

NEWSLETTER 1/2016

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FROM THE EUCEET ASSOCIATION

RESILIENCE BY DESIGN project

As decided at 8th General Assembly of the EUCEET Association, which took place on 23rd September 2015 in Florence, a third, revised, application for the project "*Resilience by Design*" was prepared and submitted on 31st March 2016 under the action KA2 Strategic Partnership of the Erasmus+ programme.

MARUEEB PROJECT - Kick-off meeting

EUCEET Association is partner in the Erasmus+ project "MARUEEB", coordinated by the University of Genoa (see Newsletter 3/2015).

Wider objective of the MARUEEB project is to establish and develop a new Master on «ENVIRONMENTAL PROTECTION AND ENERGY EFFICIENT BUILDINGS» in 3 Russian Universities and 2 Armenian Universities with affiliation to other 2 Russian Universities, according to student-centred or output-based approach.



Information on the project MARUEEB were provided in the Newsletter No. 2/2015 and No. 3/2-15. On 17-19 February 2016 was held in Genoa the kick-off meeting of the project "MARUEEB" at which EUCEET Association was represented by Prof. Diego Lo Presti.

Here are the slides of the presentation made on this occasion by Prof. Diego Lo Presti, on the basis of contributions received from 10 members of the EUCEET Association.

MARUEEB KICKOFF MEETING UNIVERSITY OF GENOA 17 – 19 FEBRUARY 2016

EUCEET ASSOCIATION

www.euceet.eu

Diego Lo Presti (President)

University of Pisa: d.lopresti@ing.unipi.it



EUCEET Association

- Founded under Belgian Law on 12th March 2007
- The Association is an outcome of the sustainability strategy outlined in the application for EUCEET III project (2006-2009)
- Statutes and bylaw were prepared by a Task Force (Jean Berlamont and Iacint Manoliu) designated by the EUCEET MC in Vilnius, on 8th December 2006



Administrative Council of the EUCEET Association:

- Prof. Diego Lo Presti (University of Pisa) President
- Prof. Laurie BOSWELL (City University London) Vice-President
- Prof. Jean BERLAMONT (Catholic University Leuven) Treasurer
- Prof. Vladimir ALEKHIN (Ural Federal University)
- Prof. Piotr BERKOWSKI (Wroclaw Technical University)
- · Prof. Linas JUCKNEVICIUS (Vilnius Technical University)
- Prof. Jose TURMO (Universitat Politècnica de Catalunya Barcelona)

Prof. Iacint Manoliu (Technical University of Civil Engineering, Bucharest) General Secretary

MAIN CONTRIBUTIONS

- ESTP
- ENPC
- CITY UNIVERSITY
- KU LEUVEN
- UPC Barcelona
- TUCEB
- WROCLAW TECHNICAL UNIVERSITY
- CZECH TECNICAL UNIVERSITY PRAGUE
- UNIVERSITY OF TRENTO
- UNIVERSITY OF PISA

ESTP

- The ESTP Paris is accredited for the engineering degree at master's level in 5 specializations. 1 specialization "energy engineering for sustainable construction" is entirely focused on energy efficiency in buildings.
 - It is a French one tiers engineering degree where students are admitted to the 3rd year in higher education after a first 2 year degree in higher education. So the whole last 3 years of the ESTP engineering programme are dedicated to this topic.
 - The other 4 ESTP specializations offer a last year indepth study in 11 fields, one of which is "engineering and energy efficiency".
- On the other hand, the ESTP research is grouped in the "Institut de Recherche en Constructibilité". One of the research topics is "energy efficiency in buildings".

ENPC

• MASTER OF ENGINEERING (CIVIL ENG.), 2 subjects (Prof. Bruno Peuportier):

Energy performance of buildings (4 ECTS)

Energy performance of buildings, application (3 ECTS)

ADVANCED MASTERS PROGRAMMES

2 dedicated programs for graduated and young professionals

- Real Estate, Buildings, Energy (IBE)
- The Advanced Master programme is divided into 10 weeks and includes a study trip in Europe. The programme is delivered from January to December. In parallel with or following the 10 teaching modules, students carry out a company-based assignment lasting a minimum of four months, on which they produce a professional dissertation for presentation to a jury panel.
- Integrated design and lifecycle of building and infrastructure (BIM)

Program: one week/month from September to July.

In parallel or following teaching modules, auditors conduct a mission in business leading to the writing of a professional thesis defended before a jury.

The subject of the thesis refers to topics covered in the course and allows the application of concepts to solve a business problem.

The curriculum aims to:

Train professional manager to a project in the context of digital model and use BIM to design an integrated manner of construction and operation of projects for new buildings, existing, or renovation, taking into account, in an approach "Buildable", constraints and models of the various players, particularly energy and environmental requirements.

To help the various professionals to "work together" through an interoperable information system, to meet all the technical, regulatory and environmental, with controlled costs.

CITY UNIVERSITY LONDON

- City University of London offers two Masters programmes, which are compliant with the Bologna Process and include the latest technical innovations related to energy efficient buildings. They also provide a capacity building facility for professional persons wishing to enter the energy industry.
- 1. Energy and Environmental Technology and Economics.

Topics include: managing conventional energy production, renewable energy, price regulation, low carbon emission, risk management assessment, user and supplier perspective, high level national and international policies and economics, etc. The programme provides the opportunity of retraining in technical and scientific content and management as well as designing course content and assessment.

2. Renewable Energy and Power System Management.

Topics include; power system design, management and economics, power system simulation and power conditioning, environmental law, integration of renewable energy schemes to reach low pollution targets, impact on existing national grid.

KU LEUVEN

- **BACHELOR**
 - BUILDING PHYSICS: HEAT AND MASS TRANSFER
- **MASTER**
 - CONSTRUCTION OF BUILDINGS: performance assessment
 - BUILDING SERVICES (part 1) heating, ventilation
 - BUILDING SERVICES (part 2) cooling and air conditioning
 - BUILDING SIMULATION
 - URBAN PHYSICS

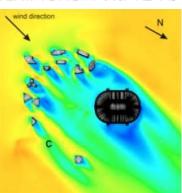
URBAN PHYSICS

AIMS

Students are capable of assessing the urban physical quality of buildings and the urban environment, identifying urban physics problems, and analyzing and evaluating building and urban designs based on the urban physics parameters wind, solar radiation and rain with respect to wind comfort and wind safety around buildings, facade surface soiling and weathering by wind-driven rain, and the urban heat island effect. Students learn:

- •Detailed knowledge of basic wind-flow patterns around buildings, wind nuisance, and wind-driven rain on building facades.
- ·Basic knowledge of the urban heat island effect to identify and mitigate this problem in realistic situations.
- •dentification and assessment of wind nuisance situations, their origin, and of the effectiveness of various remedial measures.
- ·Identification of facade surface soiling and weathering by wind-driven rain, their origin, and of the effectiveness of various remedial measures.





Building Physics Section KU LEUVEN



UPC - Barcelona

- Energy efficient buildings are discussed in two different subjects corresponding to the bachelor degree in Public Works and the master degree in Civil Engineering. The contents on Energy Efficient Buildings are presented in the courses on "Building and Prefabrication" (Public Works) and "Building Structures" (Civil Engineering master), the later taught in English.
- About six hours of face-to-face teaching is devoted to the subject, while the students also have to solve a problem concerning thermal insulation of buildings. The teaching includes concepts on the general physics of buildings, thermal conductivity and behavior, thermal insulation techniques and materials, psychometry and vapor condensation, interior environment, and sustainable solutions for Energy efficient construction.
- In addition to the time specifically devoted to this teaching, issues on sustainability and energy efficiency percolate throughout the entire courses.

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TUCEB

At the Building Services Engineering Faculty from the Technical University of Civil Engineering Bucharest, Romania, there is a specialized master (scientific field: Building Services Engineering) entitled *Energy Efficiency of Building Systems*, functioning since 2009.

