



EUCEET Association

# NEWSLETTER 2/2016

## In this issue

### FROM THE EUCEET ASSOCIATION

MARUEEB project – events .....	2
EUCEET Association was represented at IACEE 2016 conference .....	4
<i>8<sup>th</sup> European Convention of Engineering Deans (ECED 2016)</i> .....	11
EUCEET Association Workshop 2016 “ <i>The Structures for the Future</i> ” .....	13
9 <sup>th</sup> General Assembly of the EUCEET Association .....	17

### FROM MEMBERS

Czech Technical University in Prague, CZ .....	18
Aristotle University of Thessaloniki, GR .....	18
University of Florence, IT .....	19
Delft University of Technology, NL .....	19
Technical University of Cluj-Napoca, RO .....	20
Ural Federal University, RU .....	21
University of Žilina, SK .....	22
ECCE (European Council of Civil Engineers) .....	22

FROM PARTNERS .....	23
---------------------	----

FROM THE EUROPEAN UNION .....	26
-------------------------------	----

NEWS FROM THE WORLD .....	27
---------------------------	----

CALENDAR.....	29
---------------	----

## FROM THE EUCEET ASSOCIATION

### MARUEEB PROJECT - events

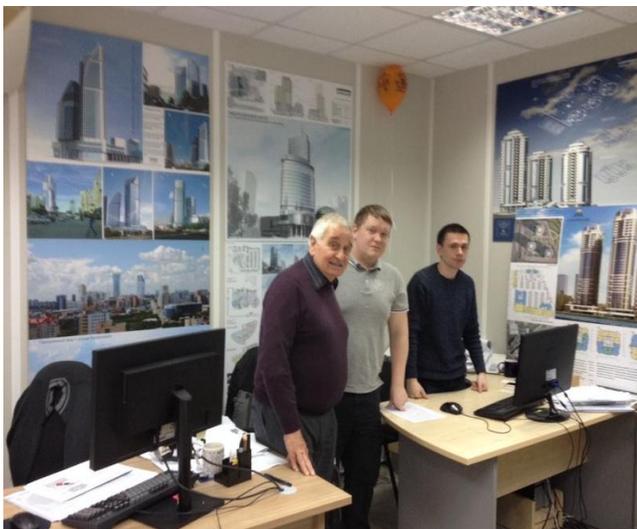
<http://marueeb.sti.urfu.ru/en/>



EUCEET Association is partner in the Erasmus+ project “MARUEEB”, coordinated by the University of Genoa.

Within the project MARUEEB there were meetings and activities.

- One of them was the working visit of Prof. Laurie Boswell, Vice-President of the EUCEET Association, from 2 to 8 April 2016, at the Institute of Civil Engineering of the Ural Federal University in Ekaterinburg.



During the visit, Professor L. Boswell visited the stakeholder's organizations in Yekaterinburg - partners of the project MARUEEB Erasmus+: "Atomstroykomplex" and "Uralproektdubrava".

The professor also took part in the meeting of the Self-Regulated organization "Association - Ural Society of Geotechnical Engineers". Stakeholders shared their opinions with respect to the Master's Degree Program in Building Design for Sustainable Development, which is being developed at the Institute of Civil Engineering of Ural Federal University. They also expressed their wishes to the Programme structure, Elective subjects and Learning Outcomes.

Professor L. Boswell met with Academician G. Mazaev - Chairman of the Presidium, and with scientists of the Ural regional branch of Russia Academy of Architecture and Construction Sciences, talking about the training of specialists in the field of energy efficient construction.

V. Alekhine, A. Novikov, I. Maltseva, A.A. Antipin and other participants of MARUEEB Erasmus + project participated in working meetings with Professor L. Boswell in which they discussed the stakeholder's requirements and guidelines developed by the Master's Degree Program in Building Design for Sustainable Development.



- Another activity in the frame of MARUEEB project was the **Seminar “Harmonization of academic approaches aimed at developing the new master study programmes”**

On May 23-24, 2016 a seminar on the theme “*Harmonization of academic approaches aimed at developing the new master study programmes*” took place in Ural Federal University in Ekaterinburg. Professors from universities of Genoa (Italy), Kaunas (Lithuania), Iasi (Romania) and their Russian colleagues participated in the seminar. Basic issues and problems of new Master Programmes formulation with stakeholders requirements to learning outcomes for project “*Master Degree in Innovative Technologies in Energy Efficient Buildings for Russian & Armenian Universities and Stakeholders*” were discussed.

Seminars participants visited Ural Federal University’s laboratories and stakeholder’s factories: “Teplit” factory of “Atomstroycomplex”, which produces energy-efficient materials for thermal shell of buildings with man-made materials; “Uralprojectdubrava” – leading architectural design company of the Ural region; Environmental Department of the Ekaterinburg’s Youth Palace, which is involved in environmental education and joint researches of soil, water and air ecology with UrFU undergraduate students and master's students.

On May 25, participants to the seminar took part in II International Conference “*Safety Problems of Civil Engineering Critical Infrastructures*”. Professor Vincenzo Bianco from Genoa University made the report on the theme “*Teaching Energy Efficiency in Buildings. The case of MARUEEB project*”.

- **A meeting for MARUEEB project was held at the “Gheorghe Asachi” Technical University of Iași, on 20-24 June 2016.**

The meeting involved discussions on implementing a new master degree in energy efficient buildings for **Russian and Armenian Universities** as well as visits to **ENERED platform** and at the two faculties involved in the project: the **Faculty of Materials Science and Engineering** and the **Faculty of Civil Engineering and Building Services**.

The local coordinator for the project is Prof. dr. Alina Adriana MINEA from Faculty of Materials Science and Engineering.

The partners from **MARUEEB consortium** that participated at the meeting were:

- Ural Federal University n.a. Boris Eltsin, Yekaterinburg
- St. Petersburg State Polytechnic University
- Tambov State Technical University
- Voronezh State University of Architecture and Civil Engineering

- South Ural State University, Chelyabinsk
- National Polytechnic University of Armenia, Yerevan
- American University of Armenia, Yerevan
- Ministry of Education and Science of Armenia

### **EUCEET Association was represented at IACEE2016 conference**

Prof. Jean Berlamont, member of the Administrative Council of EUCEET Association, represented the association at the IACEE2016 conference which was held in Porto, Portugal between 17 and 20 May 2016.

Below is brief report of the Conference prepared by Prof. Jean Berlamont followed by his paper ***“PhD PROGRAMS FOR STIMULATING INNOVATION IN INDUSTRY”*** presented at the conference:



INNOVATION IN CONTINUING  
PROFESSIONAL DEVELOPMENT:  
A VISION OF THE FUTURE  
PORTO, PORTUGAL | MAY 17 - 20, 2016

Learnings from the  
**15<sup>th</sup> World Conference of International Association of  
 Continuing Engineering Education (IACEE)**  
***“Innovation in continuing professional development, a vision of the future”***  
 Porto, May 17 – May 20, 2016

In general terms, the conference dealt with the role of universities both with Continuing Professional Development (CPD) and Continuing Engineering Education (CEE).

Technical Universities or engineering faculties from comprehensive universities should build strategic alliances with companies/ industry for the benefit of students, research and industry (triangle relation). This can result in many initiatives and have many different shapes e.g. joint research projects, internships for students, MSc and PhD thesis work in industry, project based teaching involving people from industry, etc.

It is my impression that most of TU and engineering faculties already do that to varying degrees. Sometimes the resistance of university authorities to leave the “ivory tower” still has to be overcome.

