Vacancy for a part-time (10 %) professorship in the field of Computer Aided Architectural Design (Department of Architecture and Urban Planning)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a part-time (10%) position as Professor in the rank of Assistant Professor or Associate Professor in the Department of Architecture and Urban Planning (EA01), charged with academic teaching (mostly in Dutch), academic research and carrying out academic services in the discipline of Computer Aided Architectural Design.

Profile
- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- 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 skills to realize academic competencies with university students;
- having positively evaluated experience with procure and/or organized education on an academic level is recommended;
- professionalization of education is recommended.

A part-time (10%) position will lead to an appointment for a clearly defined renewable limited period of time (maximum 6 years).

A part-time position as Professor in a certain rank cannot be combined in the same university with a part-time position as Professor in another rank.

Applicants are required to participate in the basic training for Assistant Professor.

Ghent University provides free Dutch and English language courses to professors who are non-native speakers in order to support them in their teaching activities.

More detailed information on this vacancy and on the way this job fits in the department's strategy can be obtained from Prof. Koen De Bosschere, chair of the evaluation commission, (tel. +32 9 264 34 06 or e-mail: koen.debosschere@ugent.be).

At the Ghent University, the possibility of promotion in the rank of Assistant Professor and Associate Professor is linked to the timely achievement of predefined personalized goals.

Depending on the specific profile of the selected candidate, the rank of Assistant Professor or Associate Professor will be granted.

Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached.

Please merge all the documents in one file and mention the following reference 20150108 Computer Aided Architectural Design in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link:
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

Global strategic goals of the department of Architecture and Urban Planning (EA01)

The Department of Architecture and Urban Planning aims to provide high-quality education, to train young researchers and to carry out academic research, focusing on the design component of the architectural discipline, in the branches of knowledge of architecture, building technology and urban planning. More specifically the department provides education and research in (a) theory and history of architecture, construction and urbanism; (b) building technology, building physics and building services; (c) urban and architectural design and design-related fields of knowledge, e.g. graphic communication and computer aided design. The department also provides scholarly services and services to the community based on the expertise related to the academic disciplines mentioned above.

Concerning the education, the department aims to develop a comprehensive and innovative program in architectural design, supported by the technical and scientific knowledge of the engineer and by the historical and theoretical knowledge of the broad context of architecture and urbanism. The education, especially during the Master's program, is on the one hand supported by research activities carried out in the different research groups and laboratories of the department, and is otherwise related to the design practice and the current developments in architecture and urban design. The education builds upon a broad intellectual and cultural openness, and active internationalization of research and education.

Match with the vacancy

The newly appointed assistant professor will have a proven expertise in the research domain of computer aided architectural design, rooted in the engineering sciences as well as in the design and building practice. The activities of the newly appointed assistant professor should strengthen the academic research in the department as described above, and directly feed into the design oriented curriculum of the department in collaboration with other members of the staff. A track record showing active participation in the internationalization of research or education is required. Strong interest in innovative education in the domain is an asset.
Vacancy for a part-time (10 %) professorship in the field of Data Analytics (Department of Information Technology)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a part-time (10%) position as Professor in the rank of Assistant Professor or Associate Professor in the Department of Information Technology (EA05), charged with academic teaching (mostly in Dutch), academic research and carrying out academic services in the discipline of Data Analytics.

Profile
- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- 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 skills to realize academic competencies with university students;
- having positively evaluated experience with procures and/or organized education on an academic level is recommended;
- professionalization of education is recommended.

A part-time (10%) position will lead to an appointment for a clearly defined renewable limited period of time (maximum 6 years).

A part-time position as Professor in a certain rank cannot be combined in the same university with a part-time position as Professor in another rank.

Applicants are required to participate in the basic training for Assistant Professor.

Ghent University provides free Dutch and English language courses to professors who are non-native speakers in order to support them in their teaching activities.

More detailed information on this vacancy and on the way this job fits in the department's strategy can be obtained from Prof. Sabine Wittevrongel, chair of the evaluation commission, (tel. +32 9 264 89 01 or e-mail: sabine.wittevrongel@ugent.be).

