Peptidomimetic chemistry group

Principal investigators: Dr. Guillaume Compain and Dr. Gilles Guichard

cbmn Chimie & Biologie des Membranes et des Nano-objets

université de BORDEAUX

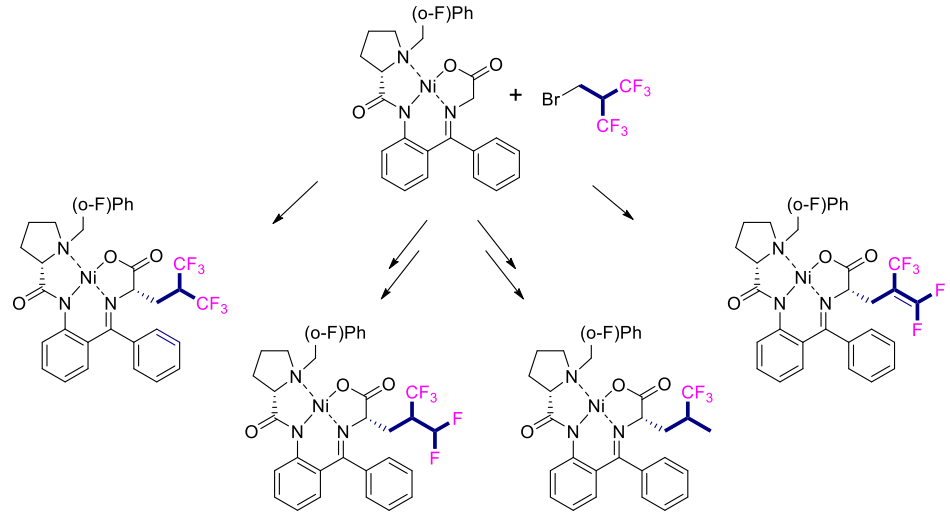
Institut Européen de Chimie et Biologie
I E C B

GIS Fluor CNRS "Réseau Français du Fluor"

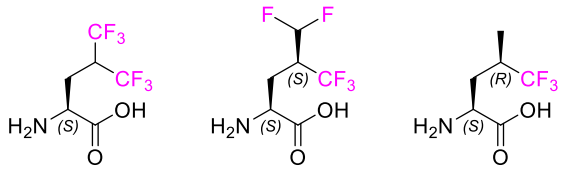
Research topics developed in the group related to the fluorine network

Synthetic methods to incorporate fluorinated groups

- Fluoroalkylation
- Hydrogenation
- Hydrodefluorination
- Stereoselective synthesis

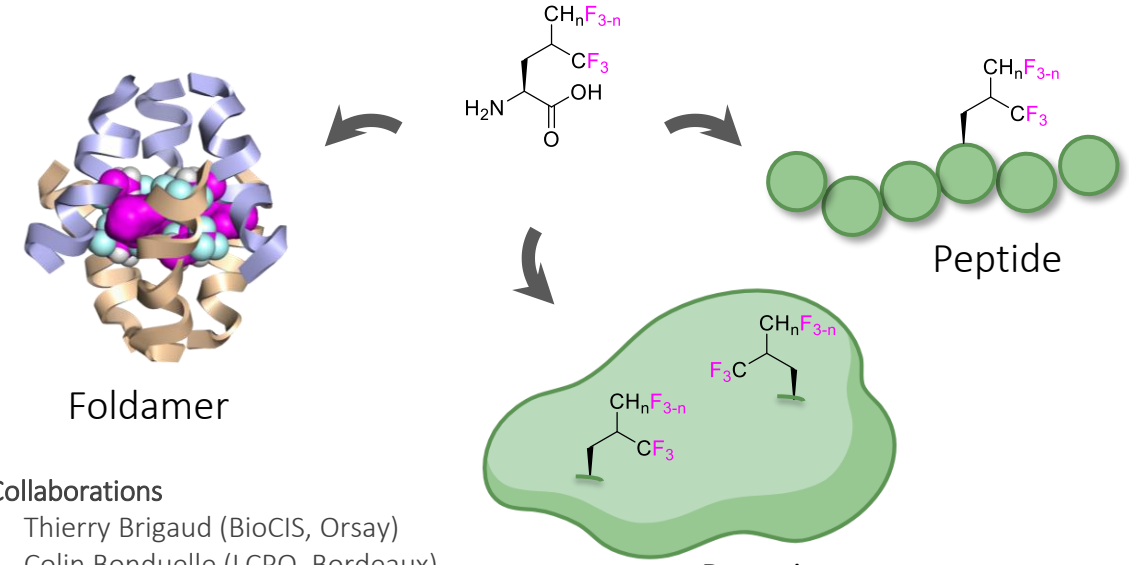


Fluorinated leucines



Supramolecular chemistry of partially fluorinated groups

- Foldamer self-assemblies
- Bioactive fluorinated peptides
- Incorporation of fluorinated amino acids into proteins



Collaborations

- Thierry Brigaud (BioCIS, Orsay)
- Colin Bonduelle (LCPO, Bordeaux)
- Mathieu Raynal (IPMC, Paris)
- Antoine Loquet (IECB, Bordeaux)
- Dominique Burnouf and Jérôme Wagner (IBMC, Strasbourg)
- Marc Baaden (LBT, Paris)

Keywords: fluorinated amino acids – fluoroalkylation – polar-hydrophobicity – supramolecular chemistry – foldamers – fluorinated peptides

References: *Comptes Rendus. Chimie*, **2024**, *27*, 385-394, *Eur. J. Org. Chem.* **2023**, *26*, e202201148, *Comm. Biol.* **2022**, 5:1202, *Chem. Sci.* **2022**, *13*, 9507–9514

Contacts

g.compain@iecb.u-bordeaux.fr g.guichard@iecb.u-bordeaux.fr

Fundings

Agence Nationale de la Recherche ANR
Région Nouvelle-Aquitaine
université de BORDEAUX
cnrs

Institut de Chimie et Biologie des Membranes et des Nano-objets
UMR CNRS 5248
Université de Bordeaux, Campus Bordes

Group website
https://www.guichard-iecb.fr/

Address
Institut Européen de Chimie et Biologie
2 Rue Robert Escarpit, 33600, Pessac