The most interesting and probably slightly disturbing message is that the actual formats of (long or short duration) CEE programs should be designed differently: no longer “offer” driven but “client” driven,

Available everywhere and at any time by using internet so that the “student = client” can download the information on his/her smart phone and interact with the teacher/ staff. A delicate equilibrium has to be found in blended learning by balancing information made available on the web and face to face student – teacher interaction. When designing programs, universities should collaborate closely with all stakeholders and design the programs in an integrated (“*inclusive*”?) and inter-disciplinary way. They should be organized in a flexible way so that the student can follow the modules at his/her own pace.

*The EUCEET plea for “inclusive curricula” and our proposal for “resilience by design” fit perfectly in the actual tendencies.*

### PHD PROGRAMS FOR STIMULATING INNOVATION IN INDUSTRY

Jean Berlamont<sup>1</sup>

<sup>1</sup>*Euceet (European Civil Engineering Education and Training association), jean.berlamont@kuleuven.be, Belgium*

#### Abstract

The number of PhD degrees awarded by Technical Universities or Engineering Faculties of comprehensive universities in Europe has increased dramatically over the last 20 years [1]. Unlike some decades ago, most PhD graduates do not stay at a university or a research institute, but (have to) go to industry. Indeed, the Lisbon strategy for growth and jobs [2] expects that these trained researchers will bring innovation, more effectiveness and creativity into European industry and companies. This has led many European higher education institutions to organize doctoral programs. How effective are these doctoral programs for PhD graduates *going to industry* after graduation and how should the ideal doctoral program look like?

In the framework of EUGENE [3], in which EUCEET participated, a survey was carried out to clarify the experience of PhD holders employed *in industry* and of their industrial employers. About 70 employees with a PhD from 7 countries and their employers or research managers were questioned.

The main findings were:

- A doctoral program should support and facilitate the PhD research, which remains the main component of the doctoral training.
- PhD programs should be individualized, flexible and adjustable, taking into account both the student’s past and future.
- Although the research should be done independently, the PhD student should not be left alone. Working in a good research group of supercritical size, where excellence is fostered, with an international profile and which has good relations with industry is the best “PhD program”.
- The added value of a PhD is the learning *process*. By doing research, scientific skills are acquired; in particular, skills in logical reasoning, decision making and data analysis are highly estimated on the work floor. These skills are at the basis of innovation, which is essential for our knowledge economy.

Keywords: Innovation, technology, PhD programme

#### 1 INTRODUCTION

In the past, PhD training consisted exclusively of individual research (“training through research”). Although the individual research is and remains the core and the main constituent of PhD work, one considers that during the PhD study period, students should be better prepared to their future key role in industry and therefore acquire

more and better skills that can be used in their future industrial career. They should be (more) exposed to an international research and industrial environment. As a consequence, PhD's will have more attractive career prospects which will enable the universities to attract the brightest and most ambitious young academics.

Now, trainings are organised and (advanced) courses are offered to PhD students, who also participate in projects with industry etc. The proportion of these activities with respect to the individual research effort varies. In many places there exists already some experience with structured PhD programmes and activities of doctoral schools and a wide variety of doctoral programmes exist:

- It may be compulsory or not;
- It may consist of technical/ scientific advanced courses (“deepening of knowledge”);
- It may consist of seminars, courses, lectures supporting the PhD process and the research (e.g. scientific tools, technology platforms, publication, vulgarization of knowledge, patent rights, engineering or industrial ethics...) (“widening of knowledge”);
- It may consists in training of skills or attitudes (e.g. entrepreneurship, information and publication skills, interpersonal skills, communication skills in different languages, strategic skills (e.g. time management), career management, strategic thinking, leadership, ...);
- It may consist of participation in industrial projects, or projects with and for industry, a training period in industry. In some cases the PhD work can be done entirely in a company (under supervision of an academic advisor of course);

Although the objectives of the doctoral programmes are clear, and although they are becoming widely implemented, it is actually not known whether these PhD training programmes are effective, reach their double objectives and “produce” PhD's who are better fit for a leading position in industry and who have a better employability and more attractive career prospects. If they are effective, it would be most interesting and instructive to know which type of PhD training is most effective.

## 2 METHODOLOGY

Within the framework of EUGENE (EUropean and Global Engineering Education network<sup>1</sup>), as part of the EU Life Long Learning Program (2009 - 2012) an effort was made to “measure” the efficiency and effectiveness of different PhD programmes. Therefore a survey was carried out should to clarify the experience of the PhD holders *employed in industry*, and of their employers.

The questions asked to the PhD alumni were a.o.:

- Why did you go for a PhD degree? What is the “added value” of having a PhD?
- Engineers in industry without PhD are also able to solve complex problems; they often do an excellent job?

What is the difference with a PhD?

- What is needed to facilitate the doctoral process? Formal structured doctoral programmes?
- Doctoral programmes

Questions asked to their employers were:

- What do you expect from a PhD holder as compared to a Master in Engineering?
- What is the added value of a PhD?
- What is your experience: do they come up to your expectations? Do you see any difference between relatively young PhD's (with doctoral programmes) and less young PhD's (without)? Is there any difference as a function of the country where they got their PhD?
- What is needed to facilitate the doctoral process? Formal structured doctoral programmes? What should they contain?

<sup>1</sup> [Eugene@unifi.it](mailto:Eugene@unifi.it)

In total 69 PhD holders working within 7 companies were interviewed from 4 countries and 22 employers:

Siemens (Slovakia)	7 PhD	1 research manager
IMEC (Belgium)	27 PhD	14 research managers
UMICORE (Belgium)	4 PhD	4 research coaches
Mott Macdonald (Czech Republic)	5 PhD	1 employer
Metrostav (Czech Republic)	4 PhD	1 employer
(Estonia)	22 PhD	20 employers
Bekaert (Belgium)		1 senior research manager

The interviews were held with employers of PhD alumni and PhD's working in industry. Mostly large research intensive companies were selected, simply because others do not hire PhD's or only a few by chance. It is therefore clear that the conclusions are not necessarily valid for PhD's pursuing an academic career.

### 3 RESULTS and CONCLUSIONS

Many comments of employers of PhD's and of PhD's working in industry are remarkably similar.

- Most companies are happy with the quality of their PhD's, although they fear that the level is lowering slightly and slowly, which is attributed to the fact that the duration of the PhD research is gradually reduced and that there is a growing tendency to reduce the required depth of knowledge of (the basic) sciences in the first cycle.

Most often, hardly any difference is found between the PhD from the "old" system and the ones from the "new system" with more or less structured doctoral programmes. They are hardly more innovative, more effective, more inventive or taking more initiatives than their predecessors.

Sometimes, depending on the nature of the 2<sup>nd</sup> cycle education, it is found that the PhD's, who benefited from the doctoral programmes in the doctoral school

- do have a better ability for international communication, to build international networks;
- often have experience with working abroad, they have better languages skills.
- have a broader view and improved analytical skills

- The doctoral programme should consist essentially of **scientific research**. PhD is a learning process, the process of doing research is more important than the research result itself; it is a training *through* research. A PhD student should acquire a thorough, deep knowledge of his subject over the edge of the existing knowledge. By doing so, he acquires scientific competences and generic skills (ask the right research questions, ask other related questions; formulate new research themes, be critical for your own work and results; think "out of the box", take initiative e.g. in experimental work, persevere: don't give up, cope with failures, find ways out; build an international knowledge network). A PhD thesis must proof that the candidate is capable of doing (scientific) research independently, not only from a scientific point of view, but also from a research- and people management point of view (social skills, organization, logistics e.g. for the experiments).

- The PhD programme should not be an extra burden, or an extra requirement, but support and facilitate the PhD research and prepare the candidate for his future. It should have *two dimensions*: depth (study the own subject deeply) and width (widen one's view to other topics and other skills).