The master provides 240 ECTS in 2 years of study, the language of teaching being Romanian.

Starting with the academic year 2016-2017, the same master (with a slightly modified curricula) will be provided in the French language, under the name *Efficacité* énergétique des installations techniques du bâtiment.

TUCEB

1 st Year of study

Numerical Analysis and programming Data acquisition and processing techniques Optional A:

- A1. Modelling and simulation of technical systems in buildings
- A2. Fluid Mechanics complements
- A3. Advanced Engineering Thermodynamics

Dynamic behavior of thermal-hydraulic systems

Comfort exigences and air quality in indoor environments

Renewable energy sources utilization in buildings

Heating and cooling by radiation

Fire-safety systems and equipment

Optional B:

- B1. Small-scale cogeneration
- B2. Air distribution in rooms and ventilation efficiency

Air-conditioning of multi-zonal buildings

Reliability and maintenance of building systems

Acoustics and noise reduction in buildings and building systems

2nd Year of study

Energy consumptions in buildings – heating and domestic hot water Energy consumptions in buildings – ventilation, air-conditioning and refrigeration Energy audit, expertise and certification of buildings Inspection of HVAC systems Optional C

- C1. Passive house design
- C2. Heat and mass transfer through building envelope

Building management systems (BMS)

Research & design activities for the master thesis

Writing of the Master thesis

WROCLAW TECHNICAL UNIVERSITY

- MASTER IN CIVIL ENGINEERING
 - ADVANCED BUILDING PHYSICS (15 + 15 HRS) TECHNICAL SHEET AVAILABLE
 - SUSTAINABLE HOUSING (15 + 15 HRS) –
 TECHNICAL SHEET AVAILABLE

CZECH TECNICAL UNIVERSITY PRAGUE

UCEEB was founded as an independent institute of the Czech Technical University in Prague under the auspices of four departments — Civil engineering, Mechanical Engineering, Electrical Engineering and Biomedical Engineering.

The Centre's goal is to leverage synergy effects of research activities of the individual departments which are related to energy efficient buildings.

UCEEB is a reaction to one of the European Union's largest priorities aimed at optimisation of energy efficiency of buildings. The new centre should also have better opportunities to participate in European scientific projects, such as the Joint Technology Initiative on Energy Efficient Buildings, which is based on the EU's targets for carbon dioxide emissions.

It is clear that sustainable building is not just a trend or fashion, but a necessity. That is why we look at energy efficient buildings as a whole.

UNIVERSITY OF TRENTO

- CE CURRICULA AT MASTER LEVEL INCLUDE THE FOLLOWING SUBJECT:
 - SUSTAINABLE BUILDING AND ARCHITECTURE (60 HRS)
 The main aim of the course is to provide students with a method and the knowledge needed to design different building typologies which provide human internal comfort conditions and respecting/using the environment.
- DOCTORAL SCHOOL IN CIVIL ENVIRONMENTAL AND MECHANICAL ENGINEERING INCLUDE THE FOLLOWING SUBJECT:
 - PASSIVE SOLAR BUILDING DESIGN (16 HRS Design and calculation methods for passive building devices (heating, cooling and ventilation); Human indoor comfort conditions (calculation and verification methods); Energy diagnosis of existing buildings (thermal flux meter methods and infrared thermo vision technique))

UNIVERSITY OF PISA

Courses:

Professor:

Fabio Fantozzi

Assistant Professors:

Franceso Leccese Giacomo Salvadori

PhD & Fellows:

Teresa Cervino Michele Rocca BUILDING PYHSICS (thermodynamics,

heat transfer, thermal insulation and energy consumption in buildings, humid air, indoor hygrothermal comfort, cooling of buildings, moisture behaviour of building components, daylighting and artificial lighting, room acoustics, sound insulation in buildings);

LIGHTING AND APPLIED

ACOUSTICS (fundamentals of lighting, day and artificial lighting of rooms and workplaces, architectural and urban lighting, light pollution; fundamentals of acoustics, transmission loss of walls, sound insulation in buildings, room acoustics and reverberation time, environmental noise);

THERMAL SYSTEMS IN

BUILDINGS (heating and air conditioning systems in buildings, mechanical ventilation and indoor air quality, solar systems in buildings, low enthalpy sources, energy performance of buildings and technical standards, outline of thermal systems safety and others).

EUCEET Association will be represented at IACEE2016 conference

Prof. Jean Berlamont, member of the Administrative Council of EUCEET Association, will represent the association at the IACEE2016 conference which will be held in Porto, Portugal between 17 and 20 May of 2016, with a presentation about the role of engineers with PhDs in industry and the competitive advantage that they bring to the company.



15th IACEE World Conference Hosted at University of Porto



May 17-20, 2016

Conference Theme
INNOVATION IN CONTINUING PROFESSIONAL DEVELOPMENT:
A VISION OF THE FUTURE

For more information: www.iacee2016.com
Email: iacee2016@fe.up.pt

EUCEET Association WORKSHOP 2016

THE STRUCTURES FOR THE FUTURE

Technical University of Cluj-Napoca, Romania 29th September 2016, 09.00 - 16.00

The Workshop will precede the 9th General Assembly of the EUCEET Association, hosted by the Technical University of Cluj-Napoca, which will take place in the same day from 16.00 to 19.00.

OBJECTIVE OF THE WORKSHOP

The main topics to be tackled in the Workshop are, but not limited to:

- 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 send an abstract of max. 200-250 words, by **30**th **April 2016**, to Prof. Doina Verdeş (<u>Doina.Verdes@dst.utcluj.ro</u>).

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 here

By plane:

Cluj-Napoca International Airport:

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

Facts and figures

Cluj-Napoca has a diverse and growing cultural scene, with cultural life exhibited in a number of fields, including the visual arts, performing arts and nightlife, aspiring to become a European Capital of Culture in the year 2020. The city's cultural scene spans its history, dating back to Roman times. Nevertheless, contemporary cultural manifestations cross ethnic boundaries, being aimed at students, cinephiles, and arts and science lovers, among others.

Today the Municipality of Cluj-Napoca is the seat of Cluj County and the spiritual and economic capital of Transylvania as well as an influential academic and medical centre; also Cluj-Napoca is the second largest city in Romania, after the capital Bucharest.



The heart of multiculturalism and diversity, Cluj-Napoca – the treasure city – is therefore an urban republic, a homeland for its inhabitants, a city where the organization of local administration, the proper distribution of taxes, the public order and urban development were, most of the time, more important than European events or princes' politics.



Although Cluj citizens spoke different languages, they knew how to live together in harmony, to mutually accept and respect the values of a city which always hosted different ethnics, religions and social classes. For these reasons, the most valuable and sustainable richness of the treasure city is that remarkable art of living together.

More informations about Cluj, Transilvania and Romania are available on the following links: http://www.clujonline.com/tourism/tourism.htm; http://www.clujbusiness.ro/ http://www.romaniatourism.com/

City center Map Cluj-Napoca



Cluj-Napoca – Accommodation

Hotels - 4 stars			
Grand Hotel Napoca ****	Str. Octavian Goga nr. 1	+40-733-410 170 reception@hotelnapoca.ro http://hotelnapoca.ro/	
City Plaza ****	Str. Sindicatelor 9 - 11	+40 264 450.101 contact@cityhotels.ro www.cityhotels.ro	
Agape ****	Str. Iuliu Maniu 6	+40 264 406.523 reception@hotelagape.ro www.hotelagape.ro	
Belvedere ****	Str. Calarasi 1-3	+40 264 432.071 belvedere.cluj@unita-turism.ro http://www.unita-turism.ro/ro/hotel/cluj- napoca/belvedere.html	
Golden Tulip ****	Observatorului Street 129, Cluj-Napoca 400352	+40 264 545 000 http://www.goldentulipcluj.ro/	
Hotels - 3 stars			
Fullton ***	Str. Sextil Puscariu 10	+40 264 597.898 office@fullton.ro www.fullton.ro	
Melody Central ***	Piata Unirii 29	+40 264 597.465 melody_hotel@yahoo.com www.hcm.ro	
Meteor ***	Bd. Eroilor 29	+40 264 591.060 reception@hotelmeteor.ro www.hotelmeteor.ro	

