



KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

**Dr. Tjaša Plaper**

D12, Department of Synthetic Biology and Immunology

Četrtek / Thursday, 25. 01. 2024 ob / at 13:00

Velika predavalnica Kemijskega inštituta / Great Lecture Hall

WEBEX

<https://ki-ljubljana.webex.com/ki-ljubljana/j.php?MTID=m089594126f21e55e902dccbb31183c10>

Join by meeting number (access code): 2788 755 5827  
Meeting password: y4pBgZRpZ22 (94724977 from video systems)

## Designed regulation of proteins in mammalian cells

Synthetic biology is a scientific field which employs engineering principles to modify cellular processes on different levels. This lecture will focus on regulation of proteins by introduction of coiled coil peptides as modulators. We developed INSRTR platform, where we inserted a coiled coil peptide into a loop of a target protein, which enabled its regulation. Coiled coil protein motifs are characterized by well-defined assembly and specificity rules, which makes them an attractive tool in synthetic biology. With implementation of INSRTR we were able to control protein function by external or internal signals. Direct control of a selected protein represents a valuable tool for regulation of biological processes.



Vljudno vabljeni / Kindly invited