At the Ghent University, the possibility of promotion in the rank of Assistant Professor and Associate Professor is linked to the timely achievement of predefined personalized goals.

Depending on the specific profile of the selected candidate, the rank of Assistant Professor or Associate Professor will be granted.

Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached.

Please merge all the documents in one file and mention the following reference 20150108 Data Analytics in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link:
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

The Department of Information Technology (INTEC) provides high quality education from undergraduate to postgraduate level based on the excellence of its research. To excel internationally, research efforts focus on carefully chosen domains so as to achieve a critical density in each of them. An important aspect of INTEC's research strategy is to assure its relevance through a close cooperation with industrial partners, often in the framework of European Union projects and in close cooperation with IMEC and IMinds. Another cornerstone of its education and research strategy is to instil entrepreneurship and to stimulate spin-off incubation in line with the technology transfer policies of Ghent University.

The part-time (10%) position in “Data Analytics” is intended to further strengthen the research potential of INTEC's research group on Internet Based Communication Networks and services (IBCN). The IBCN group is performing fundamental and applied research on internet based communication networks and services, more specifically with the focus on: network modeling, design and evaluation; fixed and wireless subsystems and networks; edge and cloud computing; software defined networking; service engineering; content and search management, and data analysis and machine learning. This research is applied to a number of application domains: health and care, transport and logistics, media, energy, manufacturing, smart living and systems biology. A well-established experimental test environment and a number of technology platforms support these activities.

In many branches of science and engineering, there is an on-going need for efficient data analytics techniques to analyse and model the parametric behaviour of complex systems starting from numerical time-consuming simulations or measurements. Within IBCN, the Data Analysis and Machine Learning cluster focuses on the study and design of innovative algorithms that can be used for efficient and accurate characterization, analysis, modelling and optimization of such systems. The group has a strong expertise on surrogate modelling techniques, system identification and data-driven model order reduction which have shown to be beneficial in a wide range of applications (e.g. analysis of microwave and wireless components, networks, electronic devices, …).

In many branches of engineering, the complexity of parametric systems is ever growing which motivates the need for more effective data analytics techniques to counter the ever-increasing complexity of simulations. There is a need for a part-time (10%) staff member for research in this domain. This new staff member has to work in close cooperation with other staff members in the INTEC department. Experience in the domain of surrogate modelling and computationally expensive systems are a necessity. Experience with sequential experimental design strategies is a clear asset. A successful candidate should demonstrate international recognition and high quality international collaboration. Besides excellent research skills, the new staff member should also possess the necessary didactic, organizational and communicative skills for teaching at an academic level.

Additional information can be obtained by contacting the Head of Department at daniel.dezutter@ugent.be.
Vacancy for a part-time (10 %) professorship in the field of Multiple Physical Agents in Smart Buildings (Department of Information Technology)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a part-time (10%) position as Professor in the rank of Assistant Professor or Associate Professor in the Department of Information Technology (EA05), charged with academic research and carrying out academic services in the discipline of Multiple Physical Agents in Smart Buildings.

Profile
- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- 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 skills to realize academic competencies with university students.

A part-time (10%) position will lead to an appointment for a clearly defined renewable limited period of time (maximum 6 years).

A part-time position as Professor in a certain rank cannot be combined in the same university with a part-time position as Professor in another rank.

More detailed information on this vacancy and on the way this job fits in the department’s strategy can be obtained from Prof. Marc Moeneclaey, chair of the evaluation commission, (tel. +32 9 264 34 13 or e-mail: marc.moeneclaey@ugent.be).

At the Ghent University, the possibility of promotion in the rank of Assistant Professor and Associate Professor is linked to the timely achievement of predefined personalized goals.

Depending on the specific profile of the selected candidate, the rank of Assistant Professor or Associate Professor will be granted.

Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached. Please merge all the documents in one file and mention the following reference 20150108 Multiple Physical Agents in Smart Buildings in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link: http://www.ugent.be/nl/vacatures/zap/sollicitatieformulieren-zap/sollzapambt.docx/view
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

The Department of Information Technology (INTEC) provides high quality education from undergraduate to postgraduate level based on the excellence of its research. To excel internationally, research efforts focus on carefully chosen domains so as to achieve a critical density in each of them. An important aspect of INTEC's research strategy is to assure its relevance through a close cooperation with industrial partners, often in the framework of European Union projects and in close cooperation with iMinds and IMEC. Another cornerstone of its education and research strategy is to instill entrepreneurship and to stimulate spin-off incubation in line with the technology transfer policies of Ghent University.

The part-time (10%) position in "Exposure to Multiple Physical Agents in Smart Buildings" is intended to further strengthen the research potential of the INTEC's research groups Wireless & Cable (WiCa) and Acoustics. The WiCa group is performing fundamental and applied research on the interaction of humans with electromagnetic fields, exposure of humans to electromagnetic fields and propagation in wireless networks in outdoor environments and indoor offices. The acoustics group investigates the exposure to sound and its effects on people. The WiCa and Acoustics group are both one of the leading international research groups in these domains. The WiCa and Acoustics groups are currently extending their research to combined monitoring, analysis and design of indoor environments with respect to exposure of multiple physical agents such as electromagnetic radiation, acoustic radiation, and fine particles. Human exposure as well as animal health monitoring is investigated.

With the increasing trend within our society to create smart buildings with maximal comfort of living, interest in quantifying the exposure to electromagnetic waves, (low-frequency) acoustic noise, and other physical agents is also growing. The development of a methodology that combines the assessment of the exposure of the different physical agents, taking into account the measurement and simulation of “proxies” (that are easier to measure than the actual agent) and that is based on a massive number of measurements using large number of small sensors (IoT), is an innovative step towards an integrated approach to the design of smart buildings with a higher comfort of living but the same quality of services. In case of electromagnetic waves, this means an excellent performance of in-home wireless networks.

A good understanding of electromagnetic and acoustic waves, the design of wireless networks, sensor technologies, and the propagation of the waves inside smart buildings and around the body (of humans or animals) is paramount to develop and apply this innovative methodology.

Therefore, there is a need for a part-time (10%) staff member for research in this domain. This new staff member has to work in close cooperation with the other staff members in INTEC. Theoretical knowledge and experimental experience in the domain of propagation in wireless networks in homes and offices interaction of electromagnetic fields with humans is a necessity. A successful candidate should demonstrate international recognition and high quality international collaboration. It is also crucial that the staff member can attract and lead research projects and give guidance to doctoral and master students.

Additional information can be obtained by contacting the head of department at daniel.dezutter@intec.ugent.be
Vacancy for a part-time (10 %) professorship in the field of Technology and Design of Microsystems: Wearable Electronics (Department of Electronics and Information Systems)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a part-time (10%) position as Professor in the rank of Assistant Professor or Associate Professor in the Department of Electronics and Information Systems (EA06), charged with academic teaching (mostly in Dutch), academic research and carrying out academic services in the discipline of Technology and Design of Microsystems: Wearable Electronics.

Profile
- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- 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 skills to realize academic competencies with university students;
- having positively evaluated experience with procures and/or organized education on an academic level is recommended;
- professionalization of education is recommended.

A part-time (10%) position will lead to an appointment for a clearly defined renewable limited period of time (maximum 6 years).

A part-time position as Professor in a certain rank cannot be combined in the same university with a part-time position as Professor in another rank.

Applicants are required to participate in the basic training for Assistant Professor.

Ghent University provides free Dutch and English language courses to professors who are non-native speakers in order to support them in their teaching activities.

More detailed information on this vacancy and on the way this job fits in the department's strategy can be obtained from Prof. Hendrik Rogier, chair of the evaluation commission, (tel. +32 9 264 33 43 or e-mail: hendrik.rogier@ugent.be).

At the Ghent University, the possibility of promotion in the rank of Assistant Professor and Associate Professor is linked to the timely achievement of predefined personalized goals.

Depending on the specific profile of the selected candidate, the rank of Assistant Professor or Associate Professor will be granted.

Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached.

