

NEWSLETTER 4/2020

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FROM THE EUCEET ASSOCIATION

The 14th General Assembly of the EUCEET Association

The 14th General Assembly of the EUCEET Association will take place on May 14th 2021, from 17:00 - 18:00 P.M kindly hosted by the Aristotle University of Thessaloniki, Greece.

Aristotle University of Thessaloniki (AUTh) was founded in 1925, thus becoming the second university in Greece. AUTh is the largest University in Greece covering all disciplines. Most of its academic personnel have been trained in reputable Universities in Europe, the United States and as far afield as Australia and Japan.



There are 41 Faculties and Schools in the Aristotle University of Thessaloniki offering all kinds of studies. Every Faculty/School offers an undergraduate degree, postgraduate degrees (2nd cycle and PhD).

The Faculty of Engineering founded in 1955 has contributed significantly to research and teaching in Greece, has recommended solutions in order to address educational problems and has promoted education reform and democratization. Moreover, it has promoted cultural issues in Greece and the development of the country by organizing and holding lots of cultural events, as well as by implementing a considerable number of development projects and undertaking construction works in areas of northern Greece.

School of Civil Engineering was the first School of the Faculty of Engineering of the Aristotle University of Thessaloniki. In 1982, it was granted its autonomous status, offering degrees in civil engineering.



Its main objective is to promote civil engineering and its importance through developmental research programmes, and contribute to the multidimensional growth of Greece as a whole. The School ensures that students are given training on a wide range of topics in civil engineering, qualifying them for employment in related fields of specialization in the public and private sector

2021 First joint Conference of EUCEET Association and AECEF



European Civil Engineering Education and Training Association



Association of European Civil Engineering Faculties

First Joint Conference of EUCEET and AECEF

"The role of education for Civil Engineers in the implementation of the SDGs"

May 14th, 2021

Aristotle University of Thessaloniki, Greece

Under the auspices of the Department of Civil Engineering of the Aristotle University of Thessaloniki and the United Nations' Sustainable Development Solutions Network SDSN Black Sea

Venue:

Aristotle University Research Dissemination Center (https://kedea.rc.auth.gr)

Address:

September 3rd, Aristotle University Campus, 546 36 Thessaloniki, Greece



Important dates:

•	January	/ 31 st , 2021	Deadline for <i>i</i>	Abstract S	Submission
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• February 5th, 2021 Notification acceptance of Abstracts & call for Papers

• February 28th, 2021 Deadline for Paper Submission

• March 31st, 2021 Notification acceptance of papers

• April 15th, 2021 End of Early Bird registration

• May 14th, 2021 Conference

The theme of the conference:

"The role of education for Civil Engineers in the implementation of the SDGs"

The topics of the conference are related, but not limited, to the following SDGs:

- SDG4 Quality education
- SDG6 Clean water and sanitation
- SDG7 Affordable and clean energy
- SDG8 Decent work and economic growth
- SDG9 Industry, innovation and infrastructure
- SDG11 Sustainable cities and communities
- SDG13 Climate action
- SDG14 Life below water
- SDG15 Life on land

Preliminary program

Time	Event
09:00	Registration
09:30	Opening by AUTh, AECEF and EUCEET
09:45	Presentation by AECEF speaker
10:15	Keynote speech by Prof. Pericles Latinopoulos
10:45	Coffee break
11:15	Papers presentations (parallel sessions)
12:30	Lunch break
14:30	Presentation by EUCEET speaker
15:00	Keynote speech by Prof. Jeffrey Sachs (virtual presentation from USA)
15:30	Papers presentations (parallel sessions)
16:30	Closing and conclusions by AECEF, EUCEET, AUT
17:00 - 18:00	General Assembly of AECEF and General Assembly of EUCEET
20:00	Conference Gala Dinner

Keynote Speakers



Jeffrey D. Sachs
Professor and Director of the Center for
Sustainable Development at
Columbia University



Pericles Latinopoulos
Professor Emeritus
at the Aristotle University of Thessaloniki
(AUTh), Greece

Prof. Diego Lo Presti informed that Prof. Alfredo Squarzoni (University of Genoa) has been selected for the EUCEET lecture at Thessaloniki and will give the lecture together with Prof. Alfredo Soeiro (University of Porto).

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Registration fees:	Early registration (€)	Late registration (€)
EUCEET and AECEF members	250	300
Other participants	300	350
Virtual participants	50	50

Registration fees include:

- conference room,
- · coffee breaks,
- lunches,
- gala dinner and
- conference material.

Organizers

The European Civil Engineering Education and Training Association (EUCEET) (www.euceet.eu)

The Association of European Civil Engineering Faculties (AECEF) (https://web.fe.up.pt/~aecef)

The Aristotle University of Thessaloniki, Greece (AUTh) (https://web.civil.auth.gr)

The United Nations' Sustainable Development Solutions Networks SDSN. (http://sdsn-blacksea.auth.gr/)

International Organization Committee

Linas JUKNEVIČIUS, Professor, Vilnius Gediminas Technical University, Vilnius, Lithuania

Diego Carlo Lo PRESTI, Professor, University of Pisa, Italy

Alfredo SOEIRO, Professor, University of Porto, Portugal

Nicolaos THEODOSSIOU, Professor, Aristotle University of Thessaloniki, Greece

More information: https://websites.auth.gr/euceetaecef2021/

FROM MEMBERS

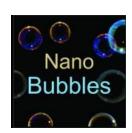
École des Ponts ParisTech, France

École des Ponts ParisTech

ECOLE DES PONTS PARTNER OF THE ERC SYNERGY GRANT "NANOBUBBLES" PROJECT

November 13, 2020

The ERC, European Research Council, has just announced the list of its ERC Synergy Grant winners. This prize rewards European scientific projects presented by multidisciplinary teams. Among them is the "NanoBubbles" project or "how, when and why science cannot correct itself" in which École des Ponts ParisTech is a partner. Led by the Universities of Paris Sorbonne Nord, Maastricht, Grenoble-Alpes and Radboud, NanoBubbles is one of the 34 prize-winners among 440 projects submitted throughout Europe and will benefit from an endowment of 8.3 million euros.