FROM MEMBERS

Universitat Politècnica de Catalunya · BarcelonaTech (UPC), ES



Information that could be of interest to the members of the Association:

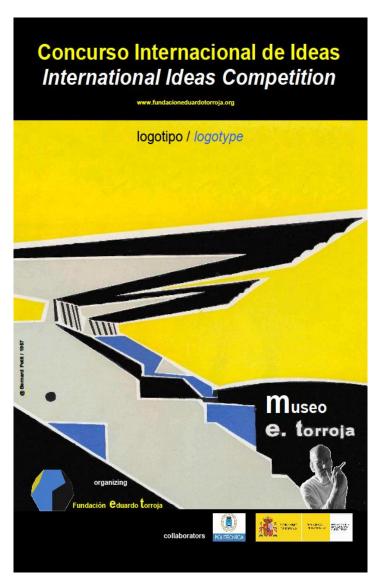
Foundation Eduardo Torroja is promoting the creation of Eduardo Torroja's museum.

Eduardo Torroja was a pioneer in the field of reinforced concrete structures, and he was designer of numerous civil works and buildings, structurally very daring and formally very attractive.

This foundation is also promoting an international contest for a logo design for students enrolled in schools in Civil Engineering, Architecture and Fine Arts worldwide. The first prize is 4,000 Euros.

Conditions in file enclosed

This foundation is asking for a contact scholar in the Schools / Faculties whose students are willing to participate. The work of this person is basically to publicize the competition and sent via email the student proposals to preserve the anonymity of authorship of the work and to assure that the student is effectively enrolled in his or her School. Any School willing to participate should inform the foundation of appointed contact professor by email the (contacto@fundacioneduardotorroja.org) so that his or her name is included in the web of collaborating professors and his or her work is recognized.



For more information please visit: www.fundacioneduardotorroja.org

Vilnius Gediminas Technical University (VGTU), LT



MESSAGE from Prof. Linas Juknevicius

We invite you to join 12th international conference "Modern Building Materials, Structures and Techniques" in Vilnius, Lithuania, on 26–27 of May, 2016. The conference will provide an opportunity for scientists, engineers, managers and professionals from around the world to share the latest achievements and to highlight the problems. Such a conference will be an excellent opportunity to meet colleagues, to exchange knowledge and experience, and to extend your list of contacts.

Starting form year 1991, faculty of Civil Engineering at Vilnius Gediminas Technical University (VGTU) together with national and international partners already has organized eleven highly successful international scientific conferences to discuss up-to-date problems in civil engineering. This conference is aimed at discussing of both industrial and academic research which has been recently carried out on analysis and design of modern structures, development of innovative building materials, maintenance of structures, building technology and management, etc.

The 11th international conference "Modern Building Materials, Structures and Techniques", held on 16-17 of May, 2013, was attended by nearly 400 scientists from more than 20 countries.

The peer-reviewed selected papers of the previous conferences were indexed by Thomson Reuters Conference Proceeding Citation Index (ISI Conference Proceedings database). The links to the full papers of recent conferences are available on the Conference internet site http://mbmst.vgtu.lt<http://mbmst.vgtu.lt/>; (Archive section).

Conference Topics (topics include but are not limited to)

- · Building materials and production technology
- Innovative analysis and design methods for bridges and building structures
- Behavior and design of concrete, masonry, glass, steel, timber and composite structures
- Stability of steel and composite structures
- Repair, renovation and strengthening of bridges and building structures
- Geotechnics
- Optimization in structural engineering
- Architectural engineering
- Construction technology and organization
- Decision making, decision support systems and management in construction
- Operational research
- Building information system
- Facility and real estate management
- Fire safety, human safety and ergonomics

Please visit conference internet site http://mbmst.vgtu.lt for more information.

Wrocław University of Technology, PL

Wrocław University of Technology is organizing the 8th International Conference on Arch Bridges (ARCH 2016), which will take place in Wrocław, Poland, on 5th - 7th October, 2016 with the general topic: "*Arch Bridges in Culture*".



Aim of the Conference

The main idea of the cyclic ARCH conference is the international meeting of scientists, experts, designers, contractors and all those who are interested in problems of arch bridge structures aimed at effective exchange of experiences and dissemination of specialist knowledge and information in this field. Considered topics are devoted to wide range of problems of arch structures, including not only technical issues, but also their presence in common live and in culture. Covered subjects are going to be related to various structures: from historical ones, through those designed and constructed contemporarily, up to the latest and future solutions and concepts.

More information on: http://www.arch16.pwr.edu.pl/#/general

Politehnica University of Timisoara, RO



The Department of Steel Structures and Structural Mechanics of Politehnica University of Timisoara organizing "THE INTERNATIONAL COLLOQUIUM ON STABILITY AND DUCTILITY OF STEEL STRUCTURES – SDSS 2016" on 30 May – 01 June 2016, Timisoara, Romania



The series of International Colloquia on Stability and Ductility of Steel Structures have been supported by the Structural Stability Research Council (SSRC) for quite a long time and are intended to summarize the progress in theoretical, numerical and experimental research in the field of stability and ductility of steel and composite steel-concrete structures. Special emphasis is always given to new concepts and procedures concerning the analysis

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and design of steel structures and to the background, development and application of rules and recommendations either appearing in recently published Codes or Specifications or about to be included in their upcoming versions. This International Colloquium series started in 1972, in Paris, and their subsequent editions traveled in several different cities and countries, the last four being held in: Timisoara, Romania (1999), Budapest, Hungary (2002), Lisbon, Portugal (2006) and Rio de Janeiro, Brazil (2010).

In October 1982, the Department of Steel Structures and Structural Mechanics of Politehnica University of Timisoara has organized one of the East-European Session of the SSRC International Colloquium on Stability of Steel Structures. Since 1992, two series of worldwide recognised scientific events have started from Timisoara, i.e.: CIMS conferences dedicated to Coupled Instability in Steel Structures and, in 1994, the series of STESSA conferences dedicated to Steel Structures in Seismic Areas. Moreover, in 1999 the Department organized the SDSS conference, within the SSRC series dedicated to the Stability and Ductility of Steel Structures. The 6th edition of International Conference on Thin-walled Structures - ICTWS' 2011, was also organized in Timisoara, Romania, in 5-7 September 2011.

The 2016 edition of SDSS is jointly organized by the Politehnica University of Timisoara, Department of Steel Structures and Structural Mechanics in co-operation with Romanian Academy, Timisoara Branch, with the support of European Convention of Constructional Steelwork (ECCS), through Structural Stability Technical Committee (TC8), and by SSRC.

The topics to be addressed during the Colloquium include, among others:

- Advanced structural analysis
- Bridges and footbridges
- Cold-formed members
- Connections
- · Cyclic and blast loading
- Damage repair and assessment of steel structures
- Design codes and standards
- Dynamic behavior and analysis
- Fatigue and fracture mechanics
- Fire engineering
- Frames
- High strength & stainless steel
- Innovative structural designs and applications
- Lightweight aluminium structures

- Lightweight fibre reinforced plastic composite structures
- Members' behavior: tension, compression, beams, beam-columns
- Off-shore structures
- Plate, shell and space structures
- Seismic-resistant structures
- Reliability and safety
- Robustness
- Ship structures
- Steel-concrete composite members and structures
- Thin-walled construction
- Trusses, towers and masts
- Tubular construction
- Vehicle structures

More information on: http://www.ct.upt.ro/sdss2016/index.htm

Astrakhan Institute of Civil Engineering, Russian Federation

Since January 14, 2016 the Astrakhan Institute of Civil Engineering (AICE) was renamed to **Astrakhan State University of Architecture and Construction.**

Astrakhan State University of Architecture and Construction in an innovative educational-scientific-industrial complex with great technical capabilities. One of the priority directions is development of international cooperation and foreign economic activity.

