



VACANCY

BIRA-IASB is hiring a **Research assistant (M/F/X)**

Deadline for application : 2021, 5 July

Researcher

Doctor in Sciences or Doctor in engineering sciences

preferentially orientation physics or chemistry, or physical engineering.

Tasks, division, context

You work within the group 'Infrared observations' of the Scientific Division 'Sources and losses of atmospheric constituents'. The group's specialty is the acquisition and exploitation of infrared spectrometric measurements, in-situ or by remote sensing, for determining the concentrations of trace gases and aerosols in the atmosphere. The observational data thus obtained are exploited to study changes in the atmospheric composition caused by natural processes and human activities, such as the recovery of the stratospheric ozone layer, climate changes due to emissions of the so-called greenhouse gases, the impact of biomass burning, etc. The measurements are carried out with Fourier-transform infrared spectrometers from the ground, in the framework of international networks and research infrastructures or measurement campaigns, and on board satellites. The data obtained are also compared and exploited with numerical models of the atmosphere. The group works in close collaboration with other teams within the institute and national and foreign partners. The researcher to be recruited will contribute both to experimental work (observations) and to the analysis, exploitation and valorisation of the measurements. He/she will work in close collaboration with the other members of the team.

Job description

More specifically, the researcher will contribute to

- Setting up, carrying out and following up the infrared observations from the ground; participating in the network activities and/or campaigns to which these measurements contribute;
- The derivation of concentrations of the targeted atmospheric constituents from measurements (infrared spectra) using existing inversion methods;
- The geophysical exploitation of the derived data

More about BIRA-IASB

The Royal Belgian Institute for Space Aeronomy (BIRA-IASB) is a Belgian Federal Scientific Institution. Since its foundation in 1964, BIRA carries out research and provides public service in the field of space aeronomy, i.e. the physics and chemistry of the Earth's atmosphere and of other planets, and of cosmic space.

Our scientists use instruments on the ground, in the air, on board balloons or in space, and numerical models.

www.aeronomie.be

- The valorisation of the results in the framework of international initiatives such as the validation of satellite data and models, in particular in the framework of Copernicus
- The scientific research and scientific service projects in which the team is involved, as well as the preparation of new projects.

Depending on the specific interests and expertise of the researcher, he/she will take on responsibilities in the team and in (inter)national scientific research and scientific service projects.

Job qualifications

- Hold a degree of Doctor of Sciences or Doctor of Engineering Sciences, preferably in the field of physics or chemistry, or physical engineering;
- Have a basic knowledge of infrared Fourier-transform spectrometry;
- Have a good mathematical basis and IT competences; mastery of at least one programming language, good knowledge of mixed Microsoft/UNIX/Linux software environments and IT tools such as e-mail, web browsing, FTP, Microsoft Office tools, ...;
- Be a team player;
- Be fluent in English (both spoken and written);
- Have experience in writing technical/scientific reports and publications in peer-reviewed journals.

Assets

- Knowledge of one of the two national languages;
- Basic knowledge of aeronomy, and/or spectroscopy and/or inversion methods;
- Experience with international projects, especially EU, EUMETSAT or ESA projects;
- Experience with Earth observation satellite data.

We offer

- The position is on a contractual basis. Salary is according to the federal regulations for scientific contractual personnel. All relevant work experience (public + private sector) will be considered when determining seniority.
- Possibility to acquire a bonus for bilinguism (Dutch/French)
- Possibility of training (to be followed during working hours)
- Pleasant working atmosphere in a scientific environment located in a green setting in Uccle, Brussels.
- Attractive annual leave policy (minimum 26 days per year)
- Options to balance professional and personal life (flexible schedule) within the 38 hours week
- Full refund of commuting expenses when using public transportation, compensation when using the bicycle
- Possibility to work from home
- Access to special advantages arranged for the employees of the federal scientific institutions: museum card, hospitalization insurance, reductions via the Fed + card, etc.
- Company restaurant with reasonably priced hot meals and salad bar.
- On-site childcare during school holidays in July and August.
- Dynamic working environment with strong international orientation.



Interested ?

Please send your motivation letter and CV to martine.demaziere@aeronomie.be

and in cc to hr-ae@aeronomie.be with reference: "D21_2021".