Science is theoretically a self-correcting enterprise, however, in practice it is often difficult to reverse incorrect or exaggerated published claims. To understand how science correction works or fails, the NanoBubbles project combines approaches from the natural sciences, engineering and the humanities and social sciences. The project focuses on nanobiology, a highly interdisciplinary field founded around the year 2000 and which has already experienced multiple episodes marked by exaggerated or erroneous assertions. The NanoBubbles project will examine three of these "bubbles" and study the circulation of claims and counter-claims as they spread through laboratories, conferences, scientific journals, preprints or scientific exchange platforms.

École des Ponts ParisTech is a stakeholder in this project with a partnership led by Frédérique Bordignon, documentalist and linguist. She will participate in the development of corpora, the explanation of a shared common vocabulary and the creation of an ontology, the automatic analysis of texts and scientometric studies. She will also continue the work initiated as part of the Cita&Re (exploratory I-Site) project that she is co-leading and which should improve the automatic detection of negative citations, particularly those concerning retracted publications, to determine whether they are further contradicted in the literature.

In particular, NanoBubbles will aim to create a dialogue within the nanobiology community. The findings could also be applied to other emerging interdisciplinary fields such as synthetic biology or artificial intelligence.

Beyond that, and in general, the project will contribute to the work on scientific integrity to which École des Ponts ParisTech is committed. It is not only a question of giving credit to scientific production, but also of ensuring a relationship of trust between it, its researchers and society.

source: www.ecoledesponts.fr

To find out more: https://twitter.com/ Nano Bubbles

FLAVIEN CHAPUIS, ECOLE DES PONTS STUDENT, WINNER OF THE JEAN GOGUEL PRIZE October 28, 2020

Congratulations to **Flavien Chapuis**, a student in the Civil Engineering and Construction department, who recently received the **Jean Goguel prize** awarded by the French Committee of Engineering Geology (CFGI).

This prize rewards a young person under 35 years old for work in the field of engineering geology.

Flavien was designated laureate after a public defense for his work carried out during a long internship at "SNCF Reseau"; work which focused on the establishment of an ageing model of railway tunnels, based on heritage data and from a predictive maintenance perspective.



souce: www.ecoledesponts.fr

Aalto University, Finland



Installation Talks of seven new tenured professors of the School of Engineering

Published: 3.12.2020

The newly tenured professors tell about their research and why they're passionate about their field.

Prof. Wojciech Sołowski: "How to design nuclear waste repository to be safe for the next million years?"

Professor Wojciech Sołowski (Department of Civil Engineering) discusses the properties and modelling of bentonite in his installation talk. He was granted tenure at the School of Engineering in September 2020.



Information from: https://www.aalto.fi/en/news/professor-wojciech-solowski-discusses-challenges-of-storing-nuclear-waste

University of Trento, Italy



Roberta SPRINGHETTI (Assistant Professor, Department of Civil, Environmental and Mechanical Engineering) the new contact person from University of Trento sent the following news of interest for members of EUCEET Association:

Teaching models for structural mechanics

[Department of civil, environmental and mechanical engineering, University of Trento, Italy]

The teaching of structural mechanics at the Department of Civil, Environmental and Mechanical Engineering of the University of Trento has taken advantage from the introduction of educational demonstrative models, allowing professors to stimulate students' curiosity and experimental attitude, while conveying the key concepts pleasantly albeit sharply. Simple physical explicative models have been designed and realized by the group of Solid and Structural Mechanics (D. Bigoni, 2012; D. Misseroni, 2014) to stimulate and facilitate comprehension of the mechanics of elastic truss and frame structures. The models can be used *qualitatively* to visualize the deformation of the structure and *quantitatively* to compare experimental and predicted values of displacements and deformations. Confirmatory experiments have been carried out for years within undergraduate classes of strength of materials at the University of Trento, as well as in university orientation events organized by the *Scuola Normale Superiore* of Pisa and in public scientific demonstrations. According to the students, while playing with the demonstrative tools, the mechanical concepts (e.g., axial force, bending moment, strain energy) taught during classes become clearer, allowing for an increase of their mechanical intuition.

The behavior of truss structures with all the rods purely undergoing axial forces is cumbersome, while the deformation under loading is definitely not intuitive, even for undergraduate students of mathematics, physics and engineering. In order to exemplify how a truss structure behaves and has to be designed, a planar and a fully spatial teaching models (see Figure 1) have been realized: each rod is conceived as a spring snubber element with a movable pointer to measure the elongation or shortening of each element under the application of dead loads, while a mechanical comparator allows to detect nodal displacements. The 3D model, endowed with a removable cross bracing, also allows to transmit the concept of the out-of-plane instability.

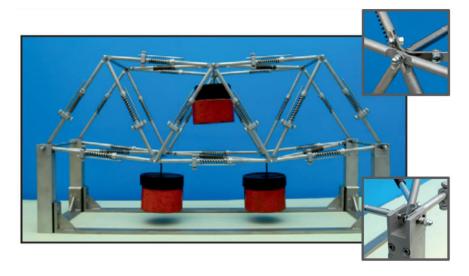


Figure 1 Frontal view of the teaching model for truss structures (left) with details of an internal node (right upper) and an external hinge (right bottom)

The demonstrative two-storey one-bay planar frame illustrated in Figure 2 with four different loading positions and directions was designed and built using solid polycarbonate elements and aluminum joints to facilitate the visualization of the deformation of elastic frame structures undergoing bending. A load cell detects the applied load, while the deformation of the frame is calculated in real time through a computer on the basis of linear elasticity and displayed on a monitor, allowing the user to directly compare the physical and the predicted deformed shapes.

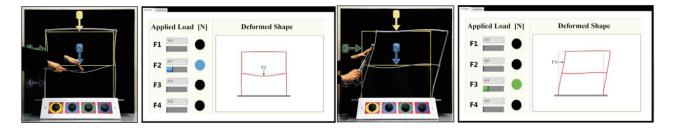


Figure 2 The teaching model for the elastic frame undergoing two different loading options (on the left a vertical force F2=8.7 N and on the right a horizontal force F3=6.9 N)

The positive feedback of the users gave a boost to the development of further models, profitably used in classrooms to convey the concepts of Euler's critical load and Saint Venant's problem.

References

D. Bigoni, F. Dal Corso, D. Misseroni and M. Tommasini, *A teaching model for truss structures*, Eur. J. Phys. 33 p. 1179–1186 (2012), https://iopscience.iop.org/article/10.1088/0143-0807/33/5/1179

D. Misseroni, D. Bigoni and F. Dal Corso, *A model for teaching elastic frames*, Journal of Materials Education Vol. 36 (5-6) p.169-174 (2014)

National Research Moscow State University of Civil Engineering (MGSU), Russia



Elizabeth BASMANOVA (Head of International Protocol Office, International Cooperation Department at MGSU) sent the following news of interest for members of EUCEET Association:

MGSU is the leading construction university in the Russian Federation. It was founded in 1921 and year 2021 celebrates its centenary. This is one of the oldest technical higher education institutions of Russia.