Astrakhan State University of Architecture and Construction informing about the conducting of the V^t International scientific forum of young scientist, students and schoolchildren on the basis the University and inviting the Members of EUCEET Association to be co-organizer of this event and take a distant part.

You can make your questions by e-mail international@aucu.ru

ECCE – European Council of Civil Engineers

63rd ECCE General Meeting, Madrid, 4-5 March, 2016

The 63rd ECCE General Meeting was held on 4th –5th March 2016 in Madrid, in Spain, hosted by the Colegio de Ingenieros de Caminos, Canales y Puertos (CICCP). The 63rd ECCE General Meeting was organized as part of the celebration of an International Civil Engineering Congress which hosted the Portuguese and Spanish Speaking Civil Engineering Professional Associations (CICPC) Congress concurrent with its annual General Assembly. Particularly, the 7th Council of Civil Engineering Professional Associations from Spanish and Portuguese Speaking Countries was held on 29th February –1st March. On 29th February the CICPC Meeting was held. On the same day the Homage Ceremony rendered by the Colegio de Ingenieros de Caminos, Canales y Puertos, the World Council of Civil Engineers and the Instituto de Ingeniería de España for the legacy of Professor José Medem Sanjuan and the presentation of WCCE's José Medem Sanjuan Civil Engineering Excellence Award were held at the premises of the Instituto de Ingenieríade España. On 2nd –3rd March the International Congress of Civil Engineering "Paths to bring the world together" was held. ECCE President was member of the Honour Committee of the Congress.

As a postscript to the First International Conference of Civil Engineering, the Declaration of Madrid was signed, with the aim of showing the commitment of the profession to sustainable development and global concern about

climate change. Therefore, the profession offers its technological capabilities and expertise to mitigate its effects.

The Madrid Declaration has been signed by the following institutions and their respective representatives:

- Juan A. Santamera Sanchez, president of the Colegio de Ingenieros de Caminos, Canales y Puertos (Spain);
- Vicent Esteban Chapapría, president of the Association of Civil Engineering, Channels and Ports (Spain);
- Alfonso Alberto González Fernández, president of WCCE-World Council of Civil Engineers;
- Włodzimierz Szymczak, President of ECCE -European Council of Civil Engineers;
- José Tadeu da Silva, president of UPADI -Pan American Union of Engineers;
- José Manuel Pereira Vieira, president of FEANI -European Federation of National Engineering Associations;
- Carlos Matias Ramos, bastonário ODE Portugal and president of the ICPC-CECPC -Council of Portuguese and Spanish Speaking Civil Engineering Professional Associations.

During the 63rd ECCE General Meeting the Institution of Civil Engineers (United Kingdom) after a period of one year that had suspended its activity and participation in ECCE, was unanimously accepted as ECCE Member again starting its membership from 1st January 2016. ECCE also accepted a new Full Member, Ukraine. The organization that represents Ukraine in ECCE is the Association "Information Technologies in Construction of Ukraine".

In the course of the 63rd ECCE General Meeting a number of important issues were discussed and critical decisions were taken.



Prof. Iacint Manoliu, Chairman of ECCE Standing Committee on Education & Training presenting the closing activity report of the Committee. At the board can be recognized Włodzimierz Szymczak, ECCE President and Maria Karanasiou, ECCE General Secretary

It was decided that ECCE will join the Engineering Association of Mediterranean Countries (EAMC) with the status of observer and the ECCE representative to the EAMC, Mr. Aris Chatzidakis, was appointed by the ECCE President. The ECCE Standing Committees were terminated and their closing activity reports were presented by their Chairmen. The New ECCE Strategy was the major topic of this General Meeting and time for detailed discussion was dedicated to it. The Guidelines for the "ECCE Position Papers and other activities" was finalized and a number of suggestions for ECCE Position Papers was presented at a conception stage. The New ECCE Strategy has been welcomed by the ECCE Members and positive thinking and brainstorming was achieved. The idea of opening of the ECCE Individual Membership with the status of Associate Membership was voted and finalized too. Finally, the Transatlantic Trade & Investment Partnership was also discussed and a presentation on the latest evolvements on the TTIP negotiations was delivered by Mr. Govind Nadkarni from the Texas Board of Professional Engineers.



Group photo with the participants at the 63rd ECCE General Meeting in Madrid on the stair and the balcony of the beautiful building of the Colegio de Ingenieros de Caminos, Canales y Puertos

CICCP, CICPC-CECPC, ECCE, WCCE Madrid Declaration

"WALKING THE WALK: CIVIL ENGINEERS COMMITTED TO UN'S OBJECTIVES OF SUSTAINABLE DEVELOPMENT AND CLIMATE ACTION"

The undersigned, on the occasion of the celebration in Madrid of the 5th Iberoamerican Congress of Civil Engineering, the 7th General Assembly of the Council of Civil Engineering Professional Associations of Portuguese and Spanish speaking countries CICPC-CECPC, the 63rd General Assembly of the European Council of Civil Engineers - ECCE and other events prepared by the World Council of Civil Engineers - WCCE proclaim that:

THE CHALLENGES OF OUR SOCIETY

Social and economic development relies upon the sustainable management of the world's natural resources. The depletion of natural resources and its negative effects on environmental degradation among others; desertification, drought, land degradation, water scarcity and biodiversity loss step up the challenges facing humankind.

In addition to these, our world faces the challenge of climate change and an unstoppable process of urbanization and population growth. Climate change is one of the biggest challenges of our time and its adverse effects undermine the potential of all countries to achieve sustainable development.

Such situation requires well targeted and sustained action in time, not subject to political cycles, with the joint commitment of governments, professionals and society as a whole.

OUR VISION, OUR ROLE

We, civil engineers set our collective role to overcome the challenges faced by our society in order to achieve full social and human development in harmony with the environment and on such grounds we consider that

- Civil Engineers, as members of the global community must base its practice in compliance with the ethical, human and social values of our time.
- Civil engineering should commit its expertise and practice to solve social and technical demands linked to the territory.
- Consequently civil engineering, as a professional activity, should be able to identify achievable goals consistent with the stakeholders' interests and problems through effective management and efficient use of the tools and resources available.
- The existence of an Engineering-Society Nexus implies the mutual commitment on which engineers take
 the responsibility to faithfully serve society, whereas society is to provide the means to honour such
 undertaking.

Civil Engineers share the global concern for sustainable development and climate change. Therefore, we offer our technological capabilities and expertise to achieve the 17 Sustainable Development Goals (ODS) and his 169 goals as reflected in Agenda 2030 for the sustainable development of the UN General Assembly approved by September 2015. We also align ourselves with the efforts to enforce the agreements of the Conference of the Parties, COP-21 in Paris, December 2015, recognizing the need for a progressive and effective response to the urgent threat of climate change, on the basis of the best available science.

The objectives to be accomplished, in particular the satisfaction of population's basic needs and the development processes conducive to an overall improvement of living conditions, find Civil Engineering an essential resource to make these objectives come true.

OUR RESPONSIBILITY

The responsibility of Civil Engineers to society is very high. Under society's mandate to create a sustainable

world and improve overall quality of life, **civil engineers** concur with American Society of Civil Engineers' Vision 2015, according to which we **serve as competent**, **collaborative and ethical way experts**:

- Planners, designers, builders and managers of economic and social engine of society, which is called the built environment;
- Custodians of the natural environment and the proper and efficient use of its resources;
- Innovators and integrators of ideas and technologies in the public, private and academic sectors;
- Risk Managers of any uncertainties caused by natural events, accidents and other threats; and;
- Leader in debates and decisions that shape both environmental and infrastructure public policies.

