Photophysics, Photochemistry and Photobiology

This course provides an overview of experimental aspects of optical spectroscopy, and the application to a variety of systems, with examples ranging from inorganic/molecular to biological/medical fields.

Format of the course:

This is an interactive course: during five afternoons, a combination of lectures and hands-on exercises will be given. Workshops will be devoted to exercises, topical discussion, and data treatment. During the course, participants will also study a scientific paper (in small groups) and give a presentation about it on the final (sixth) day. For this, participants will also have to come up with at least one discussion question for the papers presented by the other groups.

Participants: max. 30

PPP-2024-Programme

| Friday May 31 (UvA SP D1.113) | Wednesday June 5 (UvA SP B0.203) |
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| 13.00 – 15.00: Basic Molecular Photophysics and experimental Techniques <i>René Williams</i> | 13.00 – 15.00: Molecular Modeling in Photochemistry/Photobiology Francesco Buda |
| 15.00 – 15.15: coffee break 15.15 – 17.15: Raman spectroscopy in analytical chemistry and biomedical imaging <i>Freek Ariese</i> | 15.00 – 15.15: coffee break 15.15 – 17.15: Photoactive Materials for Energy and Health René Williams |
| Monday June 3 (VU, WN-C629) | Thursday June 6 (<u>Bring Laptop</u> , VU WN-S5.29) |
| 12.30 – 14.30: Time-resolved spectroscopy of Disordered Excitonic Systems <i>Charusheela Ramanan</i> | 13.00 – 15.00: Global and target analysis of time-resolved spectra. 1 methodology Ivo van Stokkum |
| 14:30-15:00: Lab tour | 15.00 – 15.15: coffee break |
| Charusheela Ramanan/Sven Askes 15.00 – 15.15: coffee break | 15.15 – 17.15: Global and target analysis of time-resolved spectra. 2 hands on practical |
| 15.15 – 17.15: Plasmonic photothermal materials with applications in medicine, catalysis, and more Sven Askes | Ivo van Stokkum |
| Tuesday June 4 (UvA SP D1.113) | Friday June 14 (CWI Congress Center Eulerzaal, Z009) |
| 13.00 – 15.00: Optical spectroscopy in forensic science <i>Maurice Aalders</i> | 13.00 – 17.00: Presentations by participants, discussion of scientific papers. |
| 15.00 – 15.15: coffee break | 17.00-18:30: Drinks in Polder |
| 15.15 – 17.15: Photo-activatable compounds: What they are and how to make them better <i>Tomáš Solomek</i> | |