



**Prof. Ross MILTON**

Assistant Professor

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October 21<sup>st</sup> 2024

**Reference number:** 2110phd

**Position:** PhD student

*The above reference number **must** appear in the subject line or body of your email to be considered for this post. Applications by email only.*

The Milton group at the University of Geneva (<https://www.unige.ch/sciences/chiam/milton/>) offers **two PhD student** positions in Chemistry, with a focus on bioinorganic catalysis. Applicants must be eligible for a PhD at UNIGE.

Nitrogenases are exciting enzymes, able to break the kinetically inert triple bond of dinitrogen (N<sub>2</sub>). Our research has sought to artificially supply electrons to nitrogenase for catalysis (<https://doi.org/10.1021/acs.accounts.9b00494>). We have also investigated how both  $\alpha\beta$  halves of nitrogenase may or may not be essential to catalysis (<https://doi.org/10.1021/jacsau.3c00165>). The successful candidate should have an interest in metalloenzyme production/purification (including bacterial cultivation), as well as enzymatic assays and product analysis.

Our laboratories are fully equipped for cloning, bacterial cultivation, protein purification under anoxic conditions, anoxic electrochemistry and gas chromatography. The successful candidate will also benefit from (and contribute to) the dynamic environment of our group. Multiple opportunities to attend international conferences and workshops will be provided.

These PhD positions are funded by a large collaborative grant awarded by the Swiss National Science Foundation. As such, collaboration and research stays are anticipated to take place between groups housed at the **ETHZ (Victor MOUGEL and Markus REIHER)**, the **EPFL (Wenyu GU)**, the **CEA Grenoble (Tristan WAGNER)** and the **Max Planck Institute for Chemical Energy Conversion (George CUTSAIL)**.

#### **Administrative information**

**Salary:** ~51'268 CHF /year (gross).

**Paid leave:** 30 calendar days of leave/vacation are provided.

**Duration:** 4 years, extendable to 5 years, yearly contract.

**Start date:** March 2025.

The candidate must supervise the practical work of undergraduate Chemistry and Biochemistry students (Chemistry laboratories), with a maximum of 35 afternoons per year.

Prior knowledge of French is not needed.

**Deadline:** November 30<sup>th</sup> 23:59 CET.

Applications must include a (i) covering letter, (ii) curriculum vitae and, where possible, (iii) a publication list. A copy of your Bachelor's or Master's certificates (or equivalent) must be included if already obtained, or the expected graduation date must be indicated. Applications or correspondence **must quote the above job reference #** in the email subject line or email body in order to be considered. Incomplete applications will not be considered. Applications by email only. Shortlisted candidates will be contacted for interview. Please provide the contact details of two academic references. References will not be contacted without your prior consent.