Facilitating the PhD research can e.g. consists in dedicated sessions on measuring or laboratory techniques, on scientific writing, research methodology, design of experiments, on a "project based approach" (defining the project and its objectives clearly, designing work packages, estimating the necessary budget, keeping within the budget, planning operations, project management).

Preparing for the future (in industry) may consist of PhD seminars on how to start a company, finances, IP (Intellectual Property rights), introductions to entrepreneurship, economy. A lectures series on “innovation” taught by people from industry may be welcome!

“Soft (scientific) skills” are acquired by attending conferences and presenting papers, temporary placements in industry, participation in European or industrial research projects, ... Especially teaching assignments (exercise sessions, etc) with (under)graduate students are experienced as very positive (learn to explain something in a clear and easy way, useful experience, social skills ...). These activities can be seminars, workshops, but should not be formal taught courses with exams, after many years at university; students should be able to study by themselves what they need to know. In particular PhD’s who are expected to be able to do research independently should be able to find by themselves the scientific and technical knowledge that they may need and work on it individually and independently by self-study, by finding the necessary contacts, etc. Therefore it is almost a contradiction to organize “specialized” or “advanced” taught courses during the PhD programme! That does not mean that specialized seminars or lecture series e.g. by visiting scholars or organized nationally or internationally may not be interesting and useful. The advisor can “advise” the PhD to attend these. Sometimes, the fastest and most efficient way to acquire complementary knowledge could be to follow a 2<sup>nd</sup> cycle or a dedicated PhD course; then the PhD candidate should be free to choose that.

- The activities mentioned in the previous paragraph requested from PhD students could correspond to time expenditure estimated at 30 ECTS. Teaching assignments should not take more than 10% of time.

The relative weight of both deepening and widening activities may differ. PhD programmes should be *individualized*, flexible and adjustable. Indeed, there are different types of PhD students, with different interests, different plans for the future, different backgrounds (2<sup>nd</sup> cycle). There are differences in their character and talent, in the subjects, in research groups, in advisors ...

PhD programmes should depend on the *student’s past* and the *student’s future*.

Notwithstanding the “Bologna process” that aimed at harmonizing higher education in Europe, there is (fortunately!) a large variety in the 2<sup>nd</sup> cycle curricula. In some universities/ countries Ma students have had already introduction to economy, IP, etc., or are proficient in foreign languages. In other countries they haven’t and then such non technical courses/ seminars may be offered.

There are “cultural differences” and different traditions in engineering curricula throughout Europe: between Latin countries and Greece and UK + the Northern countries, Germany and Central Europe and France.

Some have a more problem solving, project based approach others stick to traditional class teaching, some engineering schools foster team work, presentations, int. exchanges, assignments in industry throughout the 2<sup>nd</sup> cycle, others don’t. In some universities the Master thesis consists essentially of a design project, in other ones Ma students participate in a scientific or industrial research project. In some countries PhD candidates are already proficient in foreign languages. In the USA both 1<sup>st</sup> and 2<sup>nd</sup> cycle of engineering education is quite different from Europe. Student having a European second cycle degree often experience the formal PhD courses in the US quite easy. Therefore, one should not necessarily copy the US system because the whole context is different. It depends on the previous 2<sup>nd</sup> cycle whether or not there is a need for more general technical courses and thus a formal structured PhD programme!

Whether a formal PhD programme is needed to acquire the skills that PhD alumni should possess to be successful and contributing to the Lisbon objectives, depends on the *preceding undergraduate and graduate education*. In many engineering schools or faculties in Europe skills listed as typical for a PhD are acquired during the Ba or Ma phases e.g. design, group work, foreign languages, communication, etc.

Different PhD candidates may have different plans for their future, some may aspire after an academic career or a research position in industry; others may want to start a spinoff company. This is another reason why the PhD

programmes should *be individualized*.

It is therefore recommended that the PhD school offers a wide range of seminars and complementary activities covering both types of subject out of which the candidate can choose (advised by his advisor) according to his needs and plans

- It is assumed that time spent with these activities other than the research properly, does not exceed 30 ECTS (as a time measurement). Especially because of the ever shorter time period available for PhD studies: 4 years is considered as a minimum which could possibly be reduced to 3 for PhD's who do not intend to go on with research but to go to industry instead, or for PhD's carried out in industry.
- Doing part of the research in an other (excellent) university, preferably abroad, is very enriching (look at things from a different perspective; get the knowledge where it is). Doing PhD research in close collaboration with industry, the company paying part of the scholarship, may be a plus, the candidate acquiring social and planning skills.
- Although the research should be done independently, the PhD student should not be left alone. Working in a good *research group* of supercritical size, where excellence is fostered and having good relations with industry and an international profile is the best "PhD programme". The added value of a PhD is *the learning process, not the acquired knowledge*. By doing research scientific skills are acquired. In particular, the skills in the field of logic reasoning, decision making and data analysis are highly estimated on the work floor. These skills are at the basis of innovation, which is essential for our knowledge economy
- When asked about their *job satisfaction*, most PhD alumni feel that their actual job is at least partly up to their qualifications. Almost all of them agree that the training as a researcher that they got during their PhD research and the skills and competences that their acquired during the doctoral programme are useful for their actual job.

It is obvious that in particular, big, research intensive companies hire PhD's. There appears to be a different culture in Western and Northern Europe on the one side and in Southern and Eastern Europe on the other side. In particular in Central and Eastern European countries employers often do not request a PhD degree when offering jobs, they do not discriminate between engineers with an MSc or with PhD. They also do not remunerate a PhD degree. It is obvious that PhD's in engineering take full advantage of their PhD in large research intensive West European Companies.

Some of the conclusions from the interviews are corroborated by other recent research. None of them is contradicted!

S'Jegers et al. [4] confirms the importance of acquiring societal skills through the PhD process. The study also, most interestingly, draws the attention to the fact that PhD's not only have to acquire knowledge and skills, but that they also should assume a different attitude: they should become aware of the importance of communicating their findings to different sectors of society, in particular tot SME's, who could benefit from them eventually.

From the results of the DOC-CARREERS I project [5] it is confirmed that the doctoral programme should be adapted to every case a. o. because of regional and cultural differences i.e. "the way we do business here". There is no "one-size-fits-all solution". Also the usefulness of doing PhD research in close contact with or for SME, large (R&D) enterprises, industries... is emphasized.

LERU [6] insists on the fact that PhD research should be pushing boundaries. Also the research environment is important: "doctoral training should be concentrated in research intensive environments where excellence is fostered". They also insist on the acquirement of high level skills, which are meanly the intellectual and scientific skills that are acquired through the doctoral process. Some societal skills are also mentioned, they do not differ from the ones that were mentioned in the interviews. In line with S'Jegers, LERU also stresses the importance of the attitude to and the capability of communicating new knowledge to society.

Lucia Smit [7] confirms the surplus value of performing the PhD research in collaboration with industry or in an industrial context. She also stresses that specialized knowledge and skills may be important at the recruitment

stage but that the generic scientific/ research skills aiming at the creation of new knowledge are much more important for the development of the career.

#### 4 RECOMMENDATIONS SUMMARY

- A doctoral programme should consist essentially of scientific research. PhD is a learning process. The process is more important than the research results. It is training through research, which provides the PhD with scientific skills, appreciated by industry in the process of innovation.
- The PhD programmes should support and facilitate the PhD research and not be an extra burden or an extra requirement.
- Formal PhD programmes, consisting of compulsory taught courses (with exams) are only needed if there are deficiencies in the 2nd cycle engineering education.
- Complementary activities, corresponding with 30 ECTS (as a time measure) should be requested from the PhD students both to deepen and widen their knowledge and interests. These should not be taught classes. In particular teaching assignments are instrumental to acquire communication skills.
- The universities should offer a wide range of such seminars or workshops, so that each PhD student can make his own choice (possibly with the help of his/ her advisor), taking into account his past education and future aspirations.
- PhD work benefits strongly from a stay at another university. Stays abroad should be encouraged.
- PhD research benefits from the international dimension of the research and the research group.
- PhD research in close co-operation with industry can be rewarding.
- PhD's learn most from informal contacts with their peers and advisors. Being part of a research group of supercritical size having good relations with industry and an international profile is the best PhD programme.