Please merge all the documents in one file and mention the following reference 20160108 Technology and Design of Microsystems: Wearable Electronics in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link: http://www.ugent.be/nl/vacatures/zap/sollicitatieformulieren-zap/solzapambt.docx/view
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

The research unit CMST of the department has already been active for many years in the technology and design of advanced micro-systems in general and wearable electronics and sensor systems in particular. In the course of the years CMST has become an internationally recognized research center in this field.

The strength of the micro-system technology activities of the group originates to a large extent from the seamless combination of the unique capabilities of micro- and nano-electronics, micro- and nano-photronics, functional materials, micro-mechanics, and micro-fluidics, all in a single component. This integration anticipates the development of a broad class of smart micro-systems fabricated from a variety of polymer material systems and embedded in specialty substrates.

At present, already a large variety of micro-systems finds widespread use in the support of fundamental and strategic research; e.g. in biotechnology (bio-chips, micro-fluidic chips, and/or lab-on-a-chip), in biomedicine (minimally-invasive and point-of-care diagnostics, treatment monitoring with micro-imaging sensors, retinal and other implants), in smart structures (optical micro-structured fiber-sensing based systems, wireless remote monitoring sensors), in optical data communication (components for Fiber-to-the-Home, optical interconnect systems in mainframe computers), in smart textiles (body monitoring sensors in garments, smart carpets), and in durable lighting and renewable energy (micro- and nano- structured high efficiency solar cells and LEDs,) to mention only a few examples. The majority of these applications involve systems which are wearable on or inside the body.

In view of the growing interest in research and industry for wearable electronics and sensors circuit design and technology, and the opportunities this interest creates for a research group like CMST, which has a high competence level in this domain, it is the group’s goal to further extend the research in the field of wearable electronics and sensors circuit design and technology. The proposed part-time professorship is intended to take charge of those research activities.

The successful candidate will be responsible for continuing and extending the ongoing research on wearable systems design and technology towards increased system performance (e.g. more sensor functions, higher autonomy, etc.), mechanical performance (new flexible and stretchable circuit technologies), reliability (e.g. washability, mechanical loading of the circuit), more advanced biocompatible packaging, better hermeticity, improved comfort for the wearer, increased miniaturization and heterogeneous integration of electronics and sensors packaging technologies with other substrate technologies like e.g. textiles.

It is of the utmost importance that the successful candidate has a profound knowledge of micro-systems technologies in general, and wearable systems and their specific challenges and issues in particular. As (s)he will lead a research group in this domain, research management skills are also recommended. (S)he should be able to hire, motivate and advise Master and PhD students, and to set up, find funding for, participate in as well as coordinate and manage national and international research projects in this domain.

In addition, as the successful candidate expectedly will take up teaching assignments on the subject of microsystems design/technology/applications, (s)he needs to possess the necessary didactic, organizational, and communicative skills for teaching at an academic level.
Vacancy for a part-time (50 %) professorship in the field of Computational Mechanics of Composites (Department of Materials Science and Engineering)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a part-time (50%) position as Professor in the rank of Assistant Professor Tenure Track in the Department of Materials Science and Engineering (EA10), charged with academic teaching (mostly in Dutch), academic research and carrying out academic services in the discipline of Computational Mechanics of Composites.

Profile
- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- having experience in initiating and leading research and attracting external funds for research is required (only applicable for the rank of Full Professor);
- 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 skills to realize academic competencies with university students;
- having positively evaluated experience with procured and/or organized education on an academic level is recommended;
- professionalization of education is recommended.

A part-time (50%) position at the entry level of Assistant Professor entails a five-year temporary appointment in a Tenure Track system. If the university board positively evaluates the performance of the person involved, the position may lead to a permanent position as Associate Professor.

Ghent University provides free Dutch and English language courses to professors who are non-native speakers in order to support them in their teaching activities.

More detailed information on this vacancy and on the way this job fits in the department’s strategy can be obtained from Prof. Luc Dupré, chair of the evaluation commission, (tel. +32 (0)9 264 34 24 or e-mail: luc.dupre@ugent.be).

Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached.

