

**Laboratoire de Chimie Biologique (LCB)
Equipe composés organofluorés**

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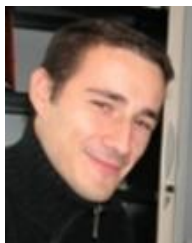
<https://www.u-cergy.fr/fr/laboratoires/lcb.html>

Keywords : fluorinated chiral auxiliaries – Fluorinated amino compounds, amino acids, amino alcohols, fluorinated peptides and carbohydrates

Principal Investigators :



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Grégory Chaume



Evelyne Chelain



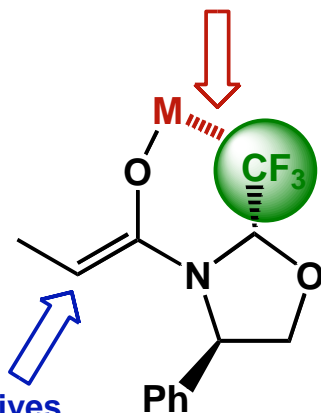
Nathalie Lensen



Julien Pytkowicz

Fluorinated Oxazolidines (Fox) as Chiral auxiliaries

Metal ... Fluorine interactions



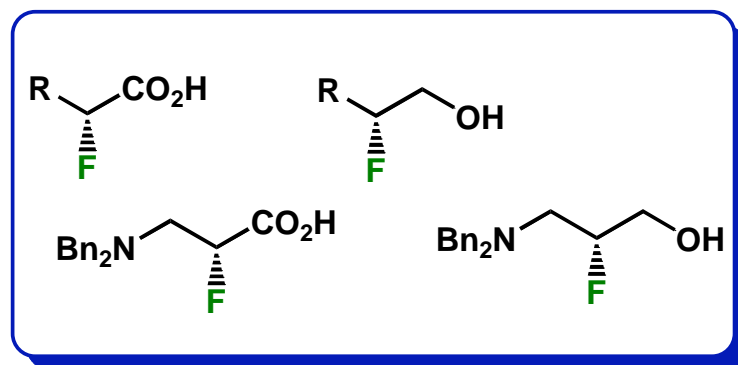
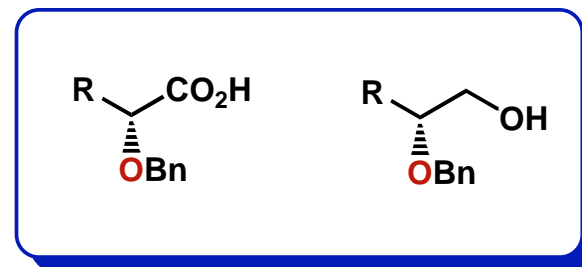
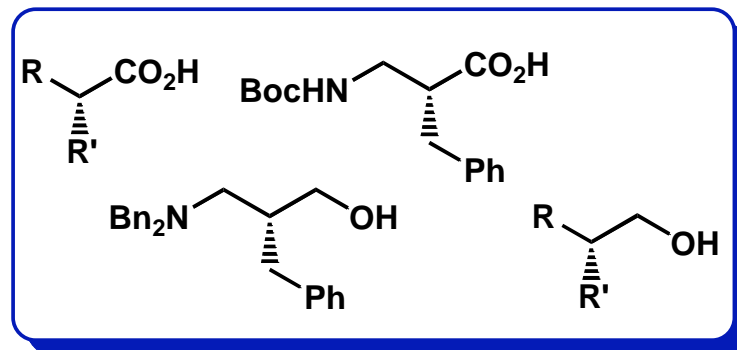
stereoselectives enolates reactions

Fox chiral auxiliary

Alkylations

Oxidations

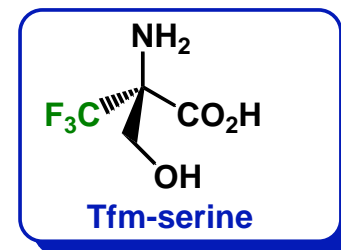
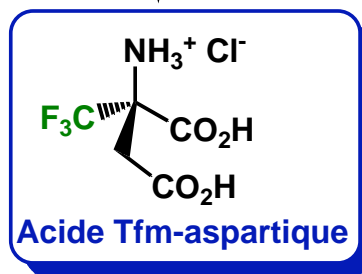
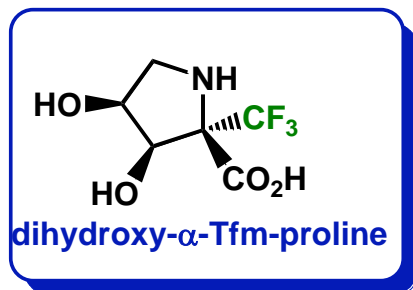
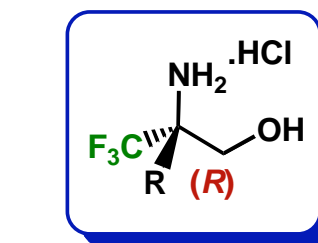
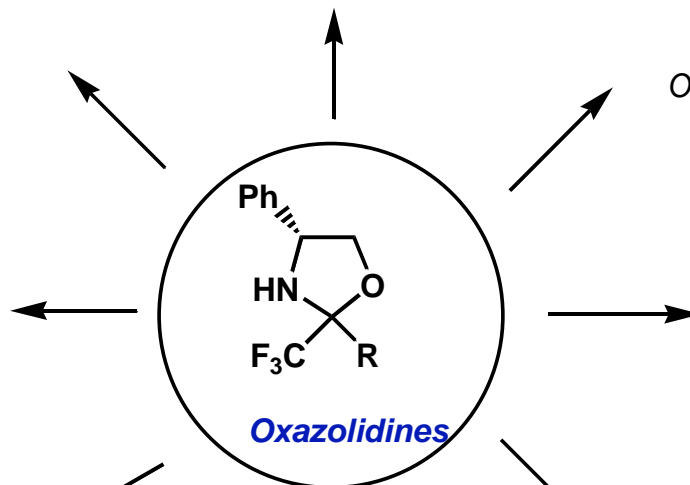
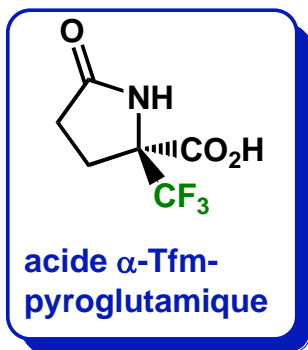
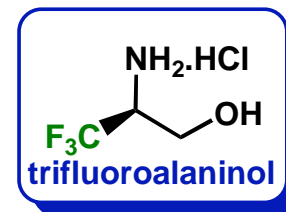
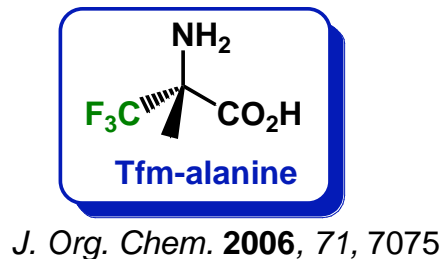
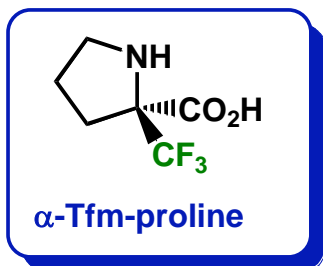
Fluorinations