MGSU is the head of the Federal Academic Methodological Association of the Russian higher education institutions related to construction as well as the International Association of Educational Civil Engineering Institutions (ASV).

The University enjoys deserved international respect, has a large experience of fruitful international cooperation with more than 100 universities and scientific-and-educational centers from 35 countries of the world. It is also in the top-200 universities of the Emerging Europe and Central Asia according to the International QS EECA 2021 Ranking.

The University provides training at all levels – BSc, MSc, PhD in various fields: «Construction», «Architecture», «Urban Planning», «Engineering Systems» and many others. At present, more than 11,000 students are studying at MGSU, including more than 900 foreigners from 87 countries.

On the basis of the University a modern laboratory complex was created, which includes more than 50 research laboratories: "Aerodynamic and Aeroacoustic Testing of Engineering Structures", "Zolotov Centre of Computer Modelling of Unique Buildings, Structures and Complexes", "Geotechnics", "Building Constructions", etc. Specialists from MGSU actively participated in the construction of landmark facilities of the country, such as the Sayano-Shushenskaya hydroelectric plant, the Bolshoy Ice Dome in Sochi, the Cosmodrome «Vostochny».

As a part of its international activities MGSU participates in international projects that provide opportunities to exchange experience and best practices, improve the competence of teachers and strengthen educational and scientific ties with the EU universities.

PROJECT ACTIVITY

Our university has successfully implemented projects in different programs: TEMPUS: CENEAST and MAPREE; Jean Monnet Module IEUP; Jean Monnet Project MIGPUD; Erasmus + Capacity Building in Higher Education GREB.

Ongoing projects:

Integrating education with consumer behavior relevant to energy efficiency and climate change at the Universities of Russia, Sri Lanka and Bangladesh (BECK). The idea is to jointly develop and implement new interdisciplinary modules on environmental protection technologies, based on consumer behavior

relevant to energy efficiency and climate change, at the universities of Russia, Sri Lanka and Bangladesh, with the aim of improving both quality and relevance of training for the needs of the global market. http://beck-erasmus.com/

Excellence in engineering education through teacher training and new pedagogic approaches in Russia and Tajikistan (EXTEND). The project is aimed at modernizing approaches to teaching engineering disciplines in Russia and Tajikistan, improving the quality of education and employment of young engineers, increasing students' motivation and the attractiveness of engineering education in general. The main goal is to develop the system of training for teachers of engineering disciplines in accordance with the principles of the Bologna Process and the European Higher Education Area. As part of the project, the EXTEND Center was opened at the university. Its main goal is to solve strategic, tactical and operational tasks that are important for the development of engineering education. http://extend-erasmusplus.ru/

Strategic Partnership for the Establishment of an Innovative Approach in Workplace Management Education (SPACE). The project is focused on developing educational disciplines in workspace management using modern methodological approaches in education and digital technologies. Within the framework of the project, a scientific study was carried out on the current state, needs and developments in workspace management among employers of large companies from the countries of the consortium, which made it possible to study the topic of this issue from the inside.

Climate Change and Urban Planning: the European Experience (CLEUX). This Erasmus + Jean Monnet Module was started September 2020. The aim of the Module is to study the EU experience in urban planning and develop training modules for students, teachers and urban planners, taking into account the reduction of human impact on the environment and climate change mitigation. www.ejm.mgsu.ru

INTERNATIONAL EVENTS

Annually on the basis of MGSU or with its participation, multiple international scientific events are held with the publication of abstracts in journals indexed by the international databases Scopus and Web of Science.

Logotype	Main information	
CONSTRUCTION THE FORMATION OF LIVING ENVIRONMENT	Conference title: XXIV International Scientific conference on Advance In Civil Engineering «Construction: the Formation of Living Environment» (FORM-2021) Dates: April 22-24, 2021 Venue: MGSU, Moscow, Russia Website: http://form2021.org/	

The main aim of the Conference is to provide the sustainable innovative development of the construction industry, to preserve the continuity of scientific schools, to form a new level of training professional staff, to strengthen scientific and business contacts.

Participation format:

- full-time with oral presentation
- full-time with poster report

The format of participation is chosen by the participant and is approved by the Scientific Committee. Oral presentation, publications and posters should be made in English.

Important Dates:

- 1. 22/02/2021 Deadline for Paper Submission
- 2. 22/03/2021 Notification of Acceptance
- 3. 11/04/2021 Last Fee Payment

CONFERENCE SECTIONS

- 1. Modern Building Materials
- 2. Reliability of Buildings and Constructions and Safety in Construction
- 3. Modelling and Mechanics of Building Structures
- 4. Engineering and Smart Systems in Construction
- 5. Management in Construction
- 6. Global Environmental Challenges

REGISTRATION FEES

\$ 200 / € 180 / ₽ 13 500

Includes:

- Presentation of scientific research results;
- Admission to all conference sessions and workshops;
- Online access to Proceedings.

Detailed information about the Conference is available on the website http://form2021.org/ Contact information of the Conference Organizing Committee: science@mgsu.ru Head of Science Policy Department: Anna Doroshenko + (495) 287-49-14 ext. 2393 Victor Evstratov +7 (495) 287-49-14 ext. 2667 Olga Konakova +7 (495) 287-49-14 ext. 2447

IN ADDITION, MGSU PUBLISHES ITS OWN JOURNALS

Vestnik MGSU

vestnikmgsu.ru

Scientific and Engineering Journal for Construction and Architecture.

Frequency: monthly.

Ural Federal

Listed with the All-Russian Certification Committee List of peer-reviewed scientific publication media for main scientific results of theses for the scientific degrees of a candidate and doctor of science.

Stroitelstvo: nauka i obrazovanie

nso-journal.ru

Scientific and practical online journal of MGSU on questions of construction science and education.

Frequency: quarterly.

Listed with the All-Russian Certification Committee List of peer-reviewed scientific publication media for main scientific results of theses for the scientific degrees of a candidate and doctor of science.