Civil engineers have clearly defined responsibilities in planning, design, construction, operation and maintenance of physical infrastructure. This infrastructure requires the use of natural resources and include all types of buildings, power plants and distribution lines, industrial facilities, transportation networks, water resource services and urban water systems. They are expected to remain in service, sustainable and safe for their intended life cycle, typically from 50 to over 100 years. Such are exposed and are potentially vulnerable to extreme weather effects such as droughts, floods, heat waves, strong winds, storms, fires, and accumulation of ice and snow. Engineering Codes and practice intend to provide acceptably low risk of failures in serviceability, durability and safety throughout the service life of such infrastructure and services.

Civil Engineers must now apply their knowledge to also find durable ways of providing social welfare consistent with respect to the natural environment. Designing sustainable solutions to address society's infrastructure needs require proper understanding of the natural processes, in order to assess any possible environmental impacts before its implementation and , if needed, propose the mitigation or protective measures needed. Proper internalization of environmental costs is to be included to any economic analysis in addition to any direct or indirect costs, as such environmental costs are generally supported overall by the community without being accounted on other stakeholders.

Therefore, we, Civil Engineers, need to incorporate into our professional body of knowledge the disciplines which enable the inclusion of sustainability criteria for climate action and environment to be included in any multicriteria alternative assessment along with other more traditionally considered criteria (economic, geomorphological, geotechnical, hydraulic, structural...).

Territory in its natural state, in addition to presenting natural risk factors (flood, fire, lightning, volcanic eruptions, storms in the sea and coasts, earthquakes, tsunamis, etc.) has a limited hosting capability, with human development requiring action on the territory, of which a large share falls under the commission of Civil Engineers to study and implement.

A large share of United Nation's 17 Strategic Development Goals -SDGs are deeply linked with the practice of Civil Engineering:

- Goal 6 "Ensuring the availability and sustainable management of water and sanitation for all"
- Goal 7 "Ensuring access to affordable, reliable, sustainable and modern energy for all"
- Goal 9 "Building resilient infrastructure, promoting inclusive and sustainable industrialization and foster innovation"
- Goal 11 "Making cities and human settlements inclusive, safe, resilient and sustainable"
- Goal 13 "Take urgent measures to combat climate change and its impacts"
- Goal 14 "Conserve and sustainably use oceans, seas and marine resources for sustainable development"
- Goal 15 "Protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt the loss of biodiversity"

It should also be noted that ensuring adequate water quality is a goal which is horizontal to other goals objectives, such as Goal 3 "Ensure healthy lives and promote the well-being for all at all ages ".

We also align ourselves with the Paris Agreements presented at the Conference of the Parties, COP-21 December 2015, recognizing the need for a progressive and effective response to the urgent threat of climate change, on the basis of the best available science.

COP-21 Agreements aim to revert global average temperature to no more than 2° C over pre-industrial levels and drive efforts to reduce such limit to just 1.5° over pre-industrial levels, recognizing that this would therefore substantially reduce the risks and effects of climate change and improve our adaptability to climate changes'

impacts and promote low Green House Gases - GHG emissions driven development.

The implementation of the Paris Agreement, requires the workings a Subsidiary Scientific and Technological Advisory Body to which several important tasks should be entrusted such as the development of specific working programs and action plans regarding several aspects of the Paris agreement. Engineering contribution to such body is to be necessarily and should be channelled through WFEO and its member organizations.

THE ROLE OF CIVIL ENGINEERING PROFESSIONAL ASSOCIATIONS

In a globalized world, in which the civil engineering profession contributes decisively to improve the quality of life of mankind, it is necessary to establish sound partnerships between those who share common interests, for the benefit of our professional Engineers and society as a whole .

Due to this, we advocate the need for the existence and irreplaceable role of Civil Engineering Professional Associations to

- a) promote adequate broad-based training of at least 5 to be expanded throughout the professional life through continuous professional development.
- b) regulate the civil engineering practice for the sake of society.
- c) provide continuing professional education to its members.
- d) enforce its ethical and deontological codes of practice ensuring: honouring public interest; security and protection against impostors; efficient use of natural resources; environmental protection; vulnerability reduction to natural disasters and climate change (in their dual role of mitigation and adaptation)
- e) contribute to the prevention of corruption (zero tolerance)
- f) cluster the different professional groups involved in civil engineering

We want to become present in society, interacting with all stakeholders to understand their needs, helping them in providing the best response and vindicating our role and function.

We know it is necessary to have some international platforms to position us well in a global world, to facilitate solidarity knowledge and experience transfer and professional mobility of Civil Engineers, in a context in which albeit local variations, there is a growing need for civil engineers worldwide.

OUR COMMITMENT

The signatories representing a large share of the more than 8.000.000 Civil Engineers in the world, consider civil engineering as a profession of public service and because of this we commit ourselves to:

- 1. Assert the ethical commitment towards society of the Civil Engineering professionals over any other influence that may risk independent judgement and professional dignity.
- 2. **Foster links between the civil engineering community and society**, promoting greater participation and commitment to sustainable development and climate action.
- 3. Support the COP-21 Paris Agreement on climate and of many of United Nations Strategic Development Goals and its 169 associated targets through the implementation of innovative technologies and engineering practices, looking forward to the implementation of cost-effective technologies, providing solutions based on sound engineering criteria and robust climate projections, in order to mitigate the rate and magnitude of climate change and its inevitable impact on society and quality of life.
- 4. Follow the codes of practice adopted by the World Federation of Engineering Organizations (Code Of practice for sustainable development and environmental protection "Think global, act local" of 2013, "Code Of Good Practice: Principles of Climate Change Adaptation for Engineers", 2015) and developing them specific to each local environment.

- 5. Enrich Civil Engineering body of knowledge by broadening its education in disciplines natural sciences and economic analysis, risk management and climate change impact assessment, encouraging continuous professional development and knowledge updating in these fields.
- 6. Convey to society the leading role of the Engineer in preventing natural hazards and sustainable land management, communicating effectively the needs in these areas.
- 7. **Bolster R&D + i** projects regarding sustainability and climate action, in the relationship between actions on the territory with the use and conservation of natural resources and environmental protection, risk management and corrective and compensatory actions monitoring for the creation of methodologies to be enrich future performance analysis through experimental data.
- 8. Celebrate congresses, workshops, courses, conferences and meetings in which the principles and commitments contained in this Declaration are fostered and its application in the different areas of activity of Civil Engineers.
- 9. Contribute through our practice in achieving the following objectives
 - a. The reduction of Greenhouse Gases GHG emissions among diverse sectors through regional and local action.
 - b. **Improved climate resilience resistance of various types of infrastructure** to withstand climate impacts, and increase their reliability and service lifecycle during extreme weather events.
 - c. The achievement of the engineering challenges for the accomplishment of sustainable development, directly linked to United Nations SDGs.
- 10. **Collaborate with our scientific and technological partners** to achieve the desired results through methods and techniques such as systems thinking; the development of international standards and codes of practice; conducting climate risk assessment as part of normal practice; and the adequate assessment of social, economic and environmental impacts.
- 11. Cooperate actively with the respective national governments in order to:
 - a. Design and develop, jointly with the education authorities, education programs and training curricula to provide sound civil engineers to assume their significant responsibility towards society on topics such as sustainable development and climate action.
 - b. Develop and implement infrastructure investment plans to create the most feasible sustainable development through continuous and steady pluriannual planning, independent from political cycles.

Madrid, March 2016

FROM PARTNERS

The 44th SEFI Annual Conference "Engineering Education on Top of the World: Industry University Cooperation"

12-15 September 2016, in Tampere, Finland

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

In 2015 the conference was held in Orléans on the theme of "Diversity in Engineering Education: An Opportunity to Face new Trends in Engineering), and in 2017, it will be organised by ISEP (Porto) in the Azores Islands (19-21 September) on "Education Excellence for Sustainability".