#### ACKNOWLEDGEMENT

The interviews were carried out by Jean Berlamont (Belgium), Titt Kaps (Estonia), Vaclav Kuraz (Czech Republic) and Michal Pokorny (Slovakia). The financial support by the E.U. is kindly acknowledged.

#### REFERENCES

- [1] Cyranoski, D., Gilbert, N., Ledford, H., Nayar, A. and Yahia, M. (2011). Education: the PhD factory, *Nature* 472, pp. 276-279.
- [2] European Commission, Lisbon strategy for growth and jobs (2009).  
[http://ec.europa.eu/archives/growthandjobs\\_2009/](http://ec.europa.eu/archives/growthandjobs_2009/)
- [3] EUGENE, a EU funded Lifelong Learning Program academic network (2009 -2012).
- [4] S'Jegers, R. et al. (2002). "Is there work after scientific research" in Dutch ("Is er nog werk na het wetenschapsbedrijf"), OVER-WERK, Tijdschrift van het steunpunt WAV 4/2002, pp. 110-114.
- [5] [www.eua.be](http://www.eua.be)
- [6] LERU (League of European Research Universities) (2010). "Doctoral Degrees beyond 2010: Training talented researchers for society".  
[http://www.leru.org/files/publications/LERU\\_Doctoral\\_degrees\\_beyond\\_2010.pdf](http://www.leru.org/files/publications/LERU_Doctoral_degrees_beyond_2010.pdf)
- [7] Smit, L. (2010). "The activities of PhD holders in companies: do they valorise their skills and knowledge?" in Dutch ("De activiteiten van doctoren in de ondernemingssector, valoriseren zij hun vaardigheden en kennis?"), PhD dissertation, Vrije Universiteit Brussel, 2010.

## 8<sup>th</sup> European Convention of Engineering Deans (ECED 2016)

At the ECED 2016 event participated Professor Iacint Manoliu, in his capacity as former Dean and Vice-Rector of the Technical University of Civil Engineering Bucharest and Professors Juris Smirnovs and Jurgis Porins from Riga Technical University.



Here is a report on ECED 2016 prepared by Prof. Juris Smirnovs from Riga Technical University:

The 8<sup>th</sup> European Convention of Engineering Deans (ECED 2016) was held on the 13<sup>th</sup> - 15<sup>th</sup> April 2016, at University College London, Centre for Engineering Education (CEE), Bloomsbury campus, in the west-end of London. Sponsors of the event were such wellknown companies as Dassault Systemes, MathWorks and Quanser.

ECED is the European networking event of the year for engineering deans organized by CESAER (Conference of European Schools for Advanced Engineering Education and Research) and SEFI (European Society for Engineering Education), that brings together deans to discuss current issues in engineering education and research. ECED represents a unique and important event in the calendar of senior leaders in engineering institutions. The general theme of 8<sup>th</sup> convention was “Schools of Engineering at the Forefront - Meeting Challenges of the Engineering Profession”.

The convention was organized in three sessions:

- Session I: Engineering Education: Meeting the Engineering Profession’s needs;
- Session II: Engineering Research and Innovation: Meeting the needs for Sustainable Development;
- Session III: Engineering Schools Adapting to Change: How much, how fast - and in what way?

Each session besides the time for interactive discussions and exchanges with the speakers and among the participants, through plenary discussions, included also flipped convention activities and break-out sessions.

This year's convention invited all participants to work on the London Agenda - which lists the most important challenges and opportunities for schools of engineering today. It is foreseen to present London Agenda during annual SEFI conference 2016 "*Engineering Education on Top of the World: Industry University Cooperation*" in Tampere on 12 – 15 September.



Some of the participants of the ECED 2016 in London

In the photo below taken by Prof. Juris Smirnovs, can be recognized: Prof. Jurgis Porins, first on the left, and Prof. Iacint Manoliu, first on the right.



**EUCEET Association WORKSHOP 2016****THE STRUCTURES FOR THE FUTURE**

Technical University of Cluj-Napoca, Romania  
29<sup>th</sup> September 2016, 09.00 - 16.00

At the General Assembly which took place on Wednesday 23<sup>rd</sup> September 2015 in Florence, it was decided that the 2016 General Assembly of the EUCEET Association will take place in the last decade of the month of September.

The Technical University of Cluj-Napoca kindly offered to host the General Assembly. As in the past, the General Assembly will be preceded by a Workshop.



Faculty of Civil Engineering, TU Cluj-Napoca

The main topics proposed are:

- smart structures;
- structures for resilient buildings;
- new materials for buildings.

The aim is to explore solutions and materials for structures which integrate and optimize on a life cycle basis major high performance attributes, including energy conservation, environment protection, safety, durability, sustainability and resilience.

The Workshop will give to academics from EUCEET partners' universities the opportunity to present advances in the relevant fields, to exchange ideas and information, to develop new cooperation among them.

**CONTRIBUTIONS**

Colleagues who want to contribute to the Workshop are kindly invited to announce Prof. Doina Verdes ([Doina.Verdes@dst.utcluj.ro](mailto:Doina.Verdes@dst.utcluj.ro)), in order to be included in the programme.



Cluj-Napoca city

## Workshop Venue

Technical University of Cluj-Napoca, Romania

**Faculty of Civil Engineering, Hall 157 first floor**

**Building located on George Baritiu Street no. 25**

(<http://www.utcluj.ro/en/>)

## How to get Faculty of Civil Engineering

### City transfer

The Airport of Cluj-Napoca has transport connections to downtown Cluj-Napoca. To get there, travelers can choose between car rentals, taxi, limo service and public transport. A regular taxi fare from the airport to the city center (about 10 km) is around 15-25 RON (4-6 EUR) - the current tariff is about 1,8 RON/km. Look only for company taxis and clearly ask the driver for the price! The airport is within Cluj-Napoca city limits and extra-urban charges should not be applied. In Romania the taxi (cab) should have a valid badge, and taximeter.