Ural Federal University (UrFU), Russia

Professor Vladimir Alekhin (Head of Department of UrFU Institute of Civil

Engineering and Architecture (ICEA) and member of the Administrative Council of

the EUCEET Association) sent the following news of interest for members of EUCEET Association:

The new Russian textbook on steel construction has been published for the last couple decades

The first Russian textbook dedicated to the design aspects and steel construction usage in various segments of the construction industry is available on SCDA website by link.

The publication, produced by Steel Construction Development Association (SCDA), reflects all the aspects of steel construction technologies application.

The textbook was developed by well-known scientists, industry experts, SCDA and market players, involved in steel construction industry. One of the authors of the textbook is Vladimir Alekhin, the member of the EUCEET Association Administrative Council.

The consultations and textbook development took over a year.

Due to the depth of the issues consideration and the completeness of the information presented, the textbook will not only train university professionals in steel construction technology implementation, but will also be useful for the employees in metallurgical, construction and design companies. The textbook consists of two parts: "Metal structures. Materials and design basics" and "Metal structures. Special course".

Earlier, the Federal Educational and Methodological Association (FUMO) carried out an examination and issued a positive recommendation to this textbook as a guide for students in specialization: "Construction" and "Construction of unique buildings and structures."

International Forum 100+ TechnoBuild (October 20-22, 2020 at IEC Ekaterinburg-EXPO)

Four several projects developed by TECHCON Ltd together with the Ural Federal University with description and analysis of emerging problems in dense urban areas were presented in the framework of the International Forum "100+ TECHNOBUILD" at the section "Schools of modern cities".

Moderator Professor Vladimir ALEKHIN (Head of Department of UrFU, director of TECHCON Ltd and member of Administrative Council of EUCEET Association), speakers Ekaterina SHAROVAROVA (Assistant Professor of UrFU, Head architect of TECHCON Ltd), Tatiana PLETNEVA (Chief architect of TECHCON Ltd), Nina NOVOSELOVA (Deputy director of TECHCON Ltd) and other participants discussed the implementation of a large-scale program for the construction of new schools and the reconstruction of existing ones. In recent years, not just school buildings have been built, but a rethinking of the educational space is taking place, which is flexible. Such trends lead to the fact that a school building should become capable of changes and transformations, comfortable and multifunctional.

The first project that was discussed is the reconstruction of the school №114 in Ekaterinburg. When designing a draft project for school in a densely built environment, the problem of natural illumination of the first floor was identified. The large area of glazing and the increased height of the first floor, organized by the difference in the relief on the site, contributed to the solution of the problem of illumination of the building. To place the classrooms on the northeastern facade, it was decided to expand the classrooms strictly to the east. The turned planes of the facade form the "dynamics" of a flat facade, creating a play of light and shadow. The high stained-glass windows of the first floor and the white color of the facade create the feeling of a "light" building, which is especially important in tight urban areas.



Main façade view with continuous glazing and the increased height of the first floor



"Turned planes" of façade (view to the classrooms)

In the design of another school the same problems of insolation and natural light arose. A similar principle was used to rotate the façade. The problem of a sufficiently large relief difference was solved by the construction of retaining walls and landscaping groups.



Recreation areas view



Main façade. Night view



Interior of communication zone

When designing school №77, there was a problem of providing normalized natural light. The problem of illumination was solved by continuous tape stained-glass windows with decorative inserts with tree structure. The problem with the lack of recreation and playgrounds was solved by using the neighboring recreational areas.



View from above



View to the classrooms



Main façade view

On the example of the developed draft design of the specialized educational and scientific center of the Federal State Autonomous Educational Institution of Higher Education "UrFU named after the first president B.N. Yeltsin", one can assess the advantages of building educational institutions in specially designated areas of the required area.



View from above

Speakers from other design companies, state and public construction expertises and City Administration authorities also took part in the session.







Photos taken at the International Forum "100+ TECHNOBUILD" - section "Schools of modern cities"

VI International Conference "Safety Problems of Civil Engineering Critical Infrastructures" SAFETY 2020 (SPCECI 2020)

The Conference was held on 5-6, November 2020 in Ekaterinburg at the Ural Federal University in collaboration with Science and Engineering Centre "Reliability and Safety of Large Systems and Machines (Ural Branch of Russian Academy of Sciences), Russian Academy of Architecture and Construction Sciences, South Ural State University and European Civil Engineering Education and Training Association (EUCEET). The representatives of science and business from Russian Federation, USA, Germany, Italy, Syria, Yemen, Czech Republic and Kazakhstan took part in the Conference (mostly online).

The main conference purpose is integration and coordination of efforts of scientists, experts and specialists in the field of integrated risk analysis related to building interdependent critical infrastructures throughout their life cycle at the international level. Design, fracture mechanics problems, diagnostics, monitoring, maintenance, survivability and optimal management of infrastructure systems issues is considered in the context of the creation and operation of safe, smart and durable infrastructure systems. Question of the creation of real conditions and a practical mechanism for an innovative scientific, educational and organizational breakthrough is one of the most important problems of the twenty-first century – safety and sustainable development of cities, regions and worldwide taking into account the human factor.

The objectives of SAFETY 2020 are to collect and disseminate state-of-the-art research and technology for design, fracture mechanics problems, diagnostics, monitoring, maintenance, survivability and optimal management of infrastructure systems issues is considered in the context of the creation and operation of safe, smart and durable infrastructure systems.

The conference participants discussed the problems of safety technologies for building critical infrastructure and territories; modeling of loads and impacts on buildings and structures; steel and concrete structures; soil mechanics and foundations problems of viable and smart cities and sustainable development of territories; energy efficiency and resource saving in civil engineering; building information technology (BIM); building technologies and materials of innovative type; education in architecture and civil engineering; expertise and management in construction; building engineering systems and others.

The Head of Department of UrFU Institute of Civil Engineering and Architecture (ICEA), Professor Vladimir Alekhin (member of the EUCEET Association Administrative Council) and Deputy Director for Science and Innovations of the ICEA served as moderators of the Conference.

The keynote lectures were given by Professor Sviatoslav Timashev (Russia), Professor Adrian Gheorge (USA), Professor Michael Beer (Germany) and Professor Diego Lo Presti (Italy, General Secretary of EUCEET Association).

BRIEF HISTORY OF THE MORANDI BRIDGE AND ITS RECONSTRUCTION is the keynote lecture given by Professor Diego Lo Presti (Italy) at the conference *SAFETY 2020 (SPCECI 2020)*.



