

Vacancy Notice

Research Fellowship on all-sky microwave radiative transfer

EUMETSAT is Europe's meteorological satellite agency. Its role is to establish and operate meteorological satellites to monitor the weather and climate from space - 24 hours a day, 365 days a year. This information is supplied to the National Meteorological Services of the organisation's Member States in Europe, as well as other users worldwide.

EUMETSAT also operates several Copernicus missions on behalf of the European Union and provide data services to the Copernicus marine and atmospheric services and their users.

As an intergovernmental European Organisation, EUMETSAT has 30 Member States (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom).

EUMETSAT is now inviting applications from suitably qualified scientists from its Member States for a Research Fellowship.

- POST:** Research Fellowship
- LOCATION:** Chalmers University of Technology,
Gothenburg, Sweden
- DURATION:** The fellowship is offered for one year, with possibility of extension for up to two additional years.
- AREA OF RESEARCH:** The Research Fellow will join the remote sensing division of the Department of Space, Earth and Environment at Chalmers University of Technology. She/he will work on characterising and reducing uncertainties in all-sky microwave radiative transfer.

The focus is on the application of the fast radiative transfer model RTTOV-SCATT for assimilating cloud and precipitation information into the ECMWF global model. Reference calculations will be performed by the ARTS research code. Besides the assimilation of existing microwave data (e.g. MHS and

ATMS), special consideration will be given to the upcoming Metop SG Ice Cloud Imager (ICI) mission. The successful candidate will work in close collaboration with experts at ECMWF, SMHI and University of Hamburg. Main tasks of the fellow include:

- Study the impact of cloud overlap assumptions, beam-filling and 3D effects;
- Assess to what extent various combinations of particle size distribution and habit assumptions give agreement with observations;
- Explore ways to represent scattering from oriented particles;
- Prepare for all-sky assimilation of ICI data;
- If found necessary and fellow has relevant knowledge: adapt/extend RTTOV-SCATT and/or ARTS.

**QUALIFICATIONS
/ SKILLS:**

- The Fellow should have a university degree in Physics, Mathematics, Meteorology, Remote Sensing, or equivalent, and relevant research experience, including PhD or at the level thereof. Experience in atmospheric radiative transfer will be emphasised.
- Strong computing skills will be a significant asset. This includes good and proven practical knowledge of programming languages (particularly Modern Fortran and C/C++), as well as experience with performing scientific simulations, and their evaluation using statistical and visualisation packages such as Python or Matlab.
- The ability to work as part of a team, a high level of commitment and interest in continuing development and training is required.
- Candidates must be able to work effectively in English, both verbally and written.

**GRADE &
REMUNERATION:**

The amount of remuneration will be in accordance with the University's scale and will depend on qualification and experience. In addition, approved travel costs are reimbursed.

CLOSING DATE: 23 September 2018

Interviews are tentatively scheduled for week 44/2018.

Applications in English or French should be sent via our online form (attaching curriculum vitae and covering letter quoting Reference VN(18)57) at

www.eumetsat.int

Please note that only nationals of EUMETSAT Member States may apply and that applications will not be returned.