



## PhD positions in Medicinal Radiochemistry

The University of Zurich (UZH) is seeking applications from candidates for a PhD in Medicinal Radiochemistry in the group of Prof. Dr Jason P. Holland in the Department of Chemistry.

Website: [www.hollandlab.org](http://www.hollandlab.org); Twitter: @HollandLab\_

### Project Background

Our research lies at the interface of chemistry, biochemistry, and translational molecular medicine. We develop new ways to make radioactive molecules using radiometal ions for applications in imaging and radiotherapy. Specifically, the science will build on our recent work using photochemical reactions to create new functional bonds to antibodies and other proteins, as well as non-covalent strategies using supramolecular chemistry (for relevant studies see: *ACIE* **2019**, *58*, 1928-1933; *ACIE* **2022**, e202204072; *Chem. Sci.* **2022**, *13*, 12713-12725; and *JACS* **2023**, *145*(23), 12894–12910). Our research is funded by the European Research Council (ERC), the European Innovation Center (EIC), and the UZH.

### Responsibilities and Conditions

Successful candidates will primarily conduct chemical synthesis and radiochemistry (with  $^{68}\text{Ga}$ ,  $^{89}\text{Zr}$ ,  $^{64}\text{Cu}$ ,  $^{18}\text{F}$ ,  $^{99\text{m}}\text{Tc}$ ,  $^{111}\text{In}$ ,  $^{177}\text{Lu}$ ,  $^{188}\text{Re}$ , etc), with associated characterisation of new materials using spectroscopy, computational work, and biological studies *in vitro* and *in vivo* to develop new cancer specific probes. The work involves handling human cells, radioactive materials, and animals, but full training will be provided.

**Duration:** 4 years (max.)  
**Starting date:** January 2024 (onwards)  
**Deadline:** 31<sup>st</sup> November 2023

### Qualifications and Eligibility Criteria

Candidates must hold, or expect to complete, a Master's (MChem, MSc or equivalent) degree in chemistry prior to matriculation at UZH. Successful candidates will have an excellent background in **synthetic organic or inorganic chemistry** and must be ambitious, creative, and fiercely independent. Experience in **relevant** supramolecular chemistry (cages, rotaxanes, catenanes, etc) is an advantage. Candidates must have an outstanding academic record as evidenced by:

- First class undergraduate/Bachelor's and Master's degrees (or equivalent qualifications) in chemistry
- Master's level experience in synthetic chemistry (ideally supramolecular)
- Academic awards at university level
- Excellent English language skills (written and oral). German is advantageous but not essential.

### Applications

Selection will be based solely on academic excellence and research potential. Short-listed applicants will be interviewed either in person or *via* video conference call. Applications should be provided as a **single PDF file** and must include a cover letter with a brief statement of motivation including past research experience/achievements (max. 2 pages), full CV (résumé), and the names and contact details of two referees.

Please apply directly online at [www.jobs.uzh.ch](http://www.jobs.uzh.ch). Further details are available from Prof. Jason P. Holland, University of Zurich, Department of Chemistry ([jason.holland@chem.uzh.ch](mailto:jason.holland@chem.uzh.ch)).