The bridge MORANDI

- July 19th 1959: contract was awarded by Condotte d'Acqua (project by dr. eng. Riccardo Morandi)
- 1963 –July 31st 1967 construction



Bridge collapse

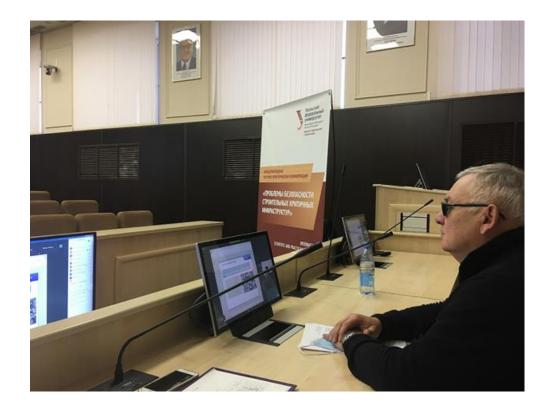
- Collapse occurred at 11:36 AM on 14 August 2018.
- A 250 m long section supported by tower 9 suddenly collapsed (red portion). 43 people died.



New Bridge (San Giorgio Bridge)

- Original idea of dr. Arch. Renzo Piano
- Length 1067 m; Width 31 m (four lanes);
 Height 45 m; 19 spans
- 18 reinforced concrete pillars having elliptical constant section
- inaugurated in August 2020

Some pictures and information from the keynote lecture given by Prof. Lo Presti





Photos taken at the conference SAFETY 2020 (SPCECI 2020)

FROM PARTNERS

Ural State University of Architecture and Art, RU

VI International Forum and Exhibition for high-rise and unique construction 100+ FORUM RUSSIA

The forum was held on October 20-22, 2020 in Yekaterinburg with the cooperation of the Ministry of Construction of Russia, the Russian Academy of Architecture and Construction Sciences. The forum was attended by representatives (mainly online) of science and business from the Russian Federation and 18 countries of the world.

The direction «*Modern temple building in the urban environment*» was one of the most important at the Forum.

Rector of the Ural State University of Architecture and Art, Alexander DOLGOV, presented practical aspects and recent research in the field of modern temple construction.

Alexander Dolgov noted that the temple plays a transformative role in the formation of the imaginative characteristics of cities, their districts and residential quarters. «We are the heirs of the great traditions of Russian masters, taking into account the ethnic, architectural and artistic characteristics of each territory. Cathedrals, being dominant buildings, set the scale of the development of city streets and an atmosphere close to man».

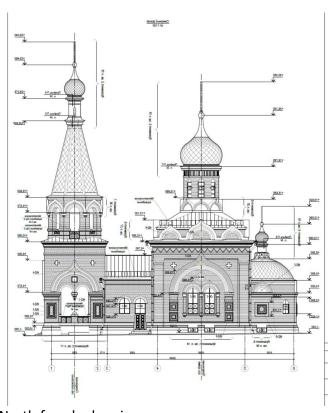
Samples of modern churches in the Sverdlovsk, Astrakhan and Tver regions, made by Alexander Dolgov, were presented.

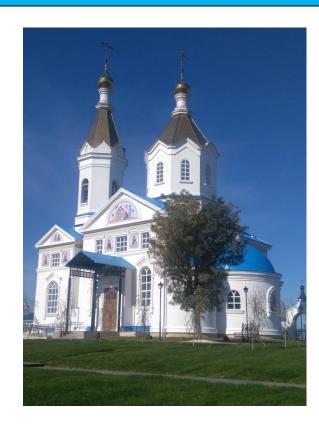




General form

Fragment





North facade drawing

Church named after Joachim and Anna, Verkhnyaya Pyshma, Sverdlovsk regions

Author Dolgov A.V.

Church named after Peter and Paul in the Astrakhan region.

Author Dolgov A.V.



Spiritually-educational center, Sverdlovsk regions. Author Dolgov A.V



Wooden church on the Moksha river, Tver region. Author Dolgov A.V.

ECCE – European Council of Civil Engineers



71st ECCE General Meeting

The 71st ECCE General Meeting was held on Friday 23 October 2020, from 11:00 to 16:30 EEST in a virtual environment via Zoom and gathered delegates from 22 out of the 23 Full ECCE Members as well as representatives of some of its Associate Members, Individual Associate Members and invited guests from its partner organizations.

The parts of the 71st ECCE General Meeting that were open were livestreamed. You can watch the videos via the following links:

Rehabilitation of Existing Buildings: Structural/Seismic in parallel with Energy Efficiency

71st ECCE GM Open Session

Information from: http://www.ecceengineers.eu/news/2020/71 ecce meeting.php

Press Release - Construction 2050 Alliance

04-12-2020

Construction in national Recovery Plans The built environment must be a priority for Next Generation EU



On 2nd December, the Construction 2050 Alliance brought together experts from all over Europe, including representatives from the European Commission, the European Parliament and national governments. They discussed the important role that the construction sector may play as the European economy recovers slowly from the COVID-19 pandemic. The Alliance's key message is that the built environment must be a key priority in all national Recovery plans and in the new EU funding initiatives.

As in our fight against climate change, for which the construction ecosystem plays a key role, the built environment provides solutions to mitigate the impact of the pandemic. Indeed, while it was estimated that on average European citizens spend more than 90% of their time indoors, this has significantly increased as confinements and curfews have become the new norm. Living in safe, healthy, properly ventilated and energy efficient buildings is thus crucial for EU citizens, the economy, and the planet.

It is for the reasons highlighted here above that, the members of the Construction 2050 Alliance held a high-level discussion on the role that the built environment should play in the post-COVID-19 recovery, more specifically, its weight in future decisions on European funding in response to the pandemic.

This first public event of the Construction 2050 Alliance allowed for open and transparent exchanges between Member States representatives, Members of the European Parliament (MEPs), high-level Commission officials, as well as European construction experts.

Whilst Member States presented their plans for the built environment in their respective national strategies under the new recovery instrument, "Next Generation EU", the European Commission confirmed that construction may be prioritised in the national Recovery Plans as it can play a key role in the recovery and resilience of the EU's economy. However, this must be requested by Member States that have full ownership of their national Recovery Plans and should be the result of a consultation exercise with national stakeholders. On the same line, MEPs Iskra Mihaylova (Bulgaria, RE) and Pernille Weiss (Denmark, EPP) suggested that national debates feed each other through an exchange of best practices on effective policy measures.

