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v Ljubljani

Fakulteta *za kemijo*
in kemijsko tehnologijo

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VABILO NA PREDAVANJE
V OKVIRU DOKTORSKEGA ŠTUDIJA
KEMIJSKE ZNANOSTI / INVITATION TO THE
LECTURE WITHIN DOCTORAL PROGRAMME IN
CHEMICAL SCIENCES

Prof. dr. Thierry Brigaud

*CY Cergy Paris Université, CNRS, BioCIS
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z naslovom / title:

**Synthesis of enantiopure fluorinated amino
acids and incorporation into peptides:
hydrophobicity and conformational aspects**

**v sredo, 25. 5. 2022 ob 15. uri /
on Wednesday, 25. 5. 2022 at 15.00**

**v predavalnici 1 v 1. nadstropju Fakultete za kemijo in
kemijsko tehnologijo, Večna pot 113 / in lecture room 1,
1st floor at the Faculty of Chemistry and Chemical
Technology, Večna pot 113**

Vljudno vabljeni! | Kindly invited!

Abstract:

The incorporation of fluorinated amino acids into peptides confers them special properties. We have developed in recent years the synthesis of a number of fluorinated amino acids in enantiopure form as well as the methodologies for their incorporation into peptides. The hydrophobic contribution of the incorporation of these amino acids has been measured by HPLC method and it has been shown a dramatic increase of the hydrophobicity induced by the incorporation of amino acids containing CF₃ and SCF₃ groups. Several biological applications concerning the inhibition of amyloid aggregation and membrane permeability will be presented. Fluorinated amino acids were also used as probes to study an antimicrobial peptide by ¹⁹F NMR. We also showed that cyclic fluorinated amino acids were exceptional tools to control the conformation of peptides.