



UNIVERSITÉ  
DE GENÈVE

FACULTÉ DES SCIENCES

Département de chimie minérale  
et analytique

**Prof. Ross MILTON**

Assistant Professor

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May 2<sup>nd</sup> 2024

**Reference number:** 040124B

**Position:** Postdoctoral researcher

*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/>) seeks **one Postdoctoral Scholar** in the area of Bioinorganic Catalysis and/or Bioelectrochemistry. Applicants must hold a PhD in Chemistry, Biochemistry, Chemical Engineering or related disciplines, ideally with experience in electrochemistry, bioinorganic chemistry or molecular biology. Existing experience in bioinorganic chemistry is advantageous, although not essential. The PhD must be obtained prior to engagement at UNIGE.

Nitrogenases, the only enzymes known to reduce kinetically inert dinitrogen (N<sub>2</sub>) to ammonia (NH<sub>3</sub>) are of significant interest to new biotechnologies. The Milton group has previously explored electrochemical turnover of nitrogenases (<https://doi.org/10.1021/acs.accounts.9b00494>). More recently, we have investigated whether both  $\alpha\beta$  halves of Mo-nitrogenase's heterotetrameric ( $\alpha\beta$ )<sub>2</sub> MoFe protein are strictly necessary for N<sub>2</sub> fixation (<https://pubs.acs.org/doi/10.1021/jacsau.3c00165> and <https://doi.org/10.1021/jacsau.3c00567>). The engaged **postdoc** will interact with the NCCR Catalysis (<https://www.nccr-catalysis.ch/>) programme, in which we seek to further evaluate nitrogenases for green NH<sub>3</sub> production *in vitro*.

The 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.

#### **Administrative information**

**Salary:** ~84'000 CHF /year (gross), 100% activity (full time).

**Paid leave:** 25 calendar days of leave/vacation are provided.

**Duration:** Multi-year (evaluated annually) – 1 year in the first instance.

**Start date:** not before September 2024.

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

Applications must include a (i) covering letter, (ii) curriculum vitae and (iii) publication list. A copy of your PhD certificate (or equivalent) must be included (if already obtained), or the expected thesis defence 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 no less than 2 academic references. References will not be contacted without your prior consent.