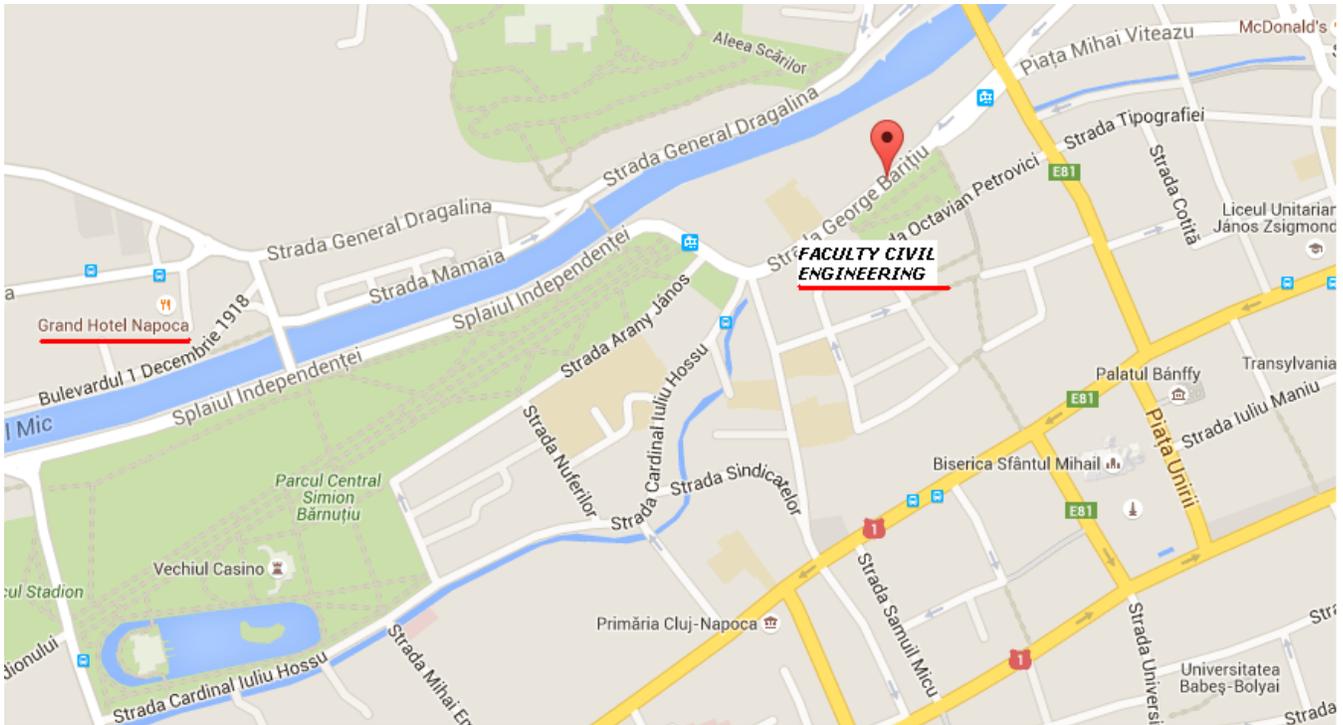
### Transport in the city

#### By public transport

Public transport in the city is possible by means of 25 bus lines, 7 trolleybus lines, and 3 tram lines, all operated by the RATUC company (*Regia Autonomă de Transport Urban de Călători*). Complete routes can be found on the company's website. Schedules are available online. For most lines servicing the city center you won't need to wait more than 15 minutes. The tariff is 4 RON (about 85 eurocents) for two travels. Tickets can be bought for cash only at special booths at most stops, identifiable by the RATUC logo and possibly the text "Bilete si Abonamente" (meaning "short and long-term tickets").

**By taxi**

Taxis are relatively more expensive than in other parts of Romania, but still cheap by European levels, and very convenient. The tariff is around RON 1.8 (c. 50 eurocents) per kilometer, and the same is applied as start fee. All the respectable companies charge the same price. Typically you won't pay more than RON15-20 (€3-4) for a travel between the city centre and some point in the suburbs. Payment is always done in cash, and paying by credit card is not possible.



City center Map Cluj-Napoca

**Cluj-Napoca - General Information**

- Location: Central Romania (County: Cluj)
- Size: 16.2 sq. miles (42 sq. km)
- Elevation: 1,181 ft. (360 meters)
- Population: 340,000
- Inhabited since: 200 BC
- First documented: 1177 AD (*Clus*)



### How to get in Cluj-Napoca

By plane:

Cluj-Napoca International Airport:

[http://www.airportcluj.ro/index.php?set\\_lang=en](http://www.airportcluj.ro/index.php?set_lang=en)

By bus:

<http://www.autogari.ro/?lang=en>

<http://www.autogarabeta-cluj.ro/>

By train:

Intern: <http://infofer.ro/>

International: <http://www.bahn.de/i/view/overseas/en/index.shtml>

More informations about Cluj, Transilvania and Romania are available on the following links:

<http://visitcluj.ro/>; <http://www.clujonline.com/tourism/tourism.htm>; <http://www.clujbusiness.ro/>

<http://www.romaniatourism.com/>

### Cluj-Napoca – Accommodation

Hotels - 4 stars			<b>How to get</b>
			Faculty of Civil Engineering George Baritiu street no. 25
<b>Grand Hotel Napoca ****</b>	Str. Octavian Goga nr. 1	+40-733-410 170 reception@hotelnapoca.ro <a href="http://hotelnapoca.ro/">http://hotelnapoca.ro/</a>	By taxi Walking through the Central Park 15 minutes
<b>City Plaza ****</b>	Str. Sindicatelor 9 - 11	+40 264 450.101 contact@cityhotels.ro www.cityhotels.ro	Walking 7 minutes
<b>Agape ****</b>	Str. Iuliu Maniu 6	+40 264 406.523 reception@hotelagape.ro www.hotelagape.ro	Walking 15 minutes
<b>Belvedere ****</b>	Str. Calarasi 1-3	+40 264 432.071 belvedere.cluj@unita-turism.ro <a href="http://www.unita-turism.ro/ro/hotel/cluj-napoca/belvedere.html">http://www.unita-turism.ro/ro/hotel/cluj-napoca/belvedere.html</a>	By taxi Or walking on the stair street 15 minutes
<b>Golden Tulip ****</b>	Observatorului Street 129, Cluj-Napoca 400352	+40 264 545 000 <a href="http://www.goldentulipcluj.ro/">http://www.goldentulipcluj.ro/</a>	By bus no 35 to the station Pod Traian and walking then 10 minutes By taxi

<b>Hotels - 3 stars</b>			<b>How to get</b> Faculty of Civil Engineering George Baritiu street no. 25
<b>Fullton ***</b>	Str. Sextil Puscariu 10	+40 264 597.898 office@fullton.ro www.fullton.ro	10 minutes walking
<b>Melody Central ***</b>	Piata Unirii 29	+40 264 597.465 melody_hotel@yahoo.com www.hcm.ro	12 minutes walking
<b>Meteor ***</b>	Bd. Eroilor 29	+40 264 591.060 reception@hotelmeteor.ro www.hotelmeteor.ro	15 minutes walking

### 9<sup>th</sup> General Assembly of the EUCEET Association

The 9<sup>th</sup> General Assembly of the EUCEET Association will take place in Cluj-Napoca, on **29<sup>th</sup> September 2016**, from **16.00 to 19.00**, kindly hosted by the Technical University of Cluj-Napoca.

#### The PROGRAMME

of the EUCEET ASSOCIATION events, to take place in Cluj-Napoca, Romania, in September 2016

<b>Wednesday, 28<sup>th</sup> September 2016</b>		<b>Thursday, 29<sup>th</sup> September 2016</b>		<b>Friday, 30<sup>th</sup> September 2016</b>		<b>Saturday, 1<sup>st</sup> October 2016</b>	
	ARRIVAL OF THE PARTICIPANTS	<b>09.00h - 11.00h</b>	<b>WORKSHOP</b>	9.00h	THE VISIT AT TURDA SALT MINE	10.00h	THE CITY TOUR
	REGISTRATION	11.00h -11.30h	COFFEE BREAK				
		<b>11.30h - 12.30h</b>	<b>WORKSHOP</b>				
		12.30h - 14.00h	LUNCH	12.00h	THE VISIT OF A WINERY IN TURDA COUNTY		
		<b>14.00 h - 15.30h</b>	<b>WORKSHOP</b>				
		15.30h - 16.00h	COFFEE BREAK				
		<b>16.00h – 19.00h</b>	<b>EUCEET - GENERAL ASSEMBLY</b>				
19.00 hr	WELCOME DINNER	20.00 h	OFFICIAL DINNER				

## FROM MEMBERS

### Czech Technical University in Prague, CZ



Czech Technical University in Prague, Faculty of Civil Engineering hosted the event Central Europe towards Sustainable Building Prague 2016 (CESB16) which is a part of 2016 international Sustainable Built Environment conference series convened under auspices of the four international organizations: iiSBE, CIB, UNEP-SBCI and FIDIC.