The representatives of the Alliance stressed that investments in the renovation and modernisation of the European buildings and infrastructure will deliver positive results in terms of health, comfort, adaptability and environmental impacts. Such investments offer key opportunities for a built environment that would be more resilient, safer, more comfortable, more cost-efficient and sustainable. Therefore, the 47 EU associations that form the Alliance call together for the built environment to be a key priority in all national recovery plans and in the new EU funding initiatives.

Click here to access the recording of the event.

Click here to read the Concept note of the Construction 2050 Alliance.

Contact:

Riccardo Viaggi,

CECE Secretary General (sg@cece.eu)



The Construction 2050 Alliance is a partnership established in 2020 made of 47 European organizations representing the actors of the built environment working together to advance the needs and priorities of the wider construction and built-environment sector at the European level.

The Construction 2050 Alliance has been established to coordinate common political messages of the construction value chain and raise the political importance of the sector at the European level.

This Alliance constitutes an unprecedented level of cooperation under a common vision towards a sustainable construction sector.

Information from: https://www.cece.eu/press-release-construction-2050-alliance/20201204095705

European University Association



EUA webinar: Ensuring fair and transparent recognition procedures through Bologna Process toolsWebinar online

28 January 2021, 14.00-15.00 CET

EUA, in collaboration with <u>Nuffic</u>, <u>HRK</u> and <u>CRUE</u>, is pleased to present this webinar organised in the context of the Erasmus+ funded "Spotlight on recognition" project.

Academic mobility across higher education systems is a key feature of the European Higher Education Area. However, it depends on well-functioning recognition of qualifications and study periods abroad, to which countries have committed themselves through the ratification of the Lisbon Recognition Convention. The Bologna Process has generated several tools aiming to enhance transparency and comparability of credentials and qualifications across higher education systems, such as learning outcomes, the ECTS, qualifications frameworks and the Diploma Supplement, all of which aim to facilitate fair recognition in compliance with the Lisbon Recognition Convention. This webinar will examine these tools and discuss good practices in using them in recognition procedures.

The webinar will be of interest to admissions officers and other staff, including at the managerial level, working in the field of academic recognition and internationalisation at higher education institutions. It will also be of interest to credential evaluators working at ENIC-NARIC centres, as well as students.

Registrations will open soon and will remain open until the start of the webinar. Participation is free of charge and open to all EUA members as well as other stakeholders with an interest in higher education institutional policy.

Speakers include:

- **Howard Davies**, Senior Adviser, EUA
- Marijke Blom-Westrik, Policy Officer, Nuffic
- Pegi Pavletić, Executive Committee Member, European Students' Union (ESU)

The webinar will be chaired by **Tia Loukkola**, Director of Institutional Development at EUA.

A recording of the webinar will be available on the **EUA YouTube Channel**.

For questions about the webinar, please contact EUA at events@eua.eu. To stay up-to-date on what awaits at the webinar as well as other activities organised in the context of the "Spotlight on recognition" project, follow #SPOT EU on Twitter or join the "Academic Recognition in the European Higher Education Area" LinkedIn group.

More information: https://eua.eu/events/160-eua-webinar-ensuring-fair-and-transparent-recognition-procedures-through-bologna-process-tools.html

2021 European Learning & Teaching Forum Embedding and facilitating sustainability 18-19 February 2021, online event

The European Learning & Teaching Forum is an EUA event that provides an opportunity for participants to meet and discuss developments in learning and teaching at European universities. The Forum builds on EUA's work with its member universities on this topic. Alongside the bottom-up approach, the Forum makes use of EUA's extensive policy work in European higher education. The Forum is an ideal event for vice-rectors for academic affairs, deans, and management involved in learning and teaching. It also welcomes students, policy-makers and other stakeholders in higher education.

The path towards a sustainable future does not only require revolutionary technologies, but also and foremost adequate education. The 2021 European Learning & Teaching Forum will explore how learning and teaching ensures access to the knowledge and skills needed to reach the UN Sustainable Development Goals and accomplish the transformations that our societies and economies require. It will also invite participants to reflect on whether the organisation of learning and teaching at their own institutions is delivered in an economically, environmentally and socially sustainable manner. Through a mix of plenary and parallel sessions, the Forum provides a platform for discussion on how universities enhance learning and teaching, while also presenting the work of the 2020 EUA Learning & Teaching Thematic Peer Groups.

For updates follow <u>#EUALearnTeach</u> on Twitter or join the LinkedIn group '<u>Learning & Teaching in European Higher Education</u>'.

More information: https://eua.eu/events/117-2021-european-learning-teaching-forum.html

Academic Cooperation Association

What's new in Brussels? Recent Developments in European Policies and Programmes

28 - 29 January 2021, Online



The year 2021 will mark a new stage in European higher education. Not only will 2021 kick start the implementation of the key strategic orientations underpinning the renewed European Education Area and the European Research Area (with the financial backing of the EU Multiannual Financial Framework 2021-2027), it will also continue the tremendous efforts of the sector to pursue co-creation and innovation in the challenging context of the COVID-19 pandemic. Many institutions will have to align their strategies with the new realities in order to mainstream and upscale such efforts, in the field of internationalisation, among many others, and to seek support at national and European levels for their inclusion, sustainability and digitalisation agendas.

The main goal of "What's New in Brussels? Recent developments in European policies and programmes" is to facilitate such institutional processes and to offer a birds-eye overview of the key innovations and opportunities in the new generation of EU higher education & research programmes and policies. Special emphasis will be placed on Erasmus+ actions and their synergies with Horizon Europe and other, including national-level, funding schemes. The discussion will feature concrete approaches higher education institutions and national agencies can employ to put the new European directions into practice. The event will also provide an opportunity to engage in an open dialogue with leading experts and policy makers.

A flagship event of the Academic Cooperation Association, "What's New in Brussels?" will bring together a unique mix of international participants from national funding and promotion agencies, policy makers at national or European levels, and higher education professionals including senior staff responsible for the design of international strategies and collaborations and managers involved in their implementation.

The programme, speaker information, and registration form can be found on ACA's <u>external event</u> platform.