Subthemes include but are not limited to:

- University-Business cooperation
- Engineering Skills
- Sustainability and Engineering Education
- Quality Assurance and Accreditation
- Continuing Engineering Education and Lifelong Learning
- Open and Online Engineering Education
- Ethics in Engineering Education

- Curriculum Development
- Attractiveness of Engineering Education
- Physics and Engineering Education
- Engineering Education Research
- Gender and Diversity
- "I feel brilliant"

Deadlines

- 13 March 2016: Submission of extended abstracts
- 24 April 2016: Notification of acceptance
- 15 May 2016: Submission of full papers
- 10 June 2016: Notification of final acceptance
- 30 June 2016: End of early bird registration

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

8th European Convention of Engineering Deans— ECED 2016

14-15 April 2016, University College London, London, UK

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 this 8th convention is "Schools of Engineering at the Forefront – Meeting Challenges of the Engineering Profession".

On both the operational and strategic levels there are demands on deans to secure and develop university functions and activities. The core function of a university is to deliver educated and skilled graduates to society. Universities also conduct research and graduate PhDs with engineering degrees.

This year's convention will embrace these challenges with a program that offers plentiful opportunities for debate and discussions. At its conclusion, ECED 2016 will aim to agree an agenda – the London Agenda – which lists the most important challenges and opportunities for schools of engineering today. We hope this will help and inspire engineering deans in carrying out their roles as leaders in both education and research whilst contributing to the advancement of engineering institutions in general.

The convention will be 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?

The program will include time for interactive discussions and exchanges with the speakers and among the participants, through plenary discussions, flipped convention activities and break-out sessions.

More information on: http://www.engineering.ucl.ac.uk/eced/

ASIIN Conference

3-4 May 2016, Hotel Steigenberger am Kanzleramt in Berlin, Germany



ASIIN is inviting the international Higher Education and the Quality Assurance Community to its annual HE/QA conference.

The title of the conference is "Quality Assurance in Higher Education: the unsolved mystery of its untapped potential – how can we jointly tackle the five remaining grand challenges?" and gathers a unique and high profile crowd of speakers representing the European and international HE establishment, Quality Assurance and Professional bodies all across the world, employer associations, unions and student bodies, recognition authorities, members of politics and the media etc.

Participants will analyze the unique opportunities that a structured approach to QA can have for educational, political, socio-economic modernization processes as well as recognition and mobility issues which for a (too) long time have not been put on the table. Five "grand challenges" have accordingly been identified and will structure the program. In the last part of the conference participants will look into evolving instruments of QA, including the topics of achieved learning outcomes after AHELO, accreditation and its impact on the ranking discussion, new benchmarking initiatives and the like. An interesting social program in the exciting capital of Germany will be another highlight.

The first 80 persons to register for the conference can as a bonus choose to participate cost-free in one of four European pre-workshops such as the Third Global Meeting of Specialized and Professional Quality Assurance, two workshop of the European Informatics or Engineering Network or the International ASIIN workshop which all take place during May 2nd and will be followed by a guided tour of Berlin.

More information on: http://www.asiin-ev.de/pages/en/asiin-e.-v/news-and-events/events/asiin-international-conference-2016.php?lang=DE

26th EURASHE Annual Conference



21-22 April 2016, Belgrade, Serbia

EURASHE will organise its 26th Annual Conference titled "Centres of cooperation striving for excellence: professional higher education and the world of work" in Belgrade (Serbia) on 21-22 April 2016. It is co-organised by EURASHE, the Conference of Academies of Applied Studies Serbia (CAASS) and with the support of the Ministry of Education, Science and Technological Development (MoESTD) of Serbia.

EURASHE is the European Association of Institutions in Higher Education that offer professionally orientated programmes and are engaged in applied and profession-related research within the Bologna cycles. EURASHE represents universities of applied sciences and university colleges; other members of EURASHE are national and sectorial associations of higher education institutions, and other



individual institutions, such as universities. EURASHE members operate within and across different national systems whether these are unitary or binary, professional and/or academic. EURASHE was founded in Patras (Greece) in 1990. It has the status of an international non-profit association according to Belgian law (aisbl) and its Secretariat is located in Brussels (Belgium).

EURASHE's mission is to represent the views of professionally-orientated institutions and programmes in the higher education systems in countries of the European Higher Education Area (EHEA), either in binary higher education systems or in unitary 'university' systems. Its aim is to promote the interests of professional higher education in the EHEA and to contribute to the progressive development of the European Higher Education and Research Area (EHERA). In addition to offering professionally-orientated programmes, EURASHE members are specifically engaged in applied and profession-related research, and its technological applications. EURASHE believes partnership and cooperation with other regions of the world are



important. It has thus established relationships with countries outside the EHEA through associate membership and partnership agreements with other regions, such as Canada, the United States of America, the Middle East, Central Asia and Asia. EURASHE focuses primarily on policy development and on higher education projects and research with emphasis on its professionally-orientated segments. Furthermore, it organises annual conferences, thematic seminars and tailor-made events for its members.

More information on: http://www.eurashe.eu/events/annual-conferences/26-belgrade-2016/

International Tuning Academy



Press Release

Launch of the feasibility study "Measuring and Comparing Achievements of Learning Outcomes in Higher Education in Europe" (CALOHEE)

Do students enrolled in higher education around Europe develop the competences they need? Are study programmes delivering their promises?

Can we learn to compare student's achievements in different countries in a meaningful way?

A new EU funded project, called CALOHEE, will help to find the answers to these questions by developing the infrastructure that will eventually make it possible to test bachelor and master students' performance Europe-wide across a range of fields in a way that satisfies the needs of the various stakeholders in the European higher education community.

The project started in the autumn of 2015 and first results are expected in spring 2017. The project will initially cover five subject areas, representing five significant academic domains: Engineering (Civil Engineering), Health Care (Nursing), Humanities (History), Natural Sciences (Physics) and Social Sciences (Education). After this initial stage, the outcomes can be used to examine many other degree programmes as well.

The assessment frameworks (or test blueprints) to be developed in the five fields will use the same methodology, but they will be tailored to the characteristics of each domain or subject area, taking into account the diversity of missions, orientations and profiles of universities in Europe and their various degree programmes.

These frameworks will facilitate the development of the tests which will allow university management, academics and students to understand whether students are achieving internationally defined levels of competences which prepare them for their role in society in terms of personal development, citizenship and employability, while meeting agreed academic standards. The goal of the first phase of the project is to see if it is possible to design tests that will provide evidenced-based tools to measure success and support universities in their efforts at continuous improvement.

CALOHEE will use a bottom-up approach in order to give the academic community a central position in the further implementation of the process of modernisation of higher education in Europe. It builds on the work already carried out in the framework of the European Higher Education Area (Bologna Process) and the worldwide activities associated with TUNING.

The consortium in charge of the project is led by the International TUNING Academy with technical support and consultation provided by non-profit Educational Testing Service (ETS) (based in Princeton. New Jersey, USA). Participants involved, include prestigious universities, university associations and other organisations active at European, national and grassroots level, such as the student unions. The project co-financed by the European Commission in the framework of the Erasmus+ programme, Key Action 3: Forward Looking Programmes.

Referring to CCALOHEE, Commissioner Tibor Navracsics, responsible for Education, Culture, Youth and Sport, said: "Boosting economic growth and job creation in Europe is the top political priority of this Commission. We will only succeed in this if we help ensure that our education institutions equip people with the skills needed in a dynamic, globalised economy. That is why I am very much looking forward to the results of this study funded under our Erasmus+ programme. We need more reliable data on how higher education institutions across Europe perform in order to raise standards' and I particularly welcome the focus on competences related to employability".

Tuning Academy's first online course for Staff Development

Here is the message received from Sara Goitia, from the Deusto International Tuning Academy

We are delighted to announce the Tuning Academy's first online course for Staff Development:

Course design for outcomes based learning in higher education

This course provides both the theoretical framework underpinning outcomes based learning in higher education and practical guidance.

