

Postdoctoral Research Opportunity in the Nau Group at Constructor University

We are offering a Postdoctoral research position in the Nau research group, to contribute to the innovative project CARAMEL Covalent Chaotropic Membrane Transport for Biotherapeutic Delivery, as a part of a dynamic international team embedded within a Synergy Grant funded by the European Research Council.

Project overview

The CARAMEL project aims to pioneer new synthetic strategies for modified boron clusters that interact with biological membranes, enabling efficient transport of therapeutics across these barriers. This interdisciplinary research combines organic synthesis, supramolecular chemistry, and membrane biophysics.

Job description

The elected candidate will contribute to the following tasks within the project framework:

1. Design and perform multi-step synthesis of novel boron cluster derivatives, including purification and comprehensive structural characterization.
2. Investigate their interactions with model cellular membranes, including liposomes of varied compositions, using physico-chemical techniques.
3. Mechanistic studies of membrane transport, employing advanced fluorescence-based assays.

Starting date: 1st April 2026

Duration: A two-year full-time research contract, with potential extension based on performance.

Candidate profile

We are looking for a highly motivated early-stage researcher with:

- A PhD in Chemistry, Biochemistry, or related field.
- Strong expertise in synthetic chemistry and molecular characterization (NMR, LC-MS, HPLC, UV-vis, and fluorescence spectroscopy).
- Knowledge on supramolecular chemistry.
- Hands-on experience in membrane transport studies would be advantageous.
- Excellent communications skills in English, both written and spoken.
- A collaborative spirit, strong organizational and time-managing abilities, and problem-solving skills.

How to apply

Submit a *single PDF* file (NameSurname.pdf) including:

- A motivation letter highlighting your interest and appropriateness for the position.
- Curriculum Vitae.
- Academic transcripts (BSc and MSc).
- Contact details of two academic referees.
- A brief summary of your previous research (max. 1 page).

Apply via our [online form](#). For any questions, please contact abarbabon@constructor.university

Incomplete applications will not be considered. Selected candidates will be invited for online or in-person interviews. Applications will be reviewed on a rolling basis until the position is filled.