



Prof. Ross MILTON

Assistant Professor

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April 1st 2024

Reference number: 040124phd

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 **one PhD student** position in Chemistry, in the domain of Bioinorganic Electrochemistry. Applicants must be eligible for a PhD at UNIGE.

[FeFe]-hydrogenases are of interest to new biotechnologies for dihydrogen (H₂) production from renewable energy/electricity. We recently reported an electrode design where [FeFe]-hydrogenase from *Clostridium pasteurianum* could produce relatively large quantities of H₂ for a relatively prolonged period of time (<https://doi.org/10.1021/jacsau.2c00551>). The engaged PhD student will expand on this work, with a particular focus on (i) hydrogenase encapsulation at the electrode surface and (ii) methods to further extend the activity of this enzyme over time. 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: ~48'500 CHF /year (gross).

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

Duration: 4 years, extendable to 5 years.

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 15th 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.