To find out more, follow the link: http://www.tuningacademy.org/tuning-training

To let us know that you would like to join the course, please fill this pre-inscription questionnaire: the pre-inscription questionnaire:

https://docs.google.com/forms/d/12l6_u8dG4u_I3RIA3fioNT3bk0vWmnf9GaCzxPi3HY/viewform?usp=send_form no later than **11 April 2016**.

Call launched by the Deusto headquarters of the Tuning Academy: Deusto International Tuning Academy (DITA)

Here is the message received from Maria Ortiz-Coronado Lopez, from the Deusto International Tuning Academy:

The International Tuning Academy has been established with the aim of making the results of all Tuning and Tuning-related projects <http://www.tuningacademy.org/tuning-projects; accessible to the academic community and stimulating research on Tuning-related topics.

The research projects we are looking for will focus on one of these topics:

- 1) "analysing and evaluating the impact produced by the Tuning projects" at the level of particular higher education programmes/institutions/countries/regions;
- 2) "approaches to learning, teaching and assessment of generic competences" concrete examples of what is done within higher education degrees accompanied by enhancement proposals based on both theoretical and empirical data;
- 3) "staff development initiatives that facilitate implementation of competence-based approach" critical evaluation of their effectiveness and how well they meet the needs;
- 4) curriculum reform and "incorporation of Tuning approach in institutional and national policies".

Further details and application procedure: http://tuningacademy.org/short-term-visits-call/

iNEER (International Network for Engineering Education and Research)



International Conference on Engineering Education and Research, 2016 (ICEER 2016)

21 - 24 November 2016, Sydney, Australia

The International Conference on Engineering Education and Research, 2016 (ICEER 2016) is jointly organised by the School of Computing, Engineering and Mathematics at Western Sydney University, Sydney, Australia and the International Network for Engineering Education and Research (iNEER).

iNEER is a global professional organisation formed by the world engineering community to promote mutual progress in teaching and learning through international cooperation.

iNEER is a non-profit organisation based in Potomac, Maryland, USA. The widening network of educators and researchers associated with iNEER covers 98 countries and is linked through the iNEER website, archival publications, electronic communication system and various conferences, workshops and retreats worldwide.

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ICEER 2016 will be hosted at the Parramatta Campus which is situated on the Parramatta River, 20 km from the Sydney CBD and is well connected by rail, road and ferry networks. Sydney (opens in new window), with its population of 5 million, is the largest city in Australia. The traditional landmarks of the Sydney Harbour; including the Sydney Opera House and Harbour Bridge are within easy reach of the conference venue as is the Blue Mountains (opens in new window) World Heritage National Park.

The development in engineering and technology is advancing rapidly, which is making currency and delivery of existing curricula in engineering education challenging. The recent trends and advancements in engineering education will be discussed by many leading educators from all around the world who will gather at iCEER 2016. The main objectives of this conference are to provide an opportunity of professional interaction amongst the educators, researchers, academics and students, and to showcase the latest developments and trends in engineering education.

Authors are invited to submit papers on a wide range of topics on current best practices in education of future Engineers as well as practices which should be adopted in the wake of recent research and growing demands due to the fast paced advances in technology applications.

Suggested topics, Call for Papers are available on:

http://www.westernsydney.edu.au/iceer2016/home/call for papers

EUA (European University Association)



Third Arab-Euro Conference on Higher Education 25-27 May 2016, University of Barcelona, Spain

EUA and the Association of Arab Universities, together with the University of Barcelona, are pleased to publish a Call for Presentations from EUA and AAU member institutions for three Sessions taking place at the third Arab-Euro Conference on Higher Education (AECHE 3): Opportunities and Challenges for Arab and European universities in fulfilling their societal mission.







University leadership and senior management (rectors, vice-rectors, directors of learning and teaching or academic affairs) are invited to present the experience of their institutions during the conference sessions indicated below.

The aim of the Conference is to open a sustainable process of dialogue, mutual understanding, to exchange knowledge and to increase cooperation between Arab and European Universities.

This year's AECHE conference focuses on the challenging topic of the contribution that universities can make to interregional dialogue, international collaboration and conflict solving, in light of the escalation in the number of people fleeing their homes.

Hence this 3rd AECHE conference represents an unique opportunity for EUA and its members to discuss directly with our Arab partners the burning issues arising from this crisis that are likely to have a substantial impact on the way universities work in local, national and international contexts.

More information on: http://www.ub.edu/aeche/aeche3

9th EUA-CDE Annual Meeting

Doctoral Education: a dilemma of quality and quantity?

16 - 17 June 2016, Rovira i Virgili University, Tarragona, Spain



The Annual Meeting of EUA-CDE is the largest and most comprehensive event dedicated to European doctoral education.

It is an opportunity for all stakeholders in doctoral education from Europe and beyond to meet and exchange ideas and practices as well as stay informed on the latest trends.

What is good doctoral education and what is it good for? These questions are being asked by all stakeholders, in the European institutions, national governments, by university leadership, and in individual research groups.

The number of doctoral candidates and graduations rose steeply in the past decade, partly due to national policies, but also due to an overall high level of investment in research and development. The higher numbers of doctoral candidates have been a challenge in itself for universities. Moreover, societies are becoming increasingly complex; culturally, economically, and socially. There is still a need for persons trained through research to produce new knowledge and this need makes doctoral education more than relevant today. But is the quality of provision adequate, and are the graduates well prepared for the diverse careers, opportunities, and challenges that await them?

The conference will look the how universities are ensuring the quality and relevance of doctoral education today, and what it will take to continue ensuring it in the future.

More information: http://www.eua.be/activities-services/events/event/2016/06/16/default-calendar/9th-eua-cde-annual-meeting

FROM THE EUROPEAN UNION

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

Erasmus+: Providing more and better opportunities to support Europe's future generations



Brussels, 26 January 2016

In its first year, Erasmus+, the bigger and more fit-for-purpose programme for education, training, youth and sport, is already living up to expectations.

With a budget of over €2 billion in its initial year, Erasmus+ has already offered more than one million people the opportunity to take part in 18.000 funded projects. More flexible opportunities for collaboration across sectors are also helping Europe's education, training, youth and sport systems to try out innovative practices and contribute to reform and modernisation.

Tibor Navracsics, EU Commissioner for Education, Culture, Youth and Sport, said: "During the first year Erasmus+ has proved a true success. The impressive number of participants is proof that the programme is making a difference in improving young people's employment prospects, helping them acquire new skills and experiences and supporting the modernisation of Europe's education, training and youth systems. We will continue to build on this popularity to reach out to more people with different interests, profiles and social backgrounds."

The figures published today reveal that in 2014, Erasmus+ already benefited **more people** through a **wider range of opportunities**. In its first year, the programme supported a record 650,000 mobility grants for students, trainees, teachers, volunteers and other young people and paved the way for the first student loans for a full Master degree abroad. For the first time, the programme also funded policy support projects involving public authorities and international organisations and provided funding for projects in the field of sport.

A **strengthened Erasmus+** is also delivering **stronger support to its beneficiaries**. This can be seen in improved recognition of studies abroad once students return to their home countries. Moreover, teacher and staff mobility is being integrated better into professional development strategies backed by their home institutions.

The new Erasmus+ is also more open, with a strong focus placed on promoting social inclusion, active citizenship and tolerance. To achieve this, more financial support than ever has been made available to participants with fewer financial means or those with special needs. A further €13 million has also been committed for 2016 to

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fund projects tackling issues like social inclusion of minorities and migrants and other disadvantaged social groups.

The programme has also strengthened initiatives to **improve young people's employment prospects** and facilitate their transition from education to work. This has seen an increase in traineeship and apprenticeship opportunities in the programme.

Spain, Germany and France still top destinations for students.