Please merge all the documents in one file and mention the following reference 20160108 Computational Mechanics of Composites in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link:
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

The research group MMS (Mechanics of Materials and Structures) is one of the three research groups of the Department of Materials Science and Engineering. It has been steadily growing over the past decade to one of the larger composite research groups in Europe. It currently consists of:
- one senior full professor (Joris Degrieck) and one full professor (Wim Van Paepegem),
- thirteen post-doctoral researchers,
- and about twenty researchers and PhD students, who are funded through personal grants and through external and internal projects.

The MMS group has a long-term track record in the research, fundamental as well as applied, and the education and contract research in the domain of mechanics of composite materials. The two main current research lines are:
- the (quasi-) static and dynamic behaviour of composite materials and structures (from fatigue, over vibration towards (high) dynamic impact), with emphasis on damage onset and growth, and
- the non-destructive testing, monitoring and evaluation of composites, involving mainly advanced ultrasonic and optical characterisation and sensor techniques.

For its research, the group has at its disposal a wide range of experimental and non-destructive facilities. All research activities indeed involve extensive experimental input and validation. At the same time, the group has a strong tradition in numerical modeling and computational mechanics. The emphasis lies on the correct modeling of mechanical behaviour and damage phenomena observed in composite materials under moderate and severe loading conditions. Dedicated material models or constitutive laws are developed and integrated into finite element simulations.

The MMS group has been (and is) coordinator or participant in many internal and external projects at regional/national level (FWO, IWT, IUAP, SIM, UGent BOF, etc.), in internationally funded research projects (FP6/FP7, H2020, ESA, etc.), as well as in bilateral projects with small and large Belgian and European companies and industries.

MMS is founding member of the UGent IOF valorization consortium “Composites”, and is member of additional relevant IOF consortia. MMS has been co-organizer of the ECCM10 conference (10th European Conference on Composite Materials), and will be co-organizer of the ICEM18 conference (18th International Conference on Experimental Mechanics).

More information on the MMS research activities can be found on www.composites.ugent.be.

With this vacancy for a part-time professorship, the department would like to consolidate and to further strengthen the research activities of the MMS group in the domain of computational mechanics of composites.

The candidate will be expected to mainly focus his/her activities on the supervision of PhDs and researchers and on an active engagement into ongoing and future research projects. He/she should therefore have shown to be an excellent researcher in the field of computational mechanics, and to be able to supervise PhD researchers. In addition, he/she should be able to take responsibility for some educational and contract research activities within the EA10 Department.

Additional information concerning this vacancy can be obtained by contacting the head of department at Joris.Degrieck@ugent.be.
Vacancy for a part-time (50 %) professorship in the field of Industrial Processing of Polymers (Department of Textiles)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a part-time (50%) position as Professor in the rank of Assistant Professor Tenure Track or Associate Professor or Full Professor in the Department of Textiles (EA11), charged with academic teaching (mostly in Dutch), academic research and carrying out academic services in the discipline of Industrial Processing of Polymers.

Profile

- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- having experience in initiating and leading research and attracting external funds for research is required (only applicable for the rank of Full Professor);
- 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 skills to realize academic competencies with university students;
- having positively evaluated experience with procured and/or organized education on an academic level is recommended;
- professionalization of education is recommended.

A part-time (50%) position at the entry level of Assistant Professor entails a five-year temporary appointment in a Tenure Track system. If the university board positively evaluates the performance of the person involved, the position may lead to a permanent position as Associate Professor. The University Board has the possibility to change the appointment into a tenured position, either immediately or in due course, based upon similar academic performances in another university of research institution.

A part-time (50%) position at the entry level of Associate Professor or Full Professor will lead to a tenured position, without prejudice to the possibility of the University Board to opt for a temporary appointment according to art. V.28 in the Codex of Higher Education. A part-time position as Professor in a certain rank cannot be combined in the same university with a part-time position as Professor in another rank.

Applicants are required to participate in the basic training for Assistant Professor.

Ghent University provides free Dutch and English language courses to professors who are non-native speakers in order to support them in their teaching activities.

More detailed information on this vacancy and on the way this job fits in the department’s strategy can be obtained from Prof. Geert De Schutter, chair of the evaluation commission, (tel. +32 (0)9 264 55 21 or e-mail: geert.deschutter@ugent.be).