CESB16 was the fourth conference in a row held in Prague on the actual topic of sustainable building (more on previous CESB conferences [here](#)).

Topics of the conference were:

Sustainable renovation of existing building stock,  
Industrial heritage regeneration,  
Sustainable urban development,  
Building design process,  
Materials and technologies for sustainable buildings,  
Decision-support tools and assessment methods, and  
Sustainable building in education

More information on: <http://cesb.cz/>



### Aristotle University of Thessaloniki (AUTH), GR



The [School of Civil Engineering](#) along with the [Highway Engineering Laboratory](#) of the Aristotle University of Thessaloniki (AUTH), Greece, organize the International Seminar on Roads, Bridges and Tunnels, on 18-24 November 2016.

#### Topics

ISRBT2016 seminar Topics/Lectures will cover the following subjects:

- Construction management of motorway projects
- Motorway concession projects
- Motorway construction projects in international context
- Road alignment, earthworks and environment
- Landslides and stabilization measures
- Construction techniques for motorway embankments
- Construction methods for bridges
- Suspended bridges
- Bridges on prestressed box beams
- NATM tunneling method for motorways
- "Cut and cover" and "Cover and cut" methods
- Motorway pavements and asphalt courses
- Traffic safety on motorways

More information on: [http://isrbt2016.civil.auth.gr/?page\\_id=12](http://isrbt2016.civil.auth.gr/?page_id=12)

## University of Florence, IT

### QUEECA project



QUEECA is a Tempus project which aims at setting up and implementing a system of Quality Assurance of Engineering Education (EE) in Central Asia countries, finalized to the pre-professional accreditation of engineering programmes (i.e. accreditation of educational programmes as entry route to the eng. profession). The accredited programmes must satisfy the same pre-requisites for the award of the EUR-ACE quality label, i.e. the EUR-ACE Framework Standards (EAFS) and the European Standards and Guidelines for Quality Assurance in Higher Education.

QUEECA involved 4 out of 5 TEMPUS countries in Central Asia. The three-year QUEECA initiative was led by the University of Florence, School of Engineering under the leadership of Prof. Claudio Borri. The QUEECA consortium included European partners from Italy, Germany, Belgium, Portugal and the United Kingdom and Central Asian partners from Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan

The e-book for the recently completed QUEECA project, entitled "*The QUEECA experience - Developing and Implementing a Central Asia Accreditation of Engineering Education Consistent with European Standards*" is available at: [http://www.fupress.com/archivio/pdf/3290\\_8876.pdf](http://www.fupress.com/archivio/pdf/3290_8876.pdf)

## Delft University of Technology, NL

Delft University of Technology will host on 16-19 October 2016 the *Fifth International Symposium on Life -Cycle Civil Engineering, IALCCE2016*,



### Typical themes at IALCCE symposia are:

Aging of Structures, Deterioration Modeling, Durable Materials, Earthquake and Accidental Loads, Fatigue and Damage, Marine and Severe Environments, Lifetime Structural Optimization, Long-term Performance Analysis, Performance Based Design, Service Life Prediction, Time-variant Reliability, Uncertainty Modeling, Damage Identification, Field Testing, Health Monitoring, Inspection and Evaluation, Maintenance Strategies, Rehabilitation Techniques, Strengthening and Repair, Life-Cycle Cost Models, Project Management, Risk Analysis and Optimization, Artificial Intelligence Methods, Evolutionary Procedures.



For more information please visit: <http://www.ialcce2016.org/>



## The Technical University of Cluj-Napoca, RO

The annual event “*Undergraduate Seismic Design Competition*”, organized by EERIE SLC (Student Leadership Council) was held this year in San Francisco, California, from 5<sup>th</sup> - 8<sup>th</sup> April.

For the third consecutive year, a team of students from Technical University of Cluj-Napoca succeeded to take the first place in the international competition.

Romanian students built a model called *RedWood Tower*, representing a structure of 28 storeys made entirely of balsa wood. Even if it had a weight of only 606 grams, with an additional load over 11.38 kilograms it successfully resisted to the three simulated earthquakes within the contest.

The team from Cluj was confronted with teams coming from 33 of the most prestigious universities including University of California, Stanford University, California State University, University of Michigan, University of British Columbia and University of Toronto. The team was formed by 12 students from the Faculty of Civil Engineering and from the Faculty of Architecture and Urbanism: Alina Pop, Andrei Caraza, Bogdan Stroia, Bianca Rațiu, Cătălin Popa, Cristina Iordache, Daniel Cornea, Gergely Vass, Horia Marian, Marius Monda, Miklos Bartha and Szidonia Habă.

More information about the *Undergraduate Seismic Design Competition* on: <http://slc.eeri.org/SDC2016.htm>



2016 Seismic Design Competition Champions from Technical University of Cluj - Napoca

## Ural Federal University, RU

Ural Federal University and Ural Branch Russian Academy of Sciences (SEC UB RAS) organized

***II International Conference «Safety Problems of Civil Engineering Critical Infrastructures»*** on May 26-27, 2016, Ekaterinburg, Russia.



The conference purpose was to ensure dialogue of professionals engaged in innovative scientific and educational, research in one of the most important problems of the twenty-first century - safety and sustainable development of critical infrastructures as applied to the Urals, Russia, Eurasian Region and worldwide.



### Conference topics:

1. Safety of Civil Engineering Critical Infrastructures and Territories;
2. Safety of Arctic Infrastructures;
3. Interdependent Urban Infrastructures,
4. Resilience of Infrastructures
5. Governance of Infrastructures;
6. Strength and Stability of Foundations for Buildings and Structures;
7. Energy-Efficient Technologies and Green Buildings;
8. Economic Aspects of Design, Construction and Monitoring of Unique Buildings and Structures.

More information on: <http://sti.ufu.ru/konferencii/ii-international-conference/>

## University of Žilina, SK

The Department of Structures and Bridges, Faculty of Civil Engineering, University of Žilina, Slovakia organizes the **9<sup>th</sup> International Conference on BRIDGES IN DANUBE BASIN**, September 30 – October 01, 2016.

### AIM OF THE CONFERENCE

The general goal of the Conference is the overall exchange of knowledge and experience between different institutions, owners, contractors, bridge designers and constructors, as well as scientific experts. The selected papers to be presented at the Conference are mainly related to the bridges across the Danube and its tributaries, i.e. to the bridges in Danube Basin. The Conference also aims to promote advances in bridge engineering.

The 9<sup>th</sup> Conference is dedicated to the memory of outstanding steel constructors, also founder members of the Danube Bridges Conferences: Prof. Miklós Iványi (Hungary) & Prof. Dragoş Teodorescu (Romania).

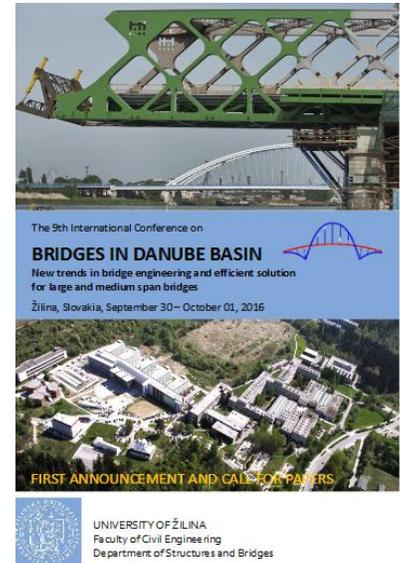
Chairman of the Organising and Scientific Committee is Prof. Jan Bujnak.

