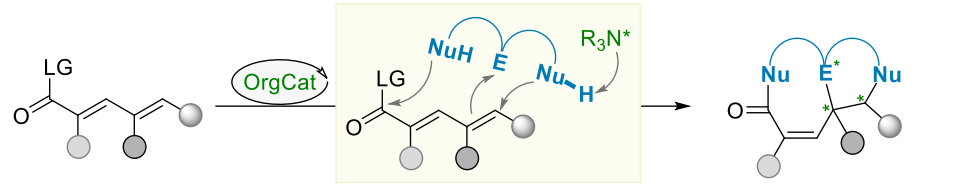
Mont Saint Aignan, July 2022

Postdoctoral research fellow (12 month) at laboratory COBRA
« Organocatalytic construction of chiral heterocycles based on the principle of vinylogy »

with Jean-François Brière within the Heterocyles Team (e-CatCH group) of laboratory COBRA (University and INSA Rouen Normandie, UMR CNRS), thanks to a LabEx SynOrg financial support in collaboration with Giang Vo-Thanh of ICMMO (University Paris Saclay, UMR CNRS).

The construction of chiral and carbon-sp3 rich heterocycles, and polycyclic derivatives, are at the heart of modern medicinal chemistry seeking to explore new chemical spaces in 3D. In order to contribute to this innovative field of research, while following our recent interest in the principle of vinylogy,[1] we are currently studying catalytic domino sequences to synthesize original tricyclic frameworks, in accordance with certain principles of sustainable chemistry.



Thereby, we desire to develop novel **vinyloguous platforms**, as electron-poor dienes, able to undergo domino reactions based on asymmetric organocatalysis (**OrgCat**). A travel towards molecular diversity will be initiated.

Expected skills: We are looking for an outstanding and highly motivated candidate with excellent knowledge in organic chemistry and products characterization (HPLC, NMR, IR, MS) and with an interest in methodology developments. Knowledge in (organo)catalysis and asymmetric synthesis would be an asset.
The applicant should provide a CV, a cover letter and 2 recommendation letters or contact that might be contacted to Dr Jean-François Brière (jean-francois.briere@insa-rouen.fr) by email.
Recruitment expected by october-november 2022 at late.

[1] (a) *For more information:* Wittmann, S.; Martzel, T.; Pham truong, C.-T.; Toffano, M.; Oudeyer, S.; Guillot, R.; Bournaud, C.; Gandon, V.; Brière, J.-F.; Vo-Thanh, G. *Angew. Chem., Int. Ed.* **2021**, *60*, 11110 (10.1002/anie.202014489).

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