At the Ghent University, the possibility of promotion in the rank of Assistant Professor and Associate Professor is linked to the timely achievement of predefined personalized goals.

Depending on the specific profile of the selected candidate, the rank of Assistant Professor or Associate Professor or Full Professor will be granted.
Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached.

Please merge all the documents in one file and mention the following reference 20150108 Industrial Processing of Polymers in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link: http://www.ugent.be/nl/vacatures/zap/sollicitatieformulieren-zap/soltzapambt.docx/view
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

Vacancy for a part-time (50 %) position as Professor in the rank of Assistant Professor Tenure Track or Associate Professor or Full Professor in the area of “industrial processing of polymers”, with a focus on extrusion or related technology.

The department targets education, research and servicing in the area of textiles. There is a strong European and worldwide scope. Just like other disciplines, textile science, textile materials and textile technologies evolve rapidly. This drives the department ahead. It has led to a strong position within and outside Europe. The department develops its own research domains, hereby emphasizing synergies with related domains.

**Education**

The department is responsible for a major part of education in material science, specifically in the area of textiles and polymer technology. In addition, the department partially supports the master programme in Chemical Technology, through courses on industrial processing of polymers. The new professor is expected to contribute to the following learning outcomes:

- Advanced knowledge of characteristics and application fields of materials in order to obtain products with specific properties.
- Advanced knowledge of and practical experience with the use of techniques and methods to investigate the characteristics of materials.
- Advanced knowledge of the use of and the interactions between the selection of raw materials and the process-parameters, keeping in mind the properties of fibrous materials and polymers with specific functionalities.

**Research**

Education at the department is closely linked with its broad research activities. This results in innovation in the textile industry in key areas such as nanotechnology (nanofibers and nano chemistry), intelligent or interactive textiles, industrial polymers (for artificial turf), biotechnology in textiles, etc. Industrial polymers, extrusion, synthetic materials and their characterization are important for each of these research themes, both for the textile and polymer industry.
High end polymers will always play a major part; future materials will require an increasing level of understanding of their structure, production, processing and characterization. The acquisition of an advanced extrusion machine (1M€ funded by the Hercules fund) demonstrates the importance of industrial polymer processing within the department. This machine is in operation since the end of 2011. It is vital for cooperation with industry. Hence continuity is needed.

The new professor is expected to demonstrate core competence in the area of industrial processing and properties of polymers in general and in extrusion in particular. Profound knowledge of polymerization techniques and polymer reaction engineering and processing is crucial.

Services

The department is very active in services. The new professor is expected to contribute in two domains, namely artificial turf and extrusion. He or she should build a good network with industry leading to cooperation with the department.

General

The new professor should also work together effectively and efficiently with the other professors within and outside the department. Close cooperation is expected in related and complementary disciplines within UGent. He or she looks for synergies and avoids duplication and overlaps.
Vacancy for a full-time professorship in the field of Sustainable Structures (Department of Structural Engineering)

The faculty of Engineering and Architecture has a vacancy for a professorship, starting from October 1, 2016. It concerns a full-time position as Professor in the rank of Assistant Professor Tenure Track or Associate Professor in the Department of Structural Engineering (EA14), charged with academic teaching (mostly in Dutch), academic research and carrying out academic services in the discipline of Sustainable Structures.

Profile
- candidates should hold a PhD or a degree recognized as equivalent;
- candidates are required to have at least two years of postdoctoral experience on October 1, 2016;
- candidates are required to have research experience in the field of study concerned, proved by recent publications in national and international peer reviewed journals and/or books;
- 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 skills to realize academic competencies with university students;
- having positively evaluated experience with procured and/or organized education on an academic level is recommended;
- professionalization of education is recommended.

A full-time position at the entry level of Assistant Professor entails a five-year temporary appointment in a Tenure Track system. If the university board positively evaluates the performance of the person involved, the position may lead to a permanent position as Associate Professor.

The University Board has the possibility to change the appointment into a tenured position, either immediately or in due course, based upon similar academic performances in another university of research institution.

Applicants are required to participate in the basic training for Assistant Professor.

Ghent University provides free Dutch and English language courses to professors who are non-native speakers in order to support them in their teaching activities.

