



## **Two PhD Candidates in Space Physics at UiT The Arctic University of Norway, Faculty of Science and Technology, Department of Physics and Technology**

**Application deadline: 15.11.2016**  
**Ref. 2016/4907**

University of Tromsø - The Arctic University of Norway, Faculty of Science and Technology, has two PhD student positions vacant for applicants who wish to obtain the degree of Philosophiae Doctor (PhD). The appointment is for a period of four years.

The positions are attached to the Department of Physics and Technology at Campus Tromsø and the research group in Space Physics.

A PhD position is for a fixed term, with the objective of completion of research training to the level of a doctoral degree. Admission to a PhD programme is a prerequisite for employment, and the programme period starts on commencement of the position. The PhD Candidate shall participate in the faculty's organized research training, and the PhD project shall be completed during the period of employment. Information about [the application process for admission to the PhD programme, application form and regulations for the degree of Philosophiae Doctor \(PhD\)](#) is available at our website.

Further information about the position and project details is available by contacting:

- Professor Ingrid Mann by email [ingrid.b.mann@uit.no](mailto:ingrid.b.mann@uit.no) or telephone +47 776 45198.

### **The positions' affiliation**

[The Faculty of Science and Technology](#) consists of the following departments: [Department of Physics and Technology](#), Department of Geology, Department of Computer Science, Department of Chemistry, Department of Mathematics and Statistics, and Department of Engineering and Safety.

The Department of Physics and Technology consists of five research groups: (1) Earth Observation, (2) Electrical Engineering, (3) Energy and Climate, (4) Machine Learning, and (5) Space Physics. The department provides education at the Bachelor, Master, and PhD levels. The department consists of 17 permanent scientific employees, and a technical/administrative staff of 10 persons. The department conducts research and education at a high international level, and our employees are engaged in several international collaborative projects.

[The Space Physics Research Group](#) has a long tradition in using the radar instruments of the EISCAT Scientific Association in Northern Scandinavia and plays an important role in preparing for the new advanced atmospheric radar facility EISCAT\_3D. Scientists in the group also conduct rocket experiments to study the electrically charged dust particles (dusty plasma) in the middle atmosphere and run the plasma laboratory Aurolab to investigate plasma processes found in space.

### **The positions' field of research**

#### Position number 3191

The PhD student will participate in the "Mesoclouds" project that uses EISCAT radar in combination with cameras to study the link between two phenomena that are related to the presence of dust and ice particles in the ionosphere: Polar Mesospheric Summer Echoes (PMSE) and Noctilucent Clouds (NLC). The project includes analysing previous radar observations of PMSE, and developing and documenting analysis tools. More observations are planned for summer 2017 with the tri-static EISCAT VHF in combination with NLC observations carried out in an international collaboration. The PhD student will work under the supervision of Professor Ingrid Mann in a group with other PhD candidates and Master students and will have an opportunity to participate in international collaborations.

#### Position number 3198

The PhD student will participate in a research project on studies of the ionosphere using EISCAT radar in combination with other instruments and model calculations. Observational data will be used to study the dust and ice particles in the ionosphere and the ionospheric parameters that influence the electric surface charging of the particles. Aside from EISCAT radar observations, heating experiments and possibly also in-situ measurements from rockets or satellites can be used with the perspective to collaborate with a group preparing cubesat measurements. The PhD student will work under the supervision of Professor Ingrid Mann in a group with other PhD candidates and Master students and will have an opportunity to participate in international collaborations.

### **Qualification requirements**

The successful applicants must fulfil the requirements for admission to the faculty's PhD programme (Regulations for the degree of Philosophiae Doctor at UiT). In addition, they shall be able to document proficiency in English equivalent to Norwegian Higher Education Entrance Qualification, refer to the website about [PhD regulations at UiT](#).

The ideal candidates have a Master's degree in Space Physics or Space Engineering and a good knowledge in one or more of the following fields would be an advantage: atmospheric and ionospheric physics, plasma physics, numerical methods and modelling, data analysis and experimental experience with radar, rocket or space experiments. Suitable candidates should have good communication skills and should be able to participate in international collaborations.