The participation fee for "What's New in Brussels?" is:

- 115 EUR for ACA members, Higher Education Institutions, organisations and individuals from member countries (ie. Austria, Belgium, Czech Republic, Estonia, Finland, Germany, Greece, Hungary, Iceland, Netherlands, Norway, Poland, Slovakia, Slovenia, Switzerland, United States)
- 145 EUR for participants from non-member countries (ie. countries other than the aforementioned)

Information from: https://aca-secretariat.be/post event/whats-new-in-brussels-recent-developments-in-european-policies-and-programmes-18/

SEFI 2021 Annual Conference

Blended Learning in Engineering Education: challenging, enlightening – and lasting?

13-16 September, 2021

TU Berlin, Germany



CALL FOR PAPERS

The 49th Annual Conference of the European Society for Engineering Education (SEFI) will be held on 13-16 September 2021 in Berlin.

The year 2020 has challenged universities worldwide in an unprecedented way. On short notice, universities had to switch from on-site classroom teaching to online teaching f formats. We all realize that this extensive online teaching will have a sustainable impact on the way we teach and learn. The conference will focus on the implications of this very special experience on Engineering Education in Europe and worldwide.

CONFERENCE TRACKS INCLUDE (but are not limited to):

- Essential elements for the online learning success
- Lab courses and projects blended and online
- Secure and appropriate forms of online assessments
- Data security and technological developments
- Rules and ethical questions of online teaching and learning
- Resilient curricula and teaching methodology
- Competence development for engineering professions
- Sustainable changes beyond covid-19
- Social aspects and communication in online learning
- Accessibility, participation and inclusion
- Impact of online teaching on student mobility
- Cooperation between universities (Europe, worldwide) in EE: concepts and experiences
- Impact on the campus and its facilities
- Academic teachers needs and support for online teaching
- On-line student counseling

and contributions on more general topics are also welcomed, such as:

Mathematics

Physics

Engineering education research

Continuing education and lifelong learning

Sustainability

Open and online education

Gender and diversity

Attractiveness

Ethics

Curriculum development Engineering skills

Capacity building

Important dates SEFI2021

Abstract submission 16 March 2021
Full paper submission 20 April 2021
Short Paper submission 4 May 2021
Notification of final acceptance 8 June 2021
Early Bird registration 20 July 2021
Final paper submission 3 August 2021

SEFI2020 annual conference 13-16 September 2021

More information: http://sefi2021.eu/

FROM THE EUROPEAN UNION

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



The European Higher Education Area in 2020 - Bologna Process Implementation Report

Publication date: Wednesday, 18 November, 2020

Programme and action: Erasmus+

The new edition of the <u>Bologna Process Implementation Report</u> shows all the progress made over two decades on mobility, quality assurance and recognition. Unprecedented achievements have been made in developing convergent degree structures in the European Higher Education area (EHEA) and countries have continued to join it throughout these last twenty years. Today, total student numbers have indeed reached more than 38 million.

The report also points to the work we need for the future on some areas such as the social dimensions and the inclusion of under-represented groups since the idea that higher education should reflect the diversity of the populations is far from being reached.



Information from: https://eacea.ec.europa.eu/national-policies/eurydice/content/european-higher-education-area-2020-bologna-process-implementation-report en

New Eurydice reports:

- ➤ The Structure of the European Education Systems 2020/21
- ➤ Compulsory Education in Europe 2020/21

Publication date: Friday, 30 October, 2020

Programme and action: Erasmus+; Eurydice Network

➤ The Structure of the European Education Systems - 2020/21

This report illustrates schematic information on the structure of mainstream educational systems in European countries, from pre-primary to tertiary level. It includes national schematic diagrams, a guide to reading the diagrams and a map showing the main organisational models of primary and lower secondary education.

The information is available for 43 European educational systems covering 38 countries participating in the Erasmus+ programme.

➤ Compulsory Education in Europe – 2020/21

This publication provides a concise information on the duration of compulsory education/training in 43 European education systems, covering 38 countries participating in the EU's Erasmus+ programme (27 Member States, Albania, Bosnia and Herzegovina, Iceland, Liechtenstein, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Turkey and the United Kingdom).

Full-time compulsory education/training refers to a period of full-time educational/training attendance required of all students.

Information from: https://eacea.ec.europa.eu/erasmus-plus/news/structure-european-education-systems-202021-and-compulsory-education-in-europe-202021 en

The 2020 Education and Training Monitor

Commissioner Mariya Gabriel announced the **2020** Education and Training Monitor at the DigiEduHack conference on 12 November 2020.

This year's edition of the Education and Training Monitor is the last one of the outgoing strategic framework for European cooperation in education and training – ET 2020. European countries have made great progress towards expanding participation in education since the establishment of EU benchmarks in 2009 as part of this process.

The lead theme of the 2020 Monitor is digital education and digital competence. It also addresses the impacts of the COVID-induced school closures and distance learning.

However, approximately 20% of 15 year old pupils across Europe still remain at risk of educational poverty, as they do not possess basic competences in literacy and mathematics or sufficient knowledge of science subjects.

More information: https://ec.europa.eu/education/policy/strategic-framework/et-monitor en

NEWS FROM THE WORLD

ICCCE 2021: 15. International Conference on Civil and Construction Engineering

28-29 January, 2021 Sydney, Australia



ICCCE 2021- International Conference on Civil and Construction Engineering aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Civil and Construction Engineering. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Civil and Construction Engineering

Call for Contributions

Prospective authors are kindly encouraged to contribute to and help shape the conference through submissions of their research abstracts, papers and e-posters. Also, high quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in all areas of Civil and Construction Engineering are cordially invited for presentation at the conference. The conference solicits contributions of abstracts, papers and e-posters that address themes and topics of the conference, including figures, tables and references of novel research materials.

