

POSTDOCTORAL POSITION IN PLANETARY ATMOSPHERES REMOTE SENSING

Job information

- Job place: Université libre de Bruxelles (50 Avenue Franklin Roosevelt, 1050 Brussels, Belgium), the laboratory "Spectroscopy, Quantum Chemistry and Atmospheric Remote Sensing" (SQUARES, <https://squares.ulb.be/>).
- Contract: 1 year
- Job status: full-time (38h per week)
- Starting date: before 01/12/2023
- Requirements: 1) PhD obtained less than 8 years before the position starts
2) Have worked or lived less than 24 months in Belgium in the last 3 years

Job description

The laboratory SQUARES (Spectroscopy, Quantum Chemistry and Atmospheric Remote Sensing) is one of the leading laboratories worldwide in the field of high-resolution molecular spectroscopy, quantum chemistry and dynamics, and in atmosphere remote sensing. You will integrate the Atmospheric spectroscopy research group and in particular the planetary atmospheres remote sensing unit, which has emerged in the last few years. You will directly contribute to the study of the Mars atmosphere through the analysis of the spectral observations of different space-based instruments. You will focus primarily on the observations of the NOMAD (Nadir and Occultation for Mars Discovery) instrument on board the Exomars Trace Gas Orbiter, which has currently acquired more than 4 years of Mars spectra. You will be in charge of the analysis of these and responsible for the development of new detection and retrieval techniques based on statistical approaches. Different retrieval targets (such as water, carbon monoxide,...) are possible and this will be discussed at the beginning of the project. You will then exploit your retrieval results to improve the knowledge of Martian seasonal and/or chemistry cycles, depending on the retrieval target.

Qualifications and requirements

We are looking for a motivated, well-organized and dynamic candidate. The successful candidate should

- Hold a PhD degree in Science or in Applied science for less than 8 years before the position starts
- Have excellent oral and written English communication skills
- Be able to work autonomously with a high level of creative thinking
- Be able to work in a team and in an international environment
- Show keen interest and curiosity in learning new techniques and in approaching scientific questions

Experience in the field of remote sensing or spectroscopy is definitely an asset.

To be eligible for the postdoctoral grant, the candidate must not have worked or lived more than 24 months in Belgium in the last 3 years.

Our offer

- A full-time research position of 1 year, with the possibility of extension for another 1-2 years

- The opportunity to play a significant role and to invest in the research activities development of a recently built research unit
- A stimulating research work environment where quality, professionalism and team spirit are encouraged
- Flexible schedule and possibility to work occasionally from home
- The opportunity to interact with several world-class investigators through the involvement of the candidate in the NOMAD scientific team
- A job in a multicultural city, which is the heart of Europe and one of the greenest European capitals

Candidate selection

After evaluating the submitted applications, the selected candidates will be invited for an interview. ULB seeks to foster an environment where all talents can flourish, regardless of gender, age, cultural background, nationality or impairments.

How to apply

If you are interested, please send to Sophie Bauduin (Sophie.Bauduin@ulb.be)

- A detailed CV including your past achievements and a list of your publications
- A motivation letter
- The contact information for at least one scientific person of reference

Deadline: until the position is filled.