) & Samo KRALJ (SLOVENIA)**



The 4th Polish-Slovenian International Seminar on  
Young 4 Soft Matter DAY  
**2<sup>nd</sup> February 2026**



## **POSTER Presentations – part I**

**12:45 – 13:00**

*Phase Transitions and Electrical Properties Of High-Pressure High Temperature  
Treated Bismuth Oxide-Based Material*

**Aleksander Szpakiewicz-Szatan \_ Poland**

**13:00 – 13:15**

*Phase Behaviour of Twist-Bend Nematic Phase*

**Maha Zid \_ Slovenia**

**13:15 – 13:30**

*Optimization of Liquid Crystal Materials for Photo- and Thermomechanically  
Responsive Elastomers*

**Milena Ježak**

**13:30 – 13:45**

*Visualizing Order Parameter Spaces And Topological Defects in Ordered Media*

**Jaka Sgerm, Marcel Kodrin \_ Slovenia**

**13:45 – 14:00**

*Non-linear dielectric response for Menthol Solutions*

**Kewin Żmigrodzki \_ Poland**

**14:00 – 14:15**

*Liquid Droplet Simulations for Material Exploration*

**Tim Javornik \_ Slovenia**

**14:15 – 14:30**

*Dielectric Properties of Reverse Micelles Formed by Nonionic Surfactants*

**Sara Helscher \_ Poland**

**14:30 – 14:45**

*Synthesis, Properties, and Enantioseparation of Four-Ring Racemic Smectics*

**Edyta Wojda \_ Poland**

**14:45 – 15:00**

*Socio & Econophysics View on Population Changes in Industrial Revolution Era*

**Agata Angelika Sojecka \_ Poland**

**15:00 – 15:15 BREAK**



**DIRECTORS: Aleksandra DROZD-RZOSKA (POLAND) & Samo KRALJ (SLOVENIA)**



The 4th Polish-Slovenian International Seminar on  
Young 4 Soft Matter DAY  
**2<sup>nd</sup> February 2026**



## POSTER Presentations – part II

**15:15 – 15:30**

*Exceptional Points in Non-Hermitian Metasurfaces*

**Anja Ribaš** \_ Slovenia

**15:30 – 15:45**

*Synthesis and Investigation of Mesophase, Optical, and Spectral Properties of Thieno [3,2-b]thiophene-Based Liquid Crystals.*

**Małgorzata Bakiera** \_ Poland

**15:45 – 16:00**

*Self-assembled benzo[b]thiophene liquid crystals with designed dielectric properties for GHz applications*

**Agnieszka Mieczkowska** \_ Poland

**16:00 – 16:15**

*Fabrication of complex-shaped colloids via selective microfluidic trapping*

**Tine Krajnc** \_ Slovenia

**16:15 – 16:30**

*Liotropic Phases of DNA*

**Melani Potrč** \_ Slovenia

**16:30 – 16:45**

*In situ observation of the nanocrystallisation process in vanadate glasses in the XAS synchrotron experiment*

**Martyna Jankowska** \_ Poland

**16:45– 17:00**

*Broadband Dielectric Spectroscopy Investigation of E7 Liquid Crystal with BaTiO<sub>3</sub> and C<sub>60</sub> Nanoparticles*

**Mateusz Kotowski** \_ Poland

## SUMMARY & OUTLOOK



DIRECTORS: Aleksandra DROZD-RZOSKA (POLAND) & Samo KRALJ (SLOVENIA)



The 4th Polish-Slovenian International Seminar on  
Young 4 Soft Matter DAY  
**2<sup>nd</sup> February 2026**



Scientific Committee of the 4<sup>th</sup> PSIS on SM 2026

**“Faces of Soft Matter”**

Assist. Prof. Dr. Brigita Rožič – Institut “Jožef Stefan” | Jozef Stefan Institute, Slovenia

Red. Prof. Dr. Robert Repnik – Univerza v Mariboru | University of Maribor, Slovenia

Prof. dr hab. Sylwester J. Rzoska – Institute of High Pressure Physics “Unipress” PAS, Poland



Organizing Committee of the 4<sup>th</sup> PSIS on SM 2026

**“Faces of Soft Matter”**

Agata Angelika Sojecka – University of Economics in Katowice, Poland

Melani Potrč – University of Maribor, Slovenia

Jakub Kalabiński – Institute of High Pressure Physics “Unipress” PAS, Poland

Aleksander Szpakiewicz-Szatan – Institute of High Pressure Physics “Unipress” PAS, Poland

---

Website: [www.young4softmatter.pl](http://www.young4softmatter.pl)

Email: [young4softmatter@gmail.com](mailto:young4softmatter@gmail.com)



DIRECTORS: Aleksandra DROZD-RZOSKA (POLAND) & Samo KRALJ (SLOVENIA)