In a separate report, the Commission is today also publishing the statistics on student and staff mobility for the final academic year (2013-2014) of the former Erasmus programme for higher education, which formed part of the umbrella Lifelong Learning Programme. The data reveals that a record number of students (272,000) and staff (57,000) took part compared to any previous year. Spain, Germany and France remained the three most popular destinations for Erasmus students to study or train abroad in 2013-2014.

In addition, a new Erasmus Regional Impact Study confirms that while undertaking an Erasmus student exchange significantly improves young people's chances of securing high quality, managerial jobs, this is especially true for students coming from Southern and Eastern Europe.

More information on: http://europa.eu

Updated Erasmus Charter holders list

The Erasmus Charter holders list was <u>updated</u> on the 2nd of March 2016.

If you work for a higher education institution (HEI) located in a Programme country and you wish to apply for actions under Erasmus +, you need to apply first for the Erasmus Charter.

The Erasmus Charter contains the fundamental principles to be respected by HEIs when participating in Erasmus+.

The Erasmus Charter for Higher Education (ECHE) provides the general quality framework for European and international cooperation activities a higher education institution (HEI) may carry out within Erasmus+.

The award of an Erasmus Charter for Higher Education is a pre-requisite for all HEIs located in a Programme country and willing to participate in the learning mobility of individuals and/or cooperation for innovation and good practices under Erasmus +.

More information on: https://eacea.ec.europa.eu/erasmus-plus/actions/erasmus-charter_en



NEWS FROM THE WORLD

The annual World Tunnel Congress (WTC) 2016

22-28 April 2016

San Francisco, California



The annual World Tunnel Congress (WTC) will held in San Francisco, California 22-28 April 2016 and tunnelers representing owners, contractors, engineers and suppliers will be exhibiting and attending this event.

The event will include up to 600 technical presentations, as many as 250 exhibitors and between 2500 and 3000 attendees.

Learn from tunneling professions from Africa, Asia, Australia, Europe, South America with professionals from North America at the 2016 World Tunnel Congress (WTC 2016) in San Francisco, CA. Tunneling is happening worldwide and for years we have learned from past projects, often those happening in our own country. Tunneling has a similar purpose worldwide but the practices, equipment and methods used can vary differently depending on the individual project. WTC 2016 will bring together professionals worldwide and encourage the exchange of experiences and ideas from past, current and future tunneling projects.

More information on: http://www.wtc2016.us/

IABMAS2016

8th International Conference on Bridge Maintenance, Safety and Management

26 - 30 June 2016

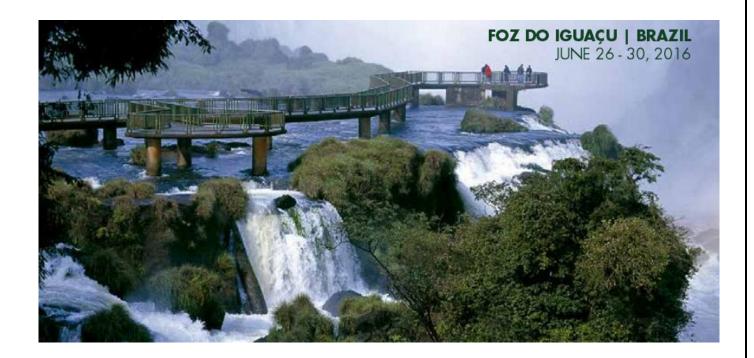
Foz do Iguaçu, Brazil

The **Brazilian IABMAS Group** is thrilled and honored for hosting the 8th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2016) in Brazil.



The conference will be held in Foz do Iguaçu, PR, from June 26-30, 2016. The conference is organized on behalf of the International Association for Bridge Maintenance and Safety (IABMAS), under the auspices of the University of São Paulo, SP, Brazil.

As an international association with many national chapters, IABMAS has developed into a high level forum for discussion of academic, scientific and technical aspects of bridge maintenance, safety, and management.



The international IABMAS 2016 conference aims at providing an appropriate atmosphere for the exchange of experiences related to bridge maintenance, safety, and management. IABMAS 2016 will bring together academics, researchers, and practicing professionals, bridging the gap between theory and practice in bridge maintenance, safety, and management. IABMAS 2016 will provide an informal atmosphere and sufficient free time for scientific connections, interactions with past and future collaborators, and so on.

More information on: http://www.iabmas2016.org/

GeoMEast 2017 International Conference "Sustainable Civil Infrastructures: Innovative Infrastructure Geotechnology"

15 - 19 July 2017 Sharm Elsheikh, Egypt

The GeoMEast SERIES is managed by SSIGE and supported by a number of leading international professional organizations.

Recent rapid construction in Egypt and the Middle East has provided great opportunities for bridge, pavement, geotechnical, geological, tunnel and all engineers to use their knowledge and talents to solve many challenging problems involving highways, bridge structures, pavements, materials, ground improvements, slopes, excavations, dams, canals and tunnels with innovative solutions and cutting-edge technologies.



GeoMEast 2017 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 21st century.

Conference topics cover a broad array of contemporary issues for professionals involved in bridge, pavement, Geomechanics, geo-environmental, geotechnical, geosciences, geophysics, tunnel, water structures, 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.

GeoMEast 2017 will provide some awards; such as: best paper awards, best presenter awards, best student presenter awards, industrial project, and others.

The program will include Podium Presentations, Poster Presentations, Keynote Lectures, Workshops, Courses, Awards, Technical Meetings, and Technical and Social Tours.

More information on: http://www.geomeast2017.org/

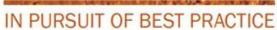
5th International Conference on Geotechnical and Geophysical Site Characterisation

5-9 September 2016

Jupiter Gold Coast, Queensland, Australia



5TH INTERNATIONAL CONFERENCE ON GEOTECHNICAL AND GEOPHYSICAL SITE CHARACTERISATION





The International Society for Soil Mechanics, Geotechnical Engineering Technical Committee TC102, and the Australian Geomechanics Society invite participation in ISC'5, the 5th International Conference on Geotechnical and Geophysical Site Characterisation.

ISC'5 brings together the world's experts who, with you and others, are working daily to improve the quality and reduce the difficulties involved. This conference is the forum for sharing this knowledge and experience. Hear and contribute to the latest ideas and technologies at the conference. See and touch and learn of the latest hardware and software and services at the trade exhibition. Take home new knowledge and give some to others to take also home.

The conference will be attended by academics, consultants, researchers, industry icons, students, contractors, suppliers, and many others – experts, beginners, learners, teachers and users.

More information on: http://www.isc5.com.au/

CALENDAR

Date Event Place

5-7.04. 2016 EE & RES 2016 — South-East European Congress & Exhibition on Energy Efficiency and Renewable Energy

Sofia, BULGARIA



http://viaexpo.com/en/pages/ee-re-exhibition

14-15. 04.2016 8th European Convention of Engineering Deans— ECED 2016

London, UK



http://www.engineering.ucl.ac.uk/eced/

17-20.05.2016 15th IACEE World Conference on Continuing Engineering Education

Porto, PORTUGAL



http://www.iacee.org/iacee_world_conference_2016.php

Date Event Place

2-4.06.2016 Third International Scientific Meeting on Civil Engineering and Environmental Engineering

Tuzla, BOSNIA and HERZEGOVINA





THIRD INTERNATIONAL SCIENTIFIC MEETING IN THE FIELD OF CIVIL AND ENVIRONMENTAL ENGINEERING

12-16.09.2016 SEFI 2016 Annual conference

Tampere, FINLAND

http://www.tut.fi/en/sefi-annual-conference-2016/welcome-to-tampere/index.htm



29.09.2016 Workshop EUCEET Association

"THE STRUCTURES FOR THE FUTURE"



Cluj-Napoca, ROMANIA

5-6.10.2016 5th international conference Advanced Construction

Kuala Lumpur, MALAYSIA



https://icabe2016.wordpress.com/

Seul,

KOREA

Date Event Place

06-10.11.2016 The World Engineering Education Forum & The Global Engineering Deans Council, 2016 Seoul



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