

International Conference on Sustainability: Multidisciplinary Engineering Practices

July 16-17, 2021



PEER-REVIEWED CONFERENCE

Organized by



Department of Civil Engineering
Chitkara University
District Solan
Himachal Pradesh 174 103
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Punjab Engineering College
(Deemed to be University)
Sector 12
Chandigarh 160012
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INTRODUCTION

Increasing population worldwide creates the need to build more infrastructure and develop more resources, and therefore our environment is under continued deterioration with different types of impact, including depletion of major resources such as air, water and soil, and destruction of ecosystem. There is a need to understand that the true development cannot be achieved by putting resources and ecology at risk. We need to adopt the sustainability in our progress and growth. Sustainability is often defined as a set of environmental, economic and social conditions in which the society has the capacity and opportunity to maintain and improve its quality indefinitely without degrading the quantity, quality or availability of natural, economic, and social resources.

Engineers and Professionals from all disciplines must take the lead in applying sustainability to selection, planning, design, and construction of various elements and components of infrastructure. Historically, sustainability considerations have been approached by engineers as constraints to their designs. But with its growing importance for civil engineering, professionals should move towards incorporating sustainability principles into their routine practice. Sustainable design requires a complete assessment of the design in place and time. Sustainable engineering practice should meet the human needs for natural resources, industrial products, energy, food, transportation, shelter, and effective waste and material management while conserving and protecting environmental quality and the natural resource base, essential for future development.

OBJECTIVES

This international conference aims at establishing the long-term linkages between the user industries and the providers of clean technologies and sustainable materials for a rapid transformation of the small and medium-sized enterprises (SMEs) with achievement of their eco-efficiency and strength through clean technology interventions. Intended participation aims at professionals from different disciplines and backgrounds. The conference shall serve as a platform to create awareness and appreciation among academicians, scientists, researchers and practitioners from various disciplines and sectors about developing and implementing sustainable practices and technologies that minimize the impact on our environment. Deliberations shall be done on new initiatives in latest technologies in the field of infrastructure development and maintenance. This will help in formulating concrete strategies with optimal utilization of available resources for developing these technologies, and consolidating the suggestions, strategies and recommendations made during the conference and disseminating the knowledge on the conference themes. It is expected that more than 300 participants will attend this conference.

THEMES

- ◆ Clean technologies
- ◆ Pollution prevention techniques and technologies
- ◆ Sustainable buildings
- ◆ Smart cities & villages
- ◆ Sustainability in road construction
- ◆ Alternative manufacturing technologies
- ◆ Economics of sustainable development
- ◆ Architecture for sustainable built environment
- ◆ Innovative materials and techniques for sustainable construction
- ◆ Climate change
- ◆ Sustainable construction practices
- ◆ Environmental impact mitigation
- ◆ Sustainable infrastructure
- ◆ Renewable energy infrastructure
- ◆ Disaster Management
- ◆ Environmental policies & practices
- ◆ Sustainable use of geosynthetics and fibres
- ◆ Asset management

PROCEEDINGS

All papers accepted for presentation in the Conference will be published as e-Proceedings with ISBN, and selected papers may be awarded and published in the CRC Press, Taylor & Francis Group book. Some selected papers in significantly extended form will be published in the International Journal of Geosynthetics and Ground Engineering as per its review and other publication policies.

SUBMISSION DEADLINES

- ◆ Submission of abstract - 25 March 2021
- ◆ Intimation of acceptance of abstract - 02 April 2021
- ◆ Receipt of full length paper as per prescribed format - 30 April 2021
- ◆ Last date of receipt of application for registration - 15 May 2021

CALL FOR ABSTRACT

- ◆ Academicians, Researchers and Corporate Executives are invited to send abstract covering original research work and case studies. The abstracts should not exceed 300 words, 12 point font size, Times New Roman on MS word with single line spacing.
- ◆ Soft copy of the abstract should be sent to the conference convener at varinder.kanwar@chitkarauniversity.edu.in

SPONSORSHIPS

- ◆ Joint collaboration - ₹ 2,00,000/- (10 free delegates)
- ◆ Co-Sponsors - ₹ 50,000/- (3 free delegates)
- ◆ Sponsors - ₹ 1,00,000/- (5 free delegates)
- ◆ Conference Lunch / Dinner - ₹ 1,00,000/-

ADVERTISEMENT IN PROCEEDINGS

- ◆ Full color (Front Inside) - ₹ 50,000/-
- ◆ Full color (Back Inside) - ₹ 50,000/-
- ◆ FULL COLOR (BACK) - ₹ 1,00,000/-
- ◆ Inside color (Full) - ₹ 30,000/-
- ◆ Inside color (Half) - ₹ 20,000/-
- ◆ Inside Black & White (Full) - ₹ 10,000/-
- ◆ Inside Black & White (Half) - ₹ 5,000/-