More information on: <http://svf.uniza.sk/kskm/Danubebridges2016/>

## ECCE – European Council of Civil Engineers

### 64<sup>th</sup> ECCE General Meeting

The 64<sup>th</sup> ECCE General Meeting will take place on **21 - 22 October 2016, in Athens, Greece** hosted by the Association of Civil Engineers of Greece in cooperation with the Technical Chamber of Greece.



## FROM PARTNERS

### **The 44<sup>th</sup> SEFI Annual Conference “Engineering Education on Top of the World: Industry University Cooperation”**

**12-15 September 2016, in Tampere, Finland**

SEFI Annual Conferences have been organised in different parts of Europe and represent a unique opportunity for the members of SEFI and all those interested by or involved in engineering education and research to exchange views and opinions, to establish new contacts with peers and other HEE stakeholders.

Tampere University of Technology (TUT) welcomes everyone to join SEFI annual conference in the beautiful city of Tampere. The conference takes place at TUT campus in the suburb of Hervanta from 12<sup>th</sup> until 15<sup>th</sup> September 2016.



The themes of the conferences reflect the objectives of the Society and the priorities identified by its members.

For the first time, several satellite events will be organised in the morning preceding the opening of the conference. For details about these events, please regularly consult the conference website.

In 2017, it will be organised by ISEP (Porto) in the Azores Islands (19-21 September) on “*Education Excellence for Sustainability*”.

More information on: <http://www.tut.fi/en/sefi-annual-conference-2016>

## EUA (European University Association)



### 2<sup>nd</sup> UNI-SET Energy Clustering Event

26 - 28 September 2016, Politecnico di Torino, Italy

## Develop and strengthen energy efficient systems and increase safety in the use of nuclear energy

The 2<sup>nd</sup> UNI-SET Energy Clustering Event will explore how European universities can further cooperate in research and education activities in the fields of energy efficiency and nuclear safety.



The event is the second of a series of UNI-SET “Energy Clustering Events” which will take place in 2016 and 2017 to discuss and stimulate the development of innovative research and education programmes in the energy field. The events seek to mobilise the European university community to tackle the “energy challenge” by fostering exchange and collaboration between researchers, educators and other stakeholders, framed by the European Strategic Energy Technology Plan (SET-Plan) and the Energy Union.

The event in Torino will provide opportunities for clustering, consortia building and knowledge sharing. The main themes of the event, around which sessions will be programmed, are derived from two priorities of the SET-Plan:

- “Develop and strengthen energy-efficient systems” (Core priority 3)
- “Increase safety in the use of nuclear energy” (Additional priority 2)

The event is organised in the framework of the FP7 UNI-SET project, an action implemented jointly by the European University Association (EUA) and KU Leuven, representing the universities in KIC InnoEnergy. The UNI-SET ECEs are mainly intended for EUA member universities participating in the UNI-SET Universities Survey.

### Objectives

The objective of the event is to mobilise the European university community to tackle the “energy challenge” by **fostering inter-university cooperation** and the voice of universities in the development of energy policy at EU level. The event will offer **insights into innovative programmes and approaches** from a multidisciplinary perspective through examples, lessons learnt and other best practice. The conference will offer specific **opportunities for networking and project development**. Participants will also contribute to the development of a **roadmap for universities** to unfold their full potential in the energy system transformation.

More information on: <http://eua.be/activities-services/events/event/2016/09/26/default-calendar/2nd-uni-set-energy-clustering-event>

**3<sup>rd</sup> EUA Funding Forum****6-7 October 2016, University of Porto, Porto, Portugal****Efficient universities: Value for society**

Forum will focus on the crucial issues of delivering value to society and efficient university management. At a time when public finances are under increased pressure, funding models for universities are being revised with the perspective of rationalising expenditure and generating greater added value and increase the efficiency of the sector. In many European countries, it is becoming highly relevant for the university sector to show and quantify its contribution to society, in social but also economic terms.

Some of the questions that will keep participants busy:

- How can efficiency strategies reinforce the university's capacity to deliver on its core missions?
- How can the contribution of universities to society be assessed, let alone measured?
- Should universities communicate on their economic added value? And if so, how?
- What are the expectations of funders and policy makers? What are successful policies to increase efficiency?
- How to develop a productive dialogue at system level?
- What is the future of European funding?
- How can universities explore new partnerships and diversify their funding streams?

More information on: <http://eua.be/activities-services/events/event/2016/10/06/default-calendar/3rd-funding-forum>

## FROM THE EUROPEAN UNION



### News from Education, Audiovisual and Culture Executive Agency (EACEA)

#### Recommended Annual Instruction Time in Full-time Compulsory Education in Europe – 2015/16

Eurydice publishes a Report on recommended minimum instruction time across core subjects in full-time general compulsory education in 37 European countries participating in the Eurydice network.

Reading, writing and literature, mathematics, natural sciences and foreign languages are recognised as core subjects in all European countries. But how much time do students spend on those subjects at school, and how much does this instruction time vary across countries?

This report provides information about the recommended minimum instruction time across core subjects in full-time general compulsory education in 37 European countries participating in the Eurydice network. The reference year is 2015/16.

The publication offers a comparative overview of the differences between primary and compulsory general secondary education, and identifies the main changes since 2010/11. It also includes national diagrams and maps illustrating the data on minimum instruction time by country and by subject.

The Report can be found on:

[https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:Recommended\\_Annual\\_Instruction\\_Time\\_in\\_Full-time\\_Compulsory\\_Education\\_in\\_Europe\\_2015/16](https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:Recommended_Annual_Instruction_Time_in_Full-time_Compulsory_Education_in_Europe_2015/16)

#### 2015 Erasmus Mundus Graduate Impact Survey: 40% of Erasmus Mundus graduates in a full-time job in 2 months



The Erasmus Mundus programme gives students from across the world the chance to study in two or more European countries at Masters level. What do graduates and students expect from Erasmus Mundus, and how does their study programme fulfil these expectations?

The Erasmus Mundus programme is rated highly satisfactory. The report shows that over 90% of the participants were satisfied with the programme, with more than 65% very satisfied. Overall, 81% of graduates were satisfied with the quality of the courses offered. Some fields were rated as particularly satisfactory, such as Health and Welfare. Furthermore, and 92% of graduates believe that their language skills increased due to Erasmus Mundus.

More information on: [http://ec.europa.eu/education/news/2016/0331-erasmus-mundus-graduate-survey\\_en.htm](http://ec.europa.eu/education/news/2016/0331-erasmus-mundus-graduate-survey_en.htm)

## NEWS FROM THE WORLD

### 2016 International Conference on Structural and Civil Engineering

September 9-11, 2016

Hong Kong



2016 International Conference on Structural and Civil Engineering will be held in Hong Kong during September 9-11, 2016.

Asia-Pacific Chemical, Biological & Environmental Engineering Society will host this conference.

It is a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Structural and Civil Engineering.

