KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

Dr. Andreja Kežar

D11, Department of Molecular Biology and Nanobiotechnology

Četrtek / Thursday, 3.12. 2020 ob / at 13:00 / WEBEX

https://ki-si.webex.com/ki-si/j.php?MTID=m31b31cbea0b1fae33054c1dcd3eb4e74
Meeting number (access code): 175 449 5439
Meeting password: december2020!

Cryo-electron microscopy as an excellent tool for high-resolution structure determination of large biological complexes

The Nobel Prize in Chemistry 2017 was awarded to the pioneers of the cryo-electron microscopy (cryo-EM). Recent advances in this method allow us to investigate biological molecules and complexes with the resolution of an atom. Last year a cryo-electron microscope was installed at the National Institute of Chemistry, Ljubljana. In my talk, I will show examples from our department, how we determine high-resolution structures of large biological complexes using single-particle analysis approach, or observe oligomeric proteinaceous structures embedded in lipid membranes using cryo-electron tomography. Detailed 3D structures of macromolecular systems are crucial for understanding of their mechanism of action or their application in biotechnology.

Vljudno vabljeni / Kindly invited