## **Professor in Space Systems Engineering**

DTU Space at Technical University of Denmark invites applications for a position as Professor in Space Systems.

DTU Space is the leading institution of public space activities in Denmark. The mission of the Institute is to conduct research, development, scientific advice, education, and innovation at the highest international level within the following areas: Space Technology & Instrumentation, Earth Observation & Geoscience, and Space- & Astrophysics.

DTU is a world leader in space electro-optical and space magnetometry instrumentation used for spacecraft navigation and scientific space missions. DTU has had a leading role in defining large sub-systems for several space missions and has been responsible for a number of mission designs. The field is central to DTU Space's strategic effort in the area of advancing space technologies and space systems research, as well as adding value to society from these technologies. The research focus is presently on defining next-generation scientific spacecraft with respect to autonomy, performance, and accuracy.

The position as professor in Space Systems Engineering entails focusing on designing, implementing, and verifying space instrumentation systems, and will placed in the division Measurement and Instrumentation Systems, which is one of the seven divisions comprising DTU Space.

## **Responsibilities and tasks**

The successful candidate is to lead the space systems engineering group, and through research and collaboration with other research entities at DTU Space strengthen DTU's international lead position in the field of designing novel, efficient science space missions. The research fields to be covered are encompassing systems engineering aspects of fundamental research in measurement techniques, space technology, and mission design concepts.

The applicant must demonstrate successful research management experience, the ability to collaborate with external partners, including major space agencies and the international space industry, as well as experience in high-level space systems engineering.

The applicant must be internationally recognized with documented research and/or research management experience in several of the following areas:

- Systems engineering of instrumentation for international space missions, based on highperformance electro-optics and magnetometry.
- Systems engineering of highly accurate space measurement platforms and subsystems.
- Experience in both Earth-bound, deep space, and planetary missions.
- Mastering system aspects of methods for platform development for validation and verification of high performance space instrumentation systems.
- Application of major space agencies standards in science instrumentation systems for satellites.
- Research-based teaching experience, including supervision of PhD, MSc, and BSc projects as well as training of postdoctoral researchers
- Other duties:
  - o Pedagogical guidance and supervision of assistant professors
  - Academic assessment work
  - Knowledge exchange with society at large
  - Innovation and/or scientific advice

Collaboration with other research groups at DTU and at DTU Space.

The successful candidate is expected to take a lead position in teaching at BSc, MSc, and PhD levels.

# Qualifications

Qualification requirements for this professorship:

- High level of original, international scientific production that has contributed to developing the field of space systems engineering.
- Documented teaching experience at various university levels.
- Successful research management experience as well as the ability to initiate and develop collaborations with external partners.

#### Assessment

In the assessment of the candidates, consideration will be given to

- the ability to teach
- scientific production at international level, research potential and ability to lead and develop a
  research team
- the ability to promote and utilize research results
- experience with innovation activities
- an all-round experience basis, including international experience
- the ability to contribute to the development of internal and external cooperation
- track record in attracting funding to the research area
- visions within the research area

## Salary and terms of employment

The appointment will be based on the collective agreement with the Confederation of Professional Associations. The allowance will be agreed with the relevant union.

#### **Further information**

Further information may be obtained from Director of DTU Space, Kristian Pedersen, +45 4525 9501.

You can read more about DTU Space at www.space.dtu.dk

## **Application procedure:**

Please submit your online application no later than XXX 2017.

Applications must be submitted as **one PDF file** containing all materials to be given consideration. To apply, please open the link 'Apply online,' fill in the online application form, and attach **all your materials in English in one PDF file**. The file must include:

- Application (cover letter) addressed to the President
- CV
- Diploma (MSc/PhD)
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <u>http://orcid.org/</u>)
- Documentation for teaching experience (e.g. in the form of a teaching portfolio)
- A plan for future research

All interested candidates irrespective of age, gender, disability, race, religion, or ethnic background are encouraged to apply.