



KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

Dr. Ana Crnković

D11, Department of Molecular Biology and Nanobiotechnology

Četrtek / Thursday, 07. 03. 2024 ob / at 13:00

Velika predavalnica Kemijskega inštituta / Great Lecture Hall

WEBEX

<https://ki-ljubljana.webex.com/ki-ljubljana/j.php?MTID=m4738bdb83c3653365c1b6a54c8937b51>

Join by meeting number (access code): 2781 088 9712
Meeting password: DXacvEP3u76 (39228373 from video systems)

Expanding the genetic code outside the comfort zone: Key factors in the production of proteins with noncanonical amino acids

The genetic incorporation of noncanonical amino acids (ncAAs) offers unprecedented advantages in the study of individual proteins through the incorporation of spectroscopic or fluorescent probes, as well as photoreactive groups and crosslinkers. It also allows us to design proteins with novel properties, such as unparalleled stability or unique chemical reactivity. Although more than 200 ncAAs have been inserted into proteins via genetic code expansion, most are still unused outside of proof-of-principle experiments. Here, I will present advances critical to synthesizing proteins with ncAAs and demonstrate the use of ncAAs in creating improved protein pores for their use in nanopore technology.



Vljudno vabljeni / Kindly invited