**Professorship in Traffic Engineering, Intelligent Transport Systems (ITS)**

The professorship is affiliated with the Department of Transport (DTU Transport). The position will be offered to a candidate with a strong research profile and an outstanding track record in internationally acknowledged research within traffic engineering and intelligent transport systems (ITS).

DTU Transport's fundamental activities concern research in topics related to transport. In addition, the department is deeply engaged in public sector consultancy, educational activities and industrial cooperation within its research areas. Hence, we emphasise that our research creates value for society in terms of its relevance for political decision making (public sector consultancy), education of high-quality graduates (education), and commercial knowledge for industry (innovation).

DTU Transport has an internationally oriented research staff of about 85 employees, mainly scientists and PhD-students.

The Professor will be part of the Department's section for transport optimisation and traffic engineering. Subjects relevant to the scientific domain of the professorship include, but are not limited to:

- Traffic flow theory and control
- Modelling in relations to dynamic/real-time traffic signal optimisation and signal prioritization
- Monitoring of road traffic to observe congestion and to collect data
- Micro-, meso- and macro-simulation of road traffic including the simulation of street space modes such as cars, trucks, buses, bicycles, pedestrians and/or light rail
- Intelligent transport systems within public transport systems
- Intelligent road charging systems

Several other DTU departments hold strong research positions within a wide range of topics relevant to the Professorship. These include DTU Space (geodesy and satellite positioning), DTU Photonics (communication technology) and DTU Compute ("big data", dynamic systems, stochastic simulation, etc.).

**Responsibilities and tasks**
The Professor will conduct original and relevant research within traffic engineering and intelligent transport systems and will take a leading role within the research field. This means that besides his/her own research, the Professor will scientifically lead and inspire a group of scientists and

- supervise PhD-students, as well as BSc- and MSc-student theses
- take a lead position in teaching in courses at both the PhD, MSc and BSc level, primarily related to traffic engineering and intelligent transport systems
- act as a mentor for Assistant Professors
- propose and take responsibility for  ensuring external funding
- drive and develop innovative collaboration with actors within the transport sector
- ensure the transfer of technological knowledge gained from innovation and research projects to the transport sector as project manager within both research and innovation oriented projects
- contribute to the strategic activities and international cooperation of the Department

- engage in international networks and cooperates with relevant international scientific communities

## Qualifications
The successful candidate will have a strong theoretical and applied background within quantitative transport research based on methodologies. The candidate should have an extensive background within traffic flow theory and also strength in disciplines such as analytics, statistics, operations research and/or simulation techniques.

Furthermore, the Professor must be capable of undertaking scientific leadership in the theoretical, methodological and applied perspectives within the field of transport at the highest international level. It is of paramount importance that the candidate possesses experience from both theoretical and practical oriented projects within traffic engineering and intelligent transport systems.

Candidates should have obtained well-documented international recognition in research within fields related to DTU Transport's strategic research priorities. Applicants are referred to the Department's research activities which are described at www.transport.dtu.dk.

Furthermore, experience from research management will be required. Extensive experience from international research cooperation will be a clear advantage, e.g. in terms of formalised project cooperation, professional positions of trust and strength of personal network within research as well as the transport sector.

The successful candidate should be able to document substantial experience with teaching at the BSc, MSc and PhD level within traffic engineering and intelligent transport systems. The experience should include development of course curricula. Preferably, the candidate should also have received formal training in university level teaching.

In addition to the qualifications mentioned above, the candidate should possess personal skills to establish and develop external cooperation.

## Assessment
In the assessment of candidates consideration will be given to:

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

## Salary and appointment terms
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 can be obtained from: Head of Section Allan Larsen, tel.: +45 4525 1502, email: ala@transport.dtu.dk or Head of Department Niels Buus Kristensen, tel.: +45 4525 6501, email: nbu@transport.dtu.dk.

**Application procedure**
Please submit your online application no later than **XXX 2014**.

Applications must be submitted as **one pdf file** containing all materials to be given consideration. To apply, please open the link "apply for this job 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)
- CV
- A list of publications indicating the works viewed as scientific highlights, e.g. where publications are sorted after publication types: in ISI journals, other journal papers, book chapters, refereed conference proceedings, other publications.
- Documentation of teaching experience
- A plan for future research

A limited selection of scientific publications and other material that the applicant may wish to include in the evaluations should be submitted. The applicants are encouraged to prepare and submit a summary of the principal recent research results (2-3 pages).

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