

# Biomimetic and Technomimetic Molecular Science Laboratory (tentative)

### Faculties:

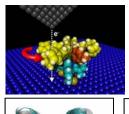
Prof. Gwénaël Rapenne (to be appointed from April, 2018) Dr. Kazuma Yasuhara

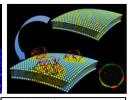
One Assistant professor

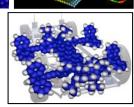
Organic, organometallic, Coordination or polyaromatic chemistry













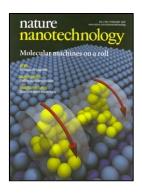
## **Research Topics**:

# 1. Technomimetic molecular machines

Motors, gears and vehicles to develop energy, communication and information transfer at the nanoscale under the action of light, heat or electrons.

#### 2. Biomimetic molecular machines

Membrane-active agents, which can trigger membrane dynamics and modulate biological functions.







## 3. Hybrid molecular machines

**Expected students:** 4-7 students per year (Master's and doctoral courses)

**Laboratory space:** Approx. 300 m<sup>2</sup> equipped for molecular synthesis and analysis (UV-Vis, Fluorescence, CD, DLS, DSC, HPLC (prep., anal.), Zeta potential, Fluorescence microscope etc.)