



Dr Xavier FRANCK



CNRS Research Director

Bioorganic team

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PROFESSIONAL EXPERIENCES

- 2008 Promoted CNRS Research Director
- 2005- present Researcher at CNRS; Rouen Normandy University, France.
- 1999-2005 Researcher at CNRS; Paris Saclay University, Faculty of Pharmacy, France
- 1998 Postdoctoral Associate; Advisor: Prof. Samir Z. Zard, ICSN Gif/Yvette, France.
- 1997 Postdoctoral Associate; Advisor: Prof. John Murphy, Strathclyde University, Glasgow, UK.

EDUCATION

- 1992-1996 Ph.D. Organic Chemistry, Advisor: Dr. Bruno Figadère, Paris Saclay University, Faculty of Pharmacy, France.
- 1992 M.S. Organic Chemistry, Sorbonne University, Pierre et Marie Curie Campus, France.

ADMINISTRATIVE & INSTITUTIONAL RESPONSIBILITIES

- Bioorganic Chemistry Team leader
- Member of the Specialist Committee (CCSE, section 32) – University of Rouen, France.
- Member of the Doctoral School council
- 2012-2016 Co-director of FR3038

RESEARCH INTERESTS

- Total Synthesis
- Fluorescent probes
- Biomarkers
- Fluorophores
- Natural Products

SCIENTIFIC ACHIEVEMENTS

Academic record (h-index: 24)

89 publications, 5 book chapters, 10 patents, 48 seminars and invited lectures (academia & industry)

SUPERVISION ACTIVITIES

Director or co-director of 12 PhD

Cotutelle with Macquarie University, Sydney, Australia

Collaboration with: Macquarie University (Sydney, Australia), University of Valencia (Spain), University of Southampton (UK), University of Tlemcen (Algeria), Paris Saclay University, Institut Curie (Orsay, France), University of Caen, Museum National d'Histoire Naturelle (Paris)

GRANTS AND FELLOWSHIPS

Financial support from Region Normandie, Labex SYNORG, CNRS 80/PRIME, Académie des Sciences, ANR, EUR XL-Chem...

TEACHING ACTIVITIES

Master 2: strategy in total synthesis and retrosynthesis

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Member of French Chemical Society

EDITORIAL ACTIVITIES

CONFERENCES

48 seminars and invited lectures

PUBLICATIONS

- New Antibacterial Cadiolide Analogues Active Against Antibiotic Resistant Bacterial Strains.

S. Bekri, F. Desriac, M. Barreau, T. Clamens, T. Gallavardin, P. Le Nahenec-Martel, J. Vieillard, Y. Datoussaid, N. Choukchou-Braham, O. Lesouhaitier, X. Franck, S. Leleu
Bioorg. Med. Chem. Lett. **2020**, 127580

- Straightforward Synthesis of N-Substituted Ureas from Primary Amides.

N. Saraiva Rosa, T. Glachet, Q. Ibert, J.-F. Lohier, X. Franck, V. Reboul.
Synthesis, **2020**, 52, 2099-2105

- Synthesis of benzopyran derivatives as PPAR α and/ or PPAR γ activators

N. Cabedo, A. Bermejo, I. Barrachina, N. El Aouad, X. Franck, N. Chahboune, I. Andreu, B. Figadère, L. Vila, N. Hennuyer, B. Staels, C. Dacquet, D. H Caignard, M. J. Sanz, D. Cortes
Bioorg. Med. Chem. **2019**, 115162

- Iodonitrene in Action: Direct Transformation of Amino Acids into Terminal Diazirines and ¹⁵N₂-Diazirines and Their Application as Hyperpolarized Markers.

T. Glachet, H. Marzag, N. Saraiva Rosa, J. F. P. Colell, G. Zhang, W. S. Warren, X. Franck, T. Theis, V. Reboul.

J. Am. Chem. Soc. **2019**, *141*, 13689–13696

- Polycerasoidol, a Natural Prenylated Benzopyran with a Dual PPAR α /PPAR γ Agonist Activity and Anti-inflammatory Effect

A. Bermejo, A. Collado, I. Barrachina, P. Marqués, N. El Aouad, X. Franck, F. Garibotto, C. Dacquet, D. H. Caignard, F. D. Suvire, R. D. Enriz, L. Piqueras, B. Figadère, M.-J. Sanz, N. Cabedo, D. Cortes

J. Nat. Prod. **2019**, *82*, 1802-1812

- Two-photon absorption and cell imaging of fluorene-functionalized epicocconone analogues

S. Oger, D. Schapman, R. Mougeot, S. Leleu, N. Lascoux, P. Baldeck, M. Benard, T. Gallavardin, L. Galas, X. Franck

Chem. A-Eur. J. **2019**, *25*, 10954–10964

- Late-Stage Sulfoximation: Improved Synthesis of the Anticancer Drug Candidate Atuveciclib

T. Glachet, X. Franck, V. Reboul

Synthesis, **2019**, *51*, 971-975

- Probe, Sample, and Instrument (PSI)™: The Hat-Trick for Fluorescence Live Cell Imaging

L. Galas, T. Gallavardin, M. Bénard, A. Lehner, D. Schapman, A. Lebon, H. Komuro, P. Lerouge, S. Leleu, X. Franck

Chemosensors **2018**, *6*, 40.

- An optimized procedure for direct access to 1H indazole-3-carboxaldehyde derivatives by nitrosation of indoles

A. Chevalier, A. Ouahrouch, A. Arnaud, T. Gallavardin, X. Franck

RSC Adv., **2018**, *8*, 13121–13128

- New Pluses in Carbanion Chemistry »

J. Maddaluno, M. De Paolis, X. Franck, D. Cahard

C. R. Chimie, **2017**, *20*, 593-594

- Total synthesis, and structural revision of chaetoviridins A.

M. Makrourougras, R. Coffinier, S. Oger, A. Chevalier, C. Sabot, X. Franck

Org. Lett. **2017**, *19*, 4146-4149

- Characterization of Fluorescent Synthetic Epicocconone-based Dye through Advanced Light Microscopies for Live Cell Imaging Applications.

D. Schapman, C. Perraudeau, M. Bénard, T. Gallavardin, A. Boulangé, S. Leleu, A. Lebon, X. Franck, L. Galas

Dyes Pigments, **2017**, *141*, 394-405

- Epicocconone-hemicyanine hybrids: Near infrared fluorophores for protein staining and cell imaging.

P. Karuso, W. Loa Kum Cheung, P. A. Peixoto, A. Boulangé, X. Franck
Chem. Eur.J. **2017**, *23*, 1820 – 1829