Topics are interested but not limited to the following:

#### Civil and Structural Engineering

- Bridge Engineering; Building Structure and Bridge Engineering;
- Building Technology; Cartography and Geographic Information System;
- Coastal Engineering; Computational Mechanics;
- Computer Simulation and CAD/CAE; Concrete Structures;
- Construction and Control; Detection and Transformation;
- Disaster Prevention and Mitigation; Engineering Management;
- Environment-Friendly Construction and Development;
- Geological Engineering; Geotechnical Engineering; Harbor Engineering;
- Heating, Gas Supply, Ventilation and Air Conditioning Works;
- Hydraulic Engineering; Material Quality and Control;
- Metallic Structures; Monitoring and Control Of Structures;
- Operation and Maintenance; Project Management;
- Reliability and Durability of Structures; Road, Bridge and Railway Engineering;
- Safety and Monitoring; Sanitary and Ground Water Engineering;
- Seismic Engineering; Structural Analysis and Design;
- Structural Engineering and Disaster Reduction;
- Structural Rehabilitation, Retrofitting and Strengthening; Surveying and Geo-informatics;
- Surveying and Photogrammetry; Surveying Engineering;
- Transportation Engineering; Tunnel, Subway and Underground Facilities;
- Urban Planning; Water Supply and Drainage Engineering

#### Architecture and Urban Planning

- Architectural Design and Theories
- Advanced Construction Materials
- Aesthetics and Landscape
- Architectural Design and Its Theory
- Architectural Environment & Equipment Engineering
- Architecture and Building Materials
- Art Design and Landscape Architecture
- Building Energy Saving Technology
- Building Technology Science
- Construction and Renewable Energy Sources
- Ecological Architecture
- Ecological Construction and Intelligent Control
- Energy Conservation and Equipment
- Green Building Materials
- Green Construction and Environmental Protection
- History and Theories of Architecture
- Landscape Planning and Design
- Traditional Construction Materials
- Urban Planning and Design

More information on: <http://www.icsce.org>

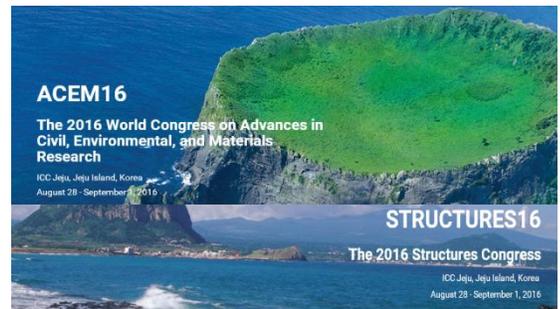
**“The 2016 World Congress on Advances in Civil, Environmental, and Materials Research (ACEM16)”**

and

**“The 2016 Structures Congress (Structures16)”**

August 28 - September 1, 2016

Jeju island, Korea



The 2016 World Congress on Advances in Civil, Environmental, and Materials Research (ACEM16)” and “The 2016 Structures Congress (Structures16)” will be organized by combining twelve International Conferences in Jeju island, Korea on August 28 - September 1, 2016.

The Congress aims at providing the first step fusion approach to solve the global problems of infrastructure, new materials, and environmental issues. Each conference of the Congress will be independently organized within ACEM16 in cooperation with other neighboring conferences. Thus the Congress will be a premier international forum that bring together academics and practicing engineers to exchange the frontier research results in the allied technologies under the topics of infrastructure, environmental, and materials research.

More information on: <http://www.acem16.com>

**4<sup>th</sup> GeoChina International Conference 2016**

July 25 to 27, 2016

Shandong, China



The conference will provide a showcase for recent developments and advancements in design, construction, and safety Inspections of transportation Infrastructures and offer a forum to discuss and debate future directions for the 21<sup>st</sup> century. Conference topics cover a broad array of contemporary issues for professionals involved in bridge, pavement, geotechnical, tunnel, railway, and emerging techniques for safety Inspections. You will have the opportunity to meet colleagues from all over the world for technical, scientific, and commercial discussions.

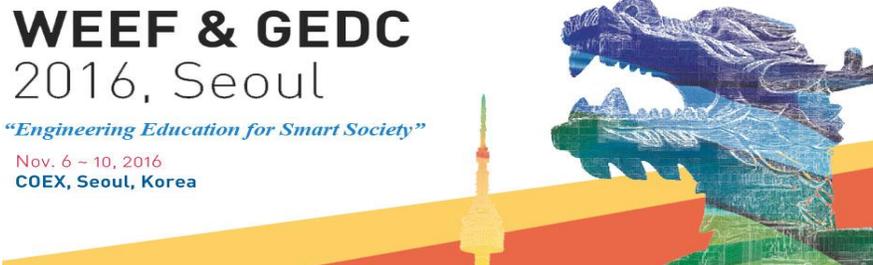
Shandong, with a history of more than 5,000 years, is considered one of the birthplaces of Chinese civilization. It is being developed into a modern international economic, financial, and trade center. Recent rapid construction in China has provided great opportunities for bridge, pavement, geotechnical, and tunnel engineers to use their knowledge and talents to solve many challenging problems involving highway bridge structures, pavements, materials, ground improvement, slopes, excavations, and tunnels with innovative solutions and cutting-edge technologies.

More information on: <http://geochina2016.geoconf.org/>

## CALENDAR

Date	Event		Place
12-16.09.2016	<p>SEFI 2016 Annual conference</p> <p><a href="http://www.tut.fi/en/sefi-annual-conference-2016/welcome-to-tampere/index.htm">http://www.tut.fi/en/sefi-annual-conference-2016/welcome-to-tampere/index.htm</a></p>		Tampere, FINLAND
29.09.2016	<ul style="list-style-type: none"> <li>• Workshop EUCEET Association <i>"THE STRUCTURES FOR THE FUTURE"</i> (9.00-16.00)</li> <li>• 9th General Assembly of the EUCEET Association (16.00-19.00)</li> </ul> <p><a href="http://www.euceet.eu/events/euceet.php?id=8">http://www.euceet.eu/events/euceet.php?id=8</a></p>		Cluj-Napoca, ROMANIA
19– 22.10. 2016	<p>COBRAMSEG/SBMR 2016</p>  <p>COBRAMSEG - XVIII Brazilian Conference on Soil Mechanics and Geotechnical Engineering SBMR - VII Brazilian Symposium on Rock Mechanics GEOJOVEM - VII Brazilian Symposium and South American Young Geotechnical Engineers Conference SFGE - Shaping the Future of Geotechnical Education</p> <p><a href="http://cobramseg2016.com.br/?lang=en">http://cobramseg2016.com.br/?lang=en</a></p>		Belo Horizonte, BRAZIL
21–22.10.2016	<p>64th ECCE General Meeting</p>  <p><a href="http://www.ecceengineers.eu/news/2016/64_ecce_meeting.php?id=41">http://www.ecceengineers.eu/news/2016/64_ecce_meeting.php?id=41</a></p>		Athens, GREECE

Date	Event	Place
06-10.11.2016	The World Engineering Education Forum & The Global Engineering Deans Council, 2016 Seoul	Seul, KOREA



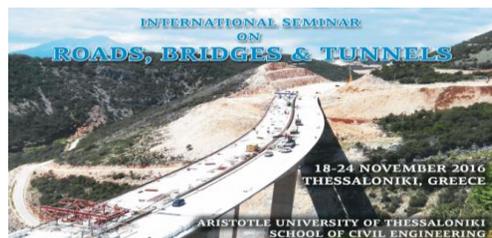
<http://www.weef-gedc2016.org/>

14 -16.11. 2016	9 <sup>th</sup> annual International Conference of Education, Research and Innovation	Seville, SPAIN
-----------------	---	----------------



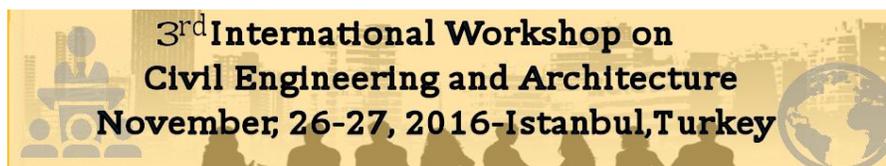
<https://iated.org/iceri/maillingMAY2.html>

18-24.11.2016	International Seminar on Roads, Bridges and Tunnels	Thessaloniki, GREECE
---------------	---	----------------------



[http://isrbt2016.civil.auth.gr/?page\\_id=12](http://isrbt2016.civil.auth.gr/?page_id=12)

26-27.11.2016	3 <sup>rd</sup> International Workshop on Civil Engineering and Architecture	Istanbul, TURKEY
---------------	--	------------------



<http://eng-scoop.org/iwcea/>