

**Vacancy for a full-time position of  
Senior Lecturer or Full Professor  
in the field of Soil Mechanics and Geotechnics  
(Department of Civil Engineering)**

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2011. It concerns a full-time position as Professor in the rank of Senior Lecturer (hoofddocent) or Professor in the rank of Full Professor (hoogleraar) in the Department of Civil Engineering, charged with academic teaching (mostly in Dutch), scientific research and carrying out scientific duties in the field of Soil Mechanics and Geotechnics.

Profile:

- on the day of application, candidates should hold a PhD degree with doctoral thesis or a degree recognized as equivalent and have at least two years of post-doctoral research experience on October 1, 2011;
- candidates are required to have research experience in the field of work concerned, proved by recent publications in national and international peer reviewed journals;
- having experience in international mobility, amongst others through participation in research programs at research institutions not linked to the university where the highest degree was obtained, is recommended;
- candidates are required to possess the necessary didactic, organizational and communicative skills for teaching at an academic level.

The governing language at Ghent University is Dutch. However, persons who do not speak Dutch as a native language are welcome to apply.

More detailed information on this vacancy and on the way this job fits in the department's strategy can be obtained at Prof. Daniël De Zutter, chair of the evaluation committee, by telephone (phone: tel. +32 9 2643327, e-mail: daniel.dezutter@ugent.be).

This full-time position at the entry level of Senior Lecturer or Full Professor will lead to a tenured position. However, in the case of a first appointment as professor, the Board of Governors of Ghent University may decide to appoint the candidate for a maximum period of three years, after which he/she may be eligible for tenure following a positive evaluation. As teaching at Ghent University is mostly in Dutch, such evaluation may include the acquired ability to teach in Dutch.

Depending on the specific profile of the selected candidate, the degree of Professor in the rank of Senior Lecturer or Professor in the rank of Full Professor will be granted.

Applications must be sent in duplicate by registered mail to the rector of Ghent University, Rectorate Building, Sint-Pietersnieuwstraat 25, 9000 Ghent, using the specific application forms for Autonomous Academic Staff ('ZAP'), including the necessary attestations of competence (copies of degrees), the March 15, 2011 at the latest.

The application forms for Autonomous Academic Staff (ZAP) can be obtained at Ghent University, Department of Personnel and Organization, Sint-Pietersnieuwstraat 25, 9000 Ghent; can be requested by phone: + 32 9 2643129 or +32 9 2643130; or can be downloaded from the internet:

<http://www.ugent.be/nl/werken/aanwerving/formulieren/zap/>

## **Match of the vacancy within the Strategic Goals of the Department**

### **Global Strategic Goals of the Faculty of Engineering and Architecture at Ghent University**

New members of the Autonomous Academic Staff (i.e., Lecturers, Senior Lecturers, Full Professors, and Senior Full Professors) are expected to develop (research) activities aimed at engineering applications or architecture and to join, as far as is possible, existing research groups rather than to separately create (very) small new and isolated research groups.

The research activities within the Faculty of Engineering and Architecture are only partially realized by employees that are funded directly by the government (Autonomous Academic Staff, Assisting Academic Personnel, and Administrative & Technical Personnel) or through research funds provided by the university itself. Indeed, a considerable share of research activities within the Faculty of Engineering and Architecture is realized by researchers that are funded through external national/Flemish or international resources (e.g., FWO-Flanders/Research Foundation-Flanders, IWT-Flanders/Agency for Innovation by Science and Technology, EU, contract research in cooperation with companies). While the latter concerns external funding, the research activities are in fact managed by internal Autonomous Academic Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants so safeguard its competitive position (internationally and nationally), it will continuously have to succeed in acquiring the necessary external funding. It is therefore the Faculty's strategy to preferably create vacancies in domains in which chances are high that such external funding can be acquired. This aspect is explicitly considered during the appointment procedure of Autonomous Academic Staff members within the Faculty of Engineering and Architecture.

### **Strategic Goals of the Department - match with the vacancy**

Today, the Laboratory of Geotechnics of Ghent University ([terzaghi.ugent.be](http://terzaghi.ugent.be)) is the sole University level Flemish research lab on theoretical, experimental and applied soil mechanics and geotechnics. Starting up, almost half a century ago, on research topics closely linked to daily geotechnical problems such as slope stability, shallow and deep foundations, it has extended its interest fields towards basic soil parameter experimental research (small strain and large strain conditions), near- and offshore geotechnical research, soil improvement techniques, calibration chamber testing, soil dynamics with related geophysical testing and very profoundly to environmental geotechnics (waste mechanics, engineered barrier developments, modeling of contaminant transport). This extension towards new research domains was accompanied by the necessary development of laboratory and in situ tests, and even newly developed testing equipment (eg. in the field of environmental geotechnics).

The results of the research activities at the Geotechnics Laboratory are mostly visible in the assistance on geotechnical issues to third parties, but also have an important repercussion on the operation of international research groups in which the laboratories fellow workers play an active part (eg. in different commissions of ISSMGE: international environmental geotechnics, offshore geotechnics, ground improvement, etc). What precedes requires a continuous acquisition of knowledge and development of the existing test facilities in such way that every study regarding soil or the use of soil in geotechnical constructions can be addressed adequately.

With this vacancy, the Department of Civil Engineering of Ghent University wishes to support the scientific evolutions within the field of geotechnical engineering, including theoretical modeling, research methods and aspects related to execution of geotechnical works. The challenges regarding choice and conception of geotechnical or foundation execution techniques need to be acknowledged and solved, and they require the development of new design models and test procedures, this altogether considering the European standards and regulations of construction.

In order to keep up with the current international research themes, a continued development of the existing expertise on all the fields mentioned before is aimed at. This expertise needs to be

implemented adequately in the academic education. Specific problem formulations of soil parameter research, (environmental) geotechnical case studies, execution techniques and foundation design make a valuable contribution to the current interest and relevance of the academic education. The students are confronted with the results of all the relevant scientific research, eg. with the evolution of research methods or design models, leading to an improved understanding of soil behavior and soil-structure interaction. The outcomes of the scientific research make a significant contribution to the development of the student's insight, critical mind and creativity in the domains of geotechnics and soil mechanics.

Finally, this vacancy opens the perspective to a more intensive collaboration between the fields of knowledge related to water within the Dept. of Civil Engineering, integrating the laboratories of Roads, Bridges and Coastal Engineering, Hydraulics and Geotechnics.

#### Summary:

On the one hand, given the fact that the Laboratory of Geotechnics of Ghent University today is the sole University level Flemish research lab on theoretical, experimental and applied soil mechanics and geotechnics, and on the other hand, because of the importance in the Civil Engineering education programme of the of domain soil mechanics and geotechnics, the Department of Civil Engineering proposes a full-time vacancy.

Because of the preceding and because of the fact that the candidate will be the only full-time professor in this research field, the department proposes that the candidate should be working on a high scientific level. Candidates with maturity in leading research projects and experienced in the acquisition of research fundings will be given priority for a possible nomination as a full professor.

As a conclusion, the Department of Civil Engineering of Ghent University declares the vacancy for a full professorship open for application.