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- Chem. Eur. J.* **2008**, 3363
- J. Org. Chem.* **2008**, 73, 3970
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- J. Fluorine Chem.* **2009**, 130, 1140
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- J. Org. Chem.* **2013**, 78, 3487

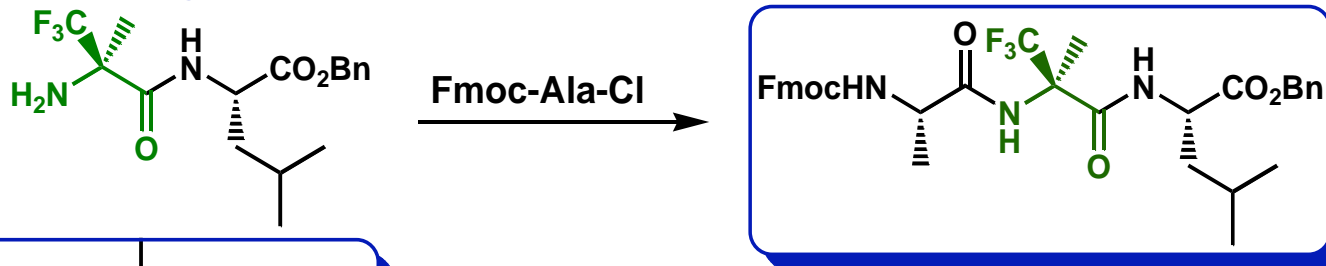
chiral modified amino acids and amino alcohols (> 98%ee)

Fluorinated amino acids and amino alcohols



Fluorinated peptides

Peptide coupling reaction at the *N*-terminal position of trifluoromethylated amino acids

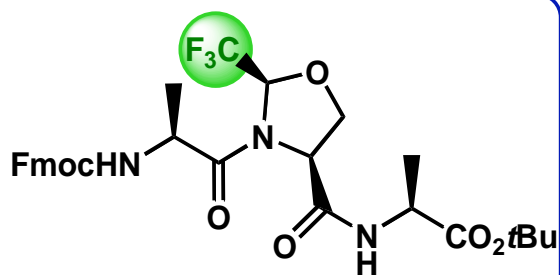


Eur. J. Org. Chem. **2009**, 5717

Biological active fluorinated peptides : CF₃-MIF-1 : analgesic properties

Eur. J. Med. Chem. **2013**, 62, 122. *Med. Chem.* **2013**, 3, 206

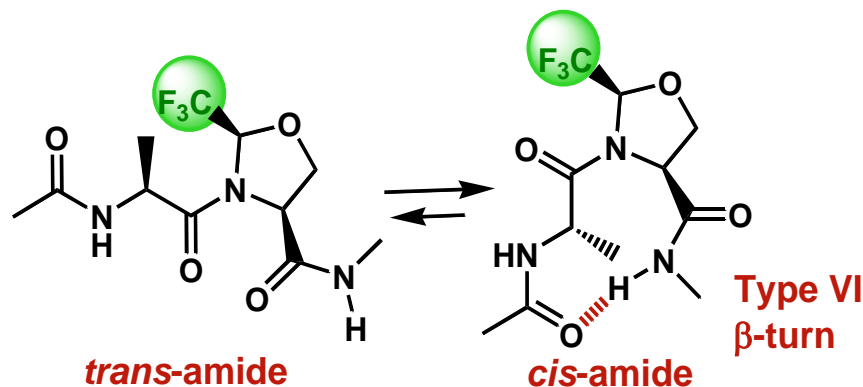
Incorporation of CF₃-pseudoprolines into peptides



Tripeptide block ready for SPSS

J. Org. Chem. **2010**, 75, 4135

J. Org. Chem. **2013**, 78, 10144



New J. Chem. **2013**, 37, 1336

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