





PhD Position in Organic Chemistry

at Department of Chemistry and Biochemistry, University of Bern, Switzerland

The research group of Prof. Tomáš Šolomek is looking for outstanding candidates to join our international team for PhD degree in Organic Chemistry in the field of Synthesis of Topological Carbon-Based Molecular Materials within our ERC-funded research project *TOPOCLIP*. The starting date is from April 2021 or later.

Selected Topologies of Carbon Allotropes Derived from Graphene



Within *TOPOCLIP*, you will design and develop stable molecular representations of unprecedented topological molecular nanocarbons to understand the impact of molecular shape and topology on the molecular or material properties with diverse applications in solar energy conversion, bio-imaging, supramolecular self-assembly, or porous materials. Organic synthesis will be your everyday tool to tackle the challenges in *TOPOCLIP*.

We offer a full-time contract (≈50k CHF/year) funded for four years in one of the best Swiss universities. You will get a thorough training in organic synthesis of molecular nanocarbons, in particular carbon-rich macrocycles, cages or nanotubes, and in basic spectroscopic investigation of their properties both in solution and in the solid state. You will also have the opportunity to extend your graduate training in organic chemistry adding quantum chemical calculations and/or advanced spectroscopic methods into your skills toolbox.

You are a self-driven, curious, creative and ambitious team player who enjoys interdisciplinary science, mastering new things, and rigorous experimental work. You possess:

- MSc degree in organic chemistry (or you will receive it before 09/2021) with an outstanding track record
- Strong background in organic synthesis with previous experience in synthesis of polycyclic aromatic hydrocarbons (or similar molecules) including work under moisture- and oxygen-free conditions
- Solid experience in common analytical and purification methods (e.g., NMR, UV-Vis, HPLC, MS)
- Excellent oral and written English skills

We look forward to receiving your application by email at tomas.solomek@unibas.ch by January 31, 2021. It must include a letter of motivation (max 2 pages), Curriculum Vitae, contact details of 2 referees and research summary highlighting your experience with organic synthesis. Only complete applications compiled in a single pdf file will be considered. Selected candidates will be shortlisted for an online interview followed by a visit to Switzerland (if permitted by the covid-19 situation).