

## **Professor in Mechatronics at the University of Agder, Faculty of Engineering and Science.**

### **Ref. 6/11**

The University of Agder invites applications for a full-time permanent position as Professor in Mechatronics at the Department of Engineering, Faculty of Engineering and Science. The position is currently located in Grimstad, Norway. The starting date is negotiable.

As part of the Department of Engineering, the Mechatronics Group consists of 18 people, including four professors, four associate professors, four lab technicians, one postdoctoral fellow and five PhD research fellows, with a new associate professor and several PhD research fellows in the process of being appointed. The group is responsible for the BSc, MSc and PhD programmes in mechatronics at the University of Agder and has a comprehensive network of Norwegian and international partner universities. The Mechatronics group, with its industrial partners in the offshore oil and gas sector in the Agder region, (NCE NODE, [www.ncenode.no](http://www.ncenode.no)), forms one Scandinavia's fastest growing research clusters in the field of mechatronics.

Research and teaching in mechatronics at UiA have over many years been adapted to the needs of regional industrial enterprises, focusing on mechatronic systems in which large movements and forces are controlled and large amounts of energy are converted. Research and teaching projects are typically focused towards the design of electromechanical systems with one or more of the following characteristics:

- Dynamic behaviour and the need for modelling and simulation;
- Structural response analysis;
- Electrical and/or hydraulic energy transmission;
- Need for closed-loop control of nonlinear and multivariable systems;
- Energy conversion.

Research and teaching are mainly focused on three disciplines:

- Mechanical engineering;
- Electrical and hydraulic actuation systems;
- Control systems.

UiA and the NODE Cluster wish to strengthen the Mechatronics Group with another person in the field of reliability engineering. The professorship is directed towards all three disciplines, but the successful candidate may well have a particular academic strength in one of the three. The candidate should have a good command of one or more of the following techniques/methods: Accelerated Life Testing, Condition Based Maintenance (CBM), Cost Benefit Analysis for Reliability and Maintenance (R&M), Equipment Diagnostics and Prognostics, Failure Modes and Effect Analysis (FMEA), Fault Tree Analysis, Life Data Analysis, Physical Reliability Models, R&M in Offshore Applications, R&M Management, Reliability Modeling, Risk Analysis and Management, Software and Control Systems Reliability Analysis, System Safety (SIL analysis).

It is expected that the successful candidate will actively participate in teaching mechatronics at all levels, including supervision of PhD students in the Department's PhD programme in

mechatronics. Research collaboration with the other members of the Mechatronics Group and offshore industry in the region will also be expected. The new professor will also represent the University of Agder in the Maritime Knowledge Hub, [www.knowledgehub.no](http://www.knowledgehub.no).

A PhD or equivalent in a central area of mechatronics is required. Applicants must be able to document teaching qualifications in the form of university-level teaching seminars or other university teacher education. Applicants who lack formal teacher training qualifications will be required to obtain such qualifications, or complete UiA's Foundation Course in Education for University Lecturers, within two years of taking up the position.

In order to qualify for appointment to a professorship the applicant must be able to document scientific expertise of a high standing at an international level. Applicants must have experience in the supervision of master's students and, preferably, PhD candidates. Information about the appointment criteria can be found in the Regulations concerning appointment and promotion to teaching and research posts, available for download at [www.uia.no/vacancies](http://www.uia.no/vacancies).

Personal suitability and good teamwork skills will also be emphasised.

The language of instruction can be Norwegian or English. The successful candidate must be proficient in oral and written English, and preferably Norwegian (or another Scandinavian language).

The Norwegian public service is committed to reflecting the diversity of society, and the personnel policy of the University of Agder aims to achieve a balanced workforce. All qualified persons are therefore encouraged to apply for the position, irrespective of cultural background, gender, age or disability.

Women are especially encouraged to apply.

Short-listed applicants will be invited for interviews and a demonstration of their teaching qualifications, usually in the form of a trial lecture. With the applicant's permission, UiA will also conduct a reference check before appointment.

Appointment is made by the University of Agder's Appointments Committee for Teaching and Research Positions.

The successful applicant will have rights and obligations in accordance with the current regulations for the public service. Organisational changes and changes in the duties and responsibilities of the position must be expected.

The position is remunerated within the State salary scale, salary plan 17.510, Professor code 1013, salary grades 67-82 (NOK 538.900-765.600). In the case of particularly highly qualified applicants, a higher salary may be considered. A 2 % compulsory pension contribution to the Norwegian Public Service Pension Fund is deducted from the pay according to current statutory provisions.

Applicants are asked to submit their application and CV online. Please use the link "Send application".

In addition, the following documentation should be sent by post in three hard copies to the University of Agder, Faculty of Engineering and Science, att. Higher Executive Officer Lise Fylkesnes, Service box 509, NO-4898 Grimstad, Norway, quoting “ref 6/11”:

- Certified copies of diplomas, transcripts and letters of reference
- Complete list of scientific publications
- Doctoral thesis
- Copies of selected scientific publications (no more than 10) relevant to the position

The applicants are fully responsible for submitting complete documentation in a sufficient number of copies within the closing date. All documentation and publications must be in English.

In accordance with §25(2) of the Freedom of Information Act, applicants may request that they are not identified in the open list of applicants. The University, however, reserves the right to publish the name of applicants. The applicants will be advised of the University's intention to exercise this right.

**Closing date: 30 April 2011.**

For further information please contact Head of Department Rein Terje Thorstensen, tel.: +47 37 23 32 16, e-mail: rein.t.thorstensen@uia.no, Dean Frank Reichert, tel +47 37 23 30 06, e-mail: frank.reichert@uia.no or Professor Geir Hovland, tel.: +47 37 23 33 27, e-mail: geir.hovland@uia.no.

The full text of this announcement is available online at [www.uia.no/vacancies](http://www.uia.no/vacancies). For more information on working at UiA, see [www.uia.no/work](http://www.uia.no/work).

In case of discrepancies between the Norwegian and the English version of this description, the Norwegian version takes precedence.