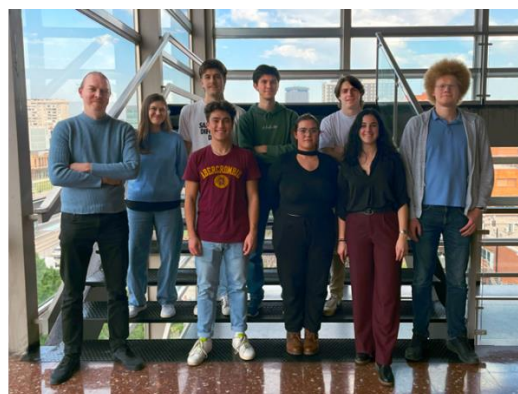
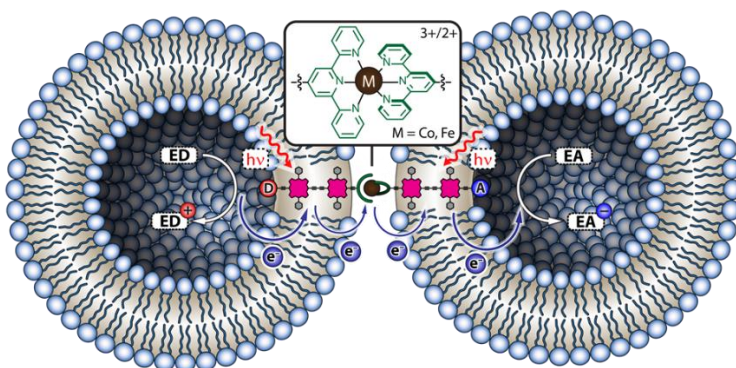




Soon to open: Postdoc position (1 year + possible extensions up to 3 years) in Supramolecular Photochemistry

Synthetic Neurons and Artificial Photoactivated Synapses

■ **The Group.** The group of *Supramolecular Photochemistry and Catalysis*, led by Dr. Bart Limburg is looking for a motivated Postdoc with an interest in supramolecular chemistry, photochemistry, and synthesis. The Postdoc position will be carried out at the **University of Barcelona**, within a young ambitious group with a friendly atmosphere. We offer a fruitful research environment in which you will be able to develop yourself as an experienced researcher under guidance of a young ambitious supervisor. More information about the research group can be found at www.limburglab.com, and the department at dqio.ub.edu.



■ **The Project.** The position is part of the [ERC-StG project SYNAPS](#). The goal is to construct an artificial system of two chemically isolated systems that are able to communicate with one another through photoinduced redox reactions. To achieve this goal, liposomes will be used as nanoreactors containing electron donors or acceptors, and judiciously designed photocatalysts will be added to the liposome membranes. The liposomes will then be bound together using supramolecular chemistry (for example through ligand-metal interactions, or hydrogen bonding), and electron transport from the inside of one liposome to the other will be studied using steady-state and transient spectroscopy techniques. The resulting system is a mimic of an electrical synapse.

■ **Tasks.**

- Design and synthesis of photocatalysts with metal-binding ligands
- Liposome synthesis and study of liposome clustering upon addition of metal ions
- Spectroscopic study of the electron-transfer behaviour of the embedded photocatalysts
- Supervision of junior researchers (PhD, Master and Bachelor students)
- Publishing results in high impact peer-reviewed journals

■ **The Candidate.** The ideal candidate has experience in supramolecular chemistry, (transient) spectroscopy and organic synthesis. They have experience in solving complex problems through literature study and performing experiments. They are interested in learning new techniques and increasing their knowledge as well as that of the group. Do you fit this position? Get in contact with us and discuss!

■ **Requirements.**

- PhD in Chemistry or related field
- Proven experience in supramolecular chemistry
- Proven experience in multistep organic synthesis
- Interest / experience in spectroscopy
- Interest / experience in photochemistry
- Excellent command of the English language

Applications / Contact / Information: blimburg@ub.edu, subject: "PD SYNAPS"

Start Date: Flexible (within 1 year)