BIRA-IASB is looking for:

Scientist

Statute: Contractual (full time)
Deadline for applications: This position will remain open until filled

Assignment, division & context

The Space Weather group within the Space Physics division develops services related to conditions in the near-Earth space environment (radiation belts, cosmic radiation, magnetosphere, ...) and its effects on both space and ground based technology as well as human health related activities. ESA's SPace ENVironment Information System (SPENVIS, \texttt{www.spenvis.oma.be}) is an operational software, developed and maintained by the Space Weather group, that facilitates a rapid analysis of the environmental effects on spacecraft and crew. The service has a wide international user community of aerospace engineers and satellite operators, and is also used by technical universities in their educational programs.

The successful candidate will join the SPENVIS team within the Space Weather group to take part in the further development of the SPENVIS system that is in line with new user requirements regarding novel types of space mission profiles, and the availability of new models and server technologies to improve the operational efficiency of the system.

Job description

The Space Weather group consists of ten employees, including scientists and IT specialists. Within the SPENVIS team you will be responsible for both scientific and IT oriented work packages. In particular, you will contribute to:

- the integration of new space environment and effect models according to ESA’s Network of Models Server concept (https://nom.esa.int/)
- updating of existing SPENVIS models
- development of new dedicated tools/applications
- the provision of support to the user community
- the writing of technical documentation of the project

More about BIRA-IASB

The Royal Belgian Institute for Space Aeronomy (BIRA-IASB) is a Belgian Federal Scientific Institute. Since its founding in 1964, BIRA-IASB has been conducting research and providing public services in space aeronomy, i.e. the physics and chemistry of Earth's atmosphere and other planets, and outer space.

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

\url{www.aeronomie.be}
Over the course of these activities you will familiarise yourself with the available environment/effect models and build up expertise in plasma/radiation effects on spacecraft components.

**Qualifications**

Candidates must have obtained a master’s degree in science or engineering with a strong experience in software development and programming.

**Technical skills**

- You have a basic knowledge of space physics
- A strong interest in learning about the models that you will have to integrate into SPENVIS (read papers, participate to conferences & workshops, communicate with the model developers, ...).
- You have a good programming skills in modern Fortran and Python3. Knowledge of C++ is an asset.
- Knowledge of scripting in Linux (bash, ...) is a plus.
- You have a good knowledge of Linux and Windows as an end user.

**Generic skills**

- You are able to work autonomously and in a team, and you have a sense for initiative.
- You have the capacity to integrate in a mixed technical/scientific environment.
- You create and promote the group spirit by sharing your opinions and ideas, and by contributing when solutions need to be found.
- You supervise internal and external clients in a transparent, honest and objective manner, provide them with a personal service and maintain constructive contacts.
- You act with integrity, in accordance with the expectations of the organization, respect confidentiality, make commitments and avoid any form of bias.
- You plan and manage your own growth according to your possibilities, interests and ambitions by critically questioning your own performance and by continuously familiarizing yourself with new insights, skills and knowledge.
- You have the commitment, the will and the ambition to achieve results and take responsibility for the correctness of actions taken.
- You are fluent in written and spoken English
- A good knowledge of Dutch and/or French is a plus as you will work in a bilingual environment.

**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)
- Attractive annual leave policy (minimum 26 days by year)
- Options to balance professional and personal life (flexible schedule) within the 38 hours week
- Pleasant work environment in a scientific institution located in a green setting in Uccle, Brussels.
- 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 international contacts.
Procedure

After evaluating the submitted applications, the selected candidates will be invited for an interview. Candidates whose diploma is not awarded in Belgium must submit a NARIC certificate of equivalence. If the equivalence certificate has not yet been obtained, the application must at least have been initiated at the time of application.

More information about the equivalence certificate can be found on the website: www.enic-naric.net/index.aspx?c=Belgium

For additional technical information please contact Dr. Erwin De Donder by email (erwin.dedonder@aeronomie.be). Regarding contract related questions and salary please contact Ms. Kristien Brouckmans (hr-ae@aeronomie.be)

Interested?

Send your CV and motivation letter to: erwin.dedonder@aeronomie.be with hr-ae@aeronomie.be in copy with the following reference “D14_SPENVIS”