



# Seminar Programme

## Nano and Fast Vibrational Spectroscopy



JAGIELLONIAN UNIVERSITY  
IN KRAKÓW

Faculty of Chemistry, Jagiellonian University  
Gronostajowa 2, 30-387 Krakow

**Monday, 17<sup>th</sup> June 2019**  
**Nanoscale Vibrational Spectroscopy**

**12<sup>00</sup>-12<sup>55</sup>** REGISTRATION (hall, ground floor – Segment A)

**12<sup>55</sup>-13<sup>00</sup>** OPENING: Agnieszka Kaczor/Kamilla Malek (room A1-01, 1<sup>st</sup> floor)

### SESSION I

**Chairman: Katarzyna M. Marzec**

**13<sup>00</sup>-13<sup>40</sup>** Jan Vavra NeaSpec *Scattering-type scanning near-field optical microscopy and spectroscopy for nanoscale chemical analysis*

**13<sup>45</sup>-14<sup>25</sup>** Wojciech Kwiatek IFJ *Nanoworld investigation using AFM-IR spectroscopy*

**14<sup>30</sup>-15<sup>10</sup>** Mustafa Kansiz Photothermal Spectroscopy Corp. *Simultaneous submicron IR and Raman microscopy/imaging - Beyond the limits of traditional IR microscopy with optical photothermal infrared (O-PTIR)*

**15<sup>10</sup>-15<sup>45</sup>** COFFEE BREAK

### SESSION II

**Chairman: Katarzyna Majzner**

**15<sup>45</sup>-16<sup>25</sup>** Ewelina Lipiec UJ *Infrared nano-spectroscopy in studies of lipids and nucleic acids*

**16<sup>30</sup>-17<sup>10</sup>** Luca Quaroni UJ *Spectroscopy of thin organic layers by nanoIR techniques*

**17<sup>15</sup>-17<sup>25</sup>** Aneta Blat UJ *An analysis of isolated and intact RBC membranes — a comparison of a semi-quantitative approach by means of FTIR, nano-FTIR and Raman spectroscopies*

**Tuesday, 18<sup>th</sup> June 2019**  
**Non-linear Raman Spectroscopy**

### SESSION III

**Chairman: Krzysztof Czamara**

**9<sup>00</sup>-9<sup>40</sup>** Michal Nejbauer IChF PAN *Practical aspects of femtosecond stimulated Raman spectroscopy*

**9<sup>45</sup>-10<sup>10</sup>** Jakob Nixdorf HHU *Stimulated Raman imaging - speed versus spectral Coverage*

**10<sup>15</sup>-10<sup>50</sup>** Halina Abramczyk PŁ *From femtosecond dynamics to intracellular retinoid metabolism in cancer cells by Raman spectroscopy*

**10<sup>50</sup>-11<sup>20</sup>** COFFEE BREAK

### SESSION IV

**Chairman: Marta Pacia**

**11<sup>20</sup>-11<sup>55</sup>** Oliver Piot URCA *Potential and limitations of stimulated Raman scattering for imaging of biological samples*

**12<sup>00</sup>-12<sup>25</sup>** Joanna Strzelczyk Bionanopark *Coherent Anti-Stokes Raman Scattering (CARS) microscopy. Label-free imaging driven by molecular vibrations*

**12<sup>30</sup>-12<sup>40</sup>** Aleksandra Dorosz UJ *Lipid droplets in stimulated eosinophil cell line (EOL-1) studied by spontaneous Raman and CARS microscopy*

**12<sup>45</sup>-14<sup>45</sup>** LUNCH BREAK with POSTER SESSION (hall, 1<sup>st</sup> floor - Segment A)

In the framework of the seminar, the **poster session** will be held and abstracts will be published in an electronic book of abstracts. Additionally, each of participants will receive a certificate of participation.

The seminar is **free of charge**, but the number of participants is limited to **120 people**. Travel and accommodation are not covered by the organizers.

The registration is **now open** and **abstracts submission** is **until May 31<sup>st</sup>**. All abstracts should be sent to the following e-mail address: [zor@chemia.uj.edu.pl](mailto:zor@chemia.uj.edu.pl). **Abstract template** is available [here](#)

Please **prepare your poster in A0 (80 x 120 cm) format (portrait orientation)**

**Organizers:**

Dr. hab. Agnieszka Kaczor and Dr. hab. Kamilla Małek  
Ewa Machalska (Secretary, email: [zor@chemia.uj.edu.pl](mailto:zor@chemia.uj.edu.pl))

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Aleksandra Dorosz

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**Sponsors:**

Photothermal Spectroscopy Corp, WITec and Neaspec GmbH