The applicant may present a description outlining the academic basis of the PhD project.

Emphasis shall also be attached to personal suitability.

### **Working conditions**

The normal period of employment is four years. The nominal length of the PhD programme is three years. The fourth year, distributed as 25 % of each year, is used for teaching or other duties for the university, cf. Guidelines for the research fellow's duties.

The position will especially be assigned teaching duties at Department of Physics and Technology.

A shorter period of appointment may be decided when the PhD candidate has already completed parts of his/her research training programme or when the appointment is based on a previous qualifying position (PhD Candidate, research assistant, or the like) in such a way that the total time used for research training amounts to three years.

Remuneration for the position of a PhD Candidate is in accordance with the State salary scale code 1017. A compulsory contribution of 2 % to the Norwegian Public Service Pension Fund will be deducted from the gross salary.

### **Assessment**

An expert committee will assess the applicants. During this assessment process, emphasis will be attached to the applicant's potential for research as shown by:

- The Master's thesis or equivalent
- any other academic works, and
- the project description (*if attached*)

In addition, consideration may be given to work experience or other activities of significance for the completion of the PhD studies, and to any teaching qualifications. This includes teaching education, teaching experience, experience from popularization, and experience/education from other types of dissemination. Information and material to be considered during the assessment must be submitted by the stipulated deadline.

The applicants who are assessed as the best qualified will be called to an interview. The interview shall among other things aim to clarify the applicant's personal suitability and motivation for the position.

### **Application**

The **application** must be submitted electronically via the application form available on [www.jobbnorge.no](http://www.jobbnorge.no).

**In addition**, by the application deadline, the application shall contain:

- Letter of application
- CV (containing a complete overview of education, supervised professional training and professional work)
- Certified\* copies of:
  - *diploma and transcript from your Bachelor's degree or equivalent*
  - *diploma and transcript from your Master's degree or equivalent*
  - *diploma supplement for completed degrees*
  - *documentation of English language proficiency*
  - *references*
- List of works and description of these (see below)

The list of works shall contain the following information:

- author(s), the work's title
- for articles: the journal's name and volume, the first and last page of the article, year of publication
- for publications: publisher, printer, year of publication, number of pages

The works (published or unpublished) which the applicant wishes to be taken into consideration during the assessment process must be submitted.

**All photocopies of certificates, diplomas, transcript and reference letter must be stamped and certified by the photocopying or a public office.**

**All documentation that is to be evaluated must be certified and translated into English or a Scandinavian language.**

**All information and material to be considered during the assessment must be submitted by the specified deadline.**

**Applicants invited for an interview will be asked to bring original certificates and diplomas.**

**General information**

Applicants shall also refer to the [Supplementary regulations for appointment to postdoktor \(Postdoctoral Fellow\), stipendiat \(PhD\) and vitenskapelig assistent \(Research Assistant\) positions at UiT](#) and to the [Regulations concerning terms and conditions of employment for the posts of postdoktor \(post-doctoral research fellow\), stipendiat \(research fellow\), vitenskapelig assistent \(research assistant\) and spesialistkandidat \(resident\)](#).

Questions concerning the organisation of the working environment, such as the physical state of the place of employment, health service, possibility for flexible working hours, part time, etc. as well as questions about the PhD programme may be directed to the telephone reference in this announcement.

UiT has HR policy objectives that emphasize diversity, and encourages all qualified applicants to apply regardless of their gender, functional ability and national or ethnic background.

UiT is an IW (Inclusive Workplace) enterprise, and will emphasize making the necessary adaptations to the working conditions for employees with reduced functional ability.

Personal data given in an application or CV will be processed in accordance with the Act relating to the processing of personal data (the Personal Data Act). In accordance with Section 25 subsection 2 of the Freedom of Information Act, the applicant may request not to be registered on the public list of applicants. However, the University may nevertheless decide that the name of the applicant will be made public. The applicant will receive advance notification in the event of such publication.

We look forward to receiving your application!

**UIT THE ARCTIC UNIVERSITY OF NORWAY**  
**NO- 9037 TROMSØ**

Jobbnorge ID: 130432, Deadline: 11/15/2016