Topics of interest for submission include, but are not limited to:

- Advanced Composite Materials, Composite structures
- Air pollution, Water Pollution
- Air and water
- Applications of Engineering

- Geology
- Applications of FEM, Nano
- Technology in Civil Engineering
- Architectural, Coastal,
- Geotechnical, Infrastructure, and
- Materials Engineering
- Building Materials, Concrete
- Technology and Structural
- Engineering
- Civil and Earth Resources
- Engineering
- Concrete Technology, Low Cost
- Housing
- Construction Materials and
- Construction Equipment
- Construction Planning and
- Management
- Construction Management and Safety
- Cost and Project Management
- Disaster Mitigation and Management
- Energy and Environmental Science
- Environment, Water Resources
- Engineering
- Environmental Engineering, Sanitary
- Engineering
- Facilities and Asset Management
- Geoenvironmental Engineering, Land fills
- Geohazards Liquefaction, landslides, etc
- Geology, Remote Sensing and GIS
- Geomechanics
- Geosynthetics, Materials and Applications
- Geotechnical Earthquake Engineering
- Geotechnical Engineering
- Geotechnical instrumentation

More information: https://waset.org/civil-and-construction-engineering-conference-in-january-2021-in-sydney

DFI-PFSF Piling & Ground Improvement Conference

10 - 12 March, 2021 Sydney, Australia



Conference Summary

This second joint conference of the Piling and Foundation Specialists Federation (PFSF) and Deep Foundations Institute (DFI) will promote all aspects of deep foundations, retention and ground improvement works. Presentations at the historic International Convention Centre Sydney (ICC) will promote all aspects of deep foundations, earth retention and ground improvement works, including:

- Design and construction approaches and solutions for deep foundations
- Use of innovative site investigation methods and techniques
- Foundation testing methods and analyses
- Ground improvement for structural support and retention works
- Developments and innovations in deep foundation equipment, methods and materials
- Risk and project delivery practices, and interaction between structural, geotechnical and construction
- Challenging project case studies with lessons learned

Who Should Attend and Why?

This conference will gather design professionals, engineers, contractors, researchers, material and equipment suppliers, and government agencies involved in the design, construction and research of piling and ground improvement solutions for building and infrastructure projects.

International experiences with worldwide experts will be shared along with interactions with practitioners specializing in cutting-edge technologies. All delegates can participate in technical sessions that include design methods, testing and quality control/assurance, equipment developments, and more.

Sessions will cover design, testing, construction, ground improvement, risk and project delivery practices, challenging project case studies, and developments and innovations.

More information: https://events.american-tradeshow.com/PilingConference2021

6th International Conference on Civil, Structural and Transportation Engineering (ICCSTE'21)

17-19 May, 2021 Niagara Falls, Canada



The 6th International Conference on Civil, Structural and Transportation Engineering (ICCSTE'21) aims to become the leading annual conference in fields related to Civil, Structural, and Transportation Engineering.



The goal of ICCSTE'21 is to gather scholars from all over the world to present advances in the relevant fields and to foster an environment conducive to exchanging ideas and information. This conference will also provide an ideal environment to develop new collaborations and meet experts on the fundamentals, applications, and products of the mentioned fields.

Topics for ICCSTE'21 include, but are not limited, to the following:

- Advanced structural materials
- Advances in civil engineering
- Architecture engineering
- Bridge engineering
- Concrete technology
- Construction management
- Earthquake and structural engineering
- Geotechnical engineering
- · Green building materials and technology
- Marine structures
- New technologies, methods and techniques in civil engineering
- Road, bridge, and railway engineering
- Sustainable transportation
- Traffic engineering
- Transport infrastructure
- Transportation Safety
- Water resources

Important dates and deadlines:

CONGRESS DATE	S	May 17 - 19, 2021
SUBMISSION DEADLINES	Paper Submission Deadlines	December 15, 2020
	Notification to Authors	December 30, 2020
	Final Version of Accepted Submissions	March 8, 2021
REGISTRATION DEADLINES	Early-Bird Registration	January 19, 2021
22.22	Regular Registration*	February 24, 2021
	Late Registration	After February 24, 2021

More information: https://iccste.com/

Gothenburg 2021: 32nd Annual EAIE Conference and Exhibition

07-10 September, 2021 Gothenburg, Sweden



Conference theme: Bolder. Braver. Go.

In 2021, Gothenburg will celebrate its 400th anniversary. From its humble origins as a trading town in the Thiry Years' War, to its ascension to Swedish industrial powerhouse, to its rebirth as a modern mover and shaker, Gothenburg's penchant for boldness and history of reinventing itself in times of need make it the perfect conference host.

The theme 'Bolder. Braver. Go.' is an urgent call to action and an assertion that the time for change is now. When thinking about Sweden, you may naturally think of Greta Thunberg and her undeniable influence on the climate debate, defiantly calling upon world leaders and citizens to stop talking and start acting on climate change. The 2021 EAIE Conference in Gothenburg will be an opportunity for

international higher education professionals to channel this urgency to take bolder and braver actions in tackling our shared global challenges.

Registration for EAIE Gothenburg 2021 will open in May 2021.

Registration dates

- Early-bird registration: Mid-May to mid-June 2021
- Regular registration: Mid-June to late-August 2021
- Late registration: Late-August to 10 September 2021

Venue

The conference will be held at **Gothia Towers Gothenburg**, one of the largest and most modern venues in Sweden.

More information: https://www.eaie.org/gothenburg.html

CALENDAR

Date Event Place

28-29.01. 2021 ICCCE 2021: International Conference on Civil and Construction Sydney, **Engineering AUSTRALIA**



https://waset.org/civil-and-construction-engineering-conference-injanuary-2021-in-sydney

First Joint Conference of EUCEET and AECEF 14.05.2021 Thessaloniki, "The role of education for Civil Engineers in the implementation of the **GREECE** SDGs"



https://websites.auth.gr/euceetaecef2021/

The 14th General Assembly of the EUCEET 14.05.2021 **Association**



Thessaloniki, **GREECE**



Date Event Place

23–26.05. 2021 4th International Conference on Transportation Geotechnics (4th ICTG)

Chicago,

International Conference on Transportation Geotechnics
2021 CHICAGO

http://conferences.illinois.edu/ICTG2020/

20-23.06.2021 55th US Rock Mechanics/Geomechanics Symposium

Houston, TEXAS



https://texas2021.armarocks.org/

21-23.06.2021 6th World Congress on Civil, Structural, and Environmental Engineering

Lisbon, PORTUGAL



https://lisbon2021.cseecongress.com/

21-24.06.2021 11th Annual International Conference on Civil Engineering

Athens, GREECE



Athens Institute for Education and Research
A World Association of Academics and Researchers
25 Years of Non-Euclidean Improvement

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Years
(1995-2020)
of Non-Earlikean Improvement

https://www.atiner.gr/civileng

Date Event Place

19-21.07.2021 Sixth GeoChina International Conference 2021

NanChang, CHINA



http://geochina2021.geoconf.org/index.php

07-10.09.2021 32nd Annual EAIE Conference and Exhibition

Gothenburg SWEDEN



https://www.eaie.org/gothenburg.html?utm_source=Informz&utm_medium=Email&utm_campaign=EAIE+Gothenburg+2021