

> Retouradres Postbus 201 3730 AE De Bilt

Onderwerp **Vacancy announcement**
Datum 25 juni 2010
Nummer KNMI 2010/19

KNMI

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Within the sector Climate Research and Seismology, in the department of Climate Observations of the Royal Netherlands Meteorological Institute (KNMI), De Bilt, the Netherlands, there is a vacancy for the position of:

Contactpersoon

Folkert Boersma
T 030-2206618
-

Post doc

General information

KNMI and Eindhoven University of Technology (TU/e) are developing a new, innovative line of atmospheric research. This research, funded by the recently awarded NWO VIDI-project *Attributing the sources of tropospheric ozone from space*, focuses on using satellite measurements of atmospheric composition to advance the understanding of the formation, role and impact of tropospheric ozone on climate change and air pollution.

The VIDI-research is carried out within the Climate Observations department of KNMI and within the Fluid Dynamics Lab in the Department of Applied Physics in Eindhoven. These groups are at the forefront in developing satellite remote sensing capabilities, research of (atmospheric) transport phenomena, and interpretation of satellite measurements of atmospheric composition with chemistry transport models.

Position information

This 5-year VIDI-project seeks to fully exploit satellite data sets from the OMI, TES, GOME-2, and IASI instruments by means of interpretation with advanced chemistry-transport models. The research aims to improve our understanding of the photochemical production of ozone from anthropogenic and biogenic precursors, and put constraints on the natural inflow of ozone from the stratosphere. The successful applicant will closely collaborate with Dr. Boersma at KNMI and TU/e on the following tasks:

- Quantify stratosphere-troposphere exchange of ozone using satellite measurements
- Develop, test, and improve satellite observations of tropospheric NO₂ and HCHO
- Integrate the efforts of 2 PhD-students in constraining ozone precursor emissions
- Evaluate improved simulations of tropospheric ozone with satellite observations
- Assess relevance of observed emissions trends for climate model scenarios

The successful candidate will divide his or her time between KNMI (0.6 FTE) and the TU/e (0.4 FTE). At KNMI, the candidate will contribute to the retrieval, validation, and use of (OMI) satellite data for research. At the TU/e, the applicant will collaborate with the PhD-students working on *Mapping NO_x emissions with satellite observations* (V34.1154) and on *Mapping biogenic emissions with satellite observations* (V34.1155), also part of the VIDI-project. Integrating the results from these PhD-projects in a chemistry transport model is anticipated to strongly contribute to a better understanding of the role of biogenic and anthropogenic emissions in driving the global tropospheric ozone budget.

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Requirements

We are searching for excellent, multidisciplinary candidates who have or will soon obtain a doctoral degree in atmospheric chemistry, remote sensing, or a closely related discipline. The overriding requirement is an excellent research record and a passion for science. The successful applicant is a strong communicator in view of the collaborative nature of the project. Preference will be given to candidates with demonstrated proficiency in atmospheric modelling, and/or prior research experience in satellite remote sensing. Familiarity with F90 is desirable.

Working places: De Bilt/Eindhoven
Salary: max. € 4.380,72 gross per month (scale 11)

Special details

The vacancy is full-time, double appointment (60% at KNMI, 40% at TU/e) with a probationary period of 2 years, and the possibility of extension up to five years. The start date is 1 september 2010.

More information can be obtained from dr. K. F. Boersma (+31 30 2206 618; boersma@knmi.nl) or prof. dr. P. F. Levelt (+31 30 2206 667).

More information about the TU/e can be found at www.tue.nl, and more information about the VIDI-program (in Dutch) can be found at www.knmi.nl/~boersma.

The deadline for applications is 15 August 2010.

Interested applicants are kindly asked to submit an application letter (including reference number KNMI 2010/19), a curriculum vitae, a 1-paragraph statement of research interest, contact information of two or more references (including a research supervisor), and a copy of the PhD-thesis and other relevant publications, if available, to

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Werving en Selectie
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