



KEMIJSKI INŠTITUT

Vabilo na Preglov kolokvij / Invitation to the Pregl colloquium

Prof. Dr. Valérie Gabelica

School of Pharmaceutical Sciences, Faculty of Science

University of Geneva, Switzerland

E-mail: Valerie.Gabelica@unige.ch

Četrtek / Thursday, 17. 4. 2025, ob / at 13:00

Velika predavalnica Kemijskega inštituta /

Great Lecture Hall

National Institute of Chemistry

Hajdrihova 19, Ljubljana, Slovenia

**Mass spectrometry for oligonucleotide analysis:
from sequencing to biophysical characterization**

Mass spectrometry became a versatile tool for small molecule characterization and for protein sequencing, but maybe less well known is its potential use for biophysics. The mass of the complex gives information about which molecules interact with which ones and the stoichiometries of the complexes, the abundance of the complex gives information about the equilibrium formation constants (or about kinetics, in time-resolved experiments), and advanced MS techniques (ion mobility, ion spectroscopy, ion-molecule reactions and sometimes MS/MS) give additional structural information on the structure of each complex. The talk will illustrate the use of MS to study nucleic acids biophysics¹—folding into unusual structures such as G-quadruplexes and interaction with small molecule ligands—and will outline future directions in the field.

Reference (1): Comprehensive review: Chem. Rev. (2022) 122, 7720-7839

Info: Prof. Dr. Janez Plavec janez.plavec@ki.si



Vljudno vabljeni / Kindly invited