Tuning Emission in Organic Molecules via Excited-State Proton Transfer

Acronyme: T.E.X.T.

Summary of the project

Excited-state intramolecular proton transfer (ESIPT) is one of the most fundamental processes in chemistry and biology, exemplifying the reorganization of chemical bonds along strong hydrogen bonds. ESIPT in organic chromophores is at the origin of the phenomenon of dual fluorescence, a process with exciting applications in sensing, lighting and imaging that will be investigated in **TEXT** by adopting a bottom-up approach. From *ab initio* theoretical modelling to the systematic characterization of the relationship between reactivity and light emission, **TEXT** will deliver new atomistic insights into ESIPT fluorescence that will finally enable it to be exploited in the next generation of organic optoelectronic materials.

Project type

Thèse/PhD	X
~~Post-doc (18 mois)~~	☐

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