More detailed information on this vacancy and on the way this job fits in the department’s strategy can be obtained from Prof. Bart Merci, chair of the evaluation commission, (tel. +32 (0)9 264 33 14 or e-mail: bart.merci@ugent.be).

At the Ghent University, the possibility of promotion in the rank of Assistant Professor and Associate Professor is linked to the timely achievement of predefined personalized goals.

Depending on the specific profile of the selected candidate, the rank of Assistant Professor or Associate Professor will be granted.

Method of application:

Applications should be received no later than March 6, 2016 at 23h59 (CET) through recruitmentzap@ugent.be with the application letter, the standard application form for Professorial Staff, and the required transcripts (copies of degrees) attached.

Please merge all the documents in one file and mention the following reference 20160108 Sustainable Structures in the subject of your mail.

The candidate will receive an e-mail confirming receipt of the application.

The application forms for Professorial Staff (Autonomous Academic Staff - “ZAP”) are available through the following link:
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 Professorial Staff (i.e., Assistant Professors, Associate Professors, 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 (Professorial 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 Professorial Staff members that succeed in acquiring external funding based on their expertise and experience.

If the Faculty of Engineering and Architecture wants to 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 Professorial Staff members within the Faculty of Engineering and Architecture.

Strategic Goals of the Department - match with the vacancy

General context

The Department of Structural Engineering consists of two research groups, viz. the Magnel Laboratory for Concrete Research and the Laboratory for Research on Structural Models.

The Magnel Laboratory is the largest Belgian research centre in the field of concrete technology and concrete structures and enjoys a vast and widely-spread international recognition. It disposes of extensive experimental testing facilities and infrastructures, among which the large strong floor for executing loading tests on large-scale elements is a unique instrument. During the last decade, it has also undertaken important investments in the equipment for durability and sustainability research and microscopic analyses.

The Laboratory for Research on Structural Models enjoys international appreciation for its experimental and numerical study of instability phenomena in shell structures. In addition, it is internationally recognised to be one of the leading research centres in the field of structural glass engineering in Europe. Its field of activity comprises structural analysis in general and structural glass and structural steelwork in particular.

By further developing its research on structural engineering and by well-considered appointments of lecturers, assistants and visiting lecturers, the department aims at pursuing the highest possible quality for each of its three basic tasks: education, scientific research and scientific and societal service.

The research activities executed in the department are only partially realised and sustained by staff members financed by the government (university teaching and assisting staff supported by university technical staff) or by researchers funded by the resources and means of Ghent University. A vast amount of the research activities of the department is realised by researchers financed by external national, Flemish and international funds (the Research Foundation Flanders (FWO-Vlaanderen), the Agency for Innovation by Science and Technology Flanders (IWT-Vlaanderen), the European Union, contract research in collaboration with industrial enterprises, etc.). Hence, newly appointed university teaching staff members are also expected to develop (research) activities aimed at gathering the necessary external funds mentioned above.

Positioning of the field of ‘Sustainable Structures’ in the department’s activities and in a broader context
The Department of Structural Engineering (EA14) is looking for a candidate for a tenure track position in the area of Sustainable Structures. The new position needs to focus on structural analysis, but with due consideration of material aspects and sustainability at a structural level. The position focuses on advanced, innovative concepts for the design and analysis of sustainable and durable structures, and may be oriented towards one or more of the following subdomains: steel structures, steel-concrete structures, concrete structures and/or glass structures. However, also a focus on structures using other innovative and sustainable construction materials is possible. Both experimental and computational methods for conventional, hybrid and high-performance materials and structures can be part of the research domain.

Particular emphasis is placed on the sustainable, safe and environmentally-friendly structural design and analysis of structures. Further topics can e.g. include application of innovative and sustainable materials and systems, and structural measures to cope with accidental and severe environmental conditions. Candidates should be able to initiate new, innovative and relevant research programmes. The ability to translate research into Bachelor’s and advanced Master’s programmes is important, in addition to conducting and managing research and obtaining funding. Selected candidates will be involved in teaching activities in structural analysis and the design of steel and concrete structures.