REGISTRATION FEE

International Participants : USD - 250\$

National Participants

Academic/Research Institutes- ₹5,000/-

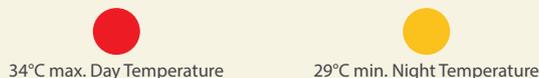
Research Scholars/Students - ₹2,000/-

Industry - ₹10,000/-

The registration fee covers the e-proceedings, refreshment and lunch during the days of the Conference. The registration fee may be paid by cash/demand draft in favour of **International Conference on SCER**, payable at Chandigarh. Registration fee can also be paid by online payment gateway on conference website <http://icscep.in/registration/>.

WEATHER

In the month of July, the weather in Chandigarh will be hot rainy (monsoon) season. Some of the probable statistics of weather in the month of July are as under:



ABOUT CHITKARA UNIVERSITY

Chitkara University, Himachal Pradesh established in the year 2008 by the Himachal Pradesh State Legislature under the "Chitkara University Act". It is a government-recognized NAAC Accredited University. The School of Engineering & Technology, a constituent institution of Chitkara University, Himachal Pradesh offers industry-relevant engineering programs. The curriculum of these programs is delivered in capacious classrooms with the aid of Information and Communication Technology (ICT) equipment, as well as on traditional black-boards. The School boasts of a well-stocked library and excellent on-campus accommodation facilities for students. At the University, academics are only one crucial cog in the wheel of holistic development of students. Ample encouragement and suitable facilities are provided to students so that they engage in co-curricular and extra-curricular activities. There are chapters of several clubs and societies on campus, as well as facilities for several sports. The various national and international collaborations of Chitkara University ensure that learning opportunities for students are always aplenty. Moreover, student exchange programs ensure that foreign students regularly add to the cultural diversity of our campus, while our students take the Indian culture to foreign universities and institutions. The university also possesses an impressive on-campus recruitment record, with many blue-chip companies regularly visiting, and recruiting from our campus.

ABOUT PUNJAB ENGINEERING COLLEGE (DEEMED TO BE UNIVERSITY)

Punjab Engineering College (Deemed to be University) (PEC) having its roots in Lahore as Mugalpura Engineering College since 1921, moved to its present campus in 1953 as PEC affiliated to Panjab University. The institute became Deemed University in 2003 through a MHRD notification and rechristened as PEC University of Technology in 2009. It is a Grant-in-Aid institution under administration of Union Territory of Chandigarh, Government of India. The institute has a 146 acres sprawling and pious campus and is house of Chandigarh College of Architecture also. The academic and administrative processes are similar to IITs in the country. The institute governance is through a vibrant Board of Governors, chaired by a renowned industrialist, Sh. Rajinder Gupta. The institute is headed by a Director on 5 years tenure; a position, which is equivalent to Vice Chancellor of Universities. The institute offers 8 Undergraduate B. Tech. Programmes and 14 Post graduate M. Tech. Programmes in various disciplines of engineering and technology. After becoming University, the institute has also started PhD programme in various disciplines of engineering, science, management, humanities and social sciences. The admission to UG and PG programmes are made through national level examinations namely JEE (Mains) and GATE respectively. There are 9 academic departments and 2 centers of excellence. The faculty of academic departments and centers is involved in cutting edge research and development works. The institute collaborates very closely with research organisations, industries, alumni and other academic institutions both India and abroad, and has signed MoUs to pursue joint research in niche areas. The students graduating from this institute are placed in highly reputed companies with handsome salary packages. With a history of about 96 years now, the institute has produced a number of alumni who have earned name and fame both for themselves and the institute.

ABOUT FEDERATION UNIVERSITY

At Federation University, the desire to transform lives and enhance communities informs everything we do. From research that improves people's lives right around the world, to supporting our students to succeed at their studies and in life – we make a difference. With campuses in Ballarat, Berwick, Brisbane, Gippsland and the Wimmera, we became Federation University in 2014 – a new entity bringing together almost 150 years of history from our predecessor institutions. We have the energy and optimism of youth combined with the knowledge and experience that comes from our history as one of the oldest universities in Australia, dating back to 1870. We are a diverse community with over 24,000 domestic and international students and 110,000 alumni across Australia and the world. We are creating a Federation of independent thinkers, of like-minded individuals who are determined to make their mark.

CHANDIGARH – THE CITY BEAUTIFUL

Located at 270 km north-west of New Delhi, Chandigarh-The City Beautiful is a well-planned and one of the fastest growing metropolitan cities of modern India, has emerged as an ideal Education and Training Centre in recent times. The city is a hub of many R&D projects, academic and industrial institutions including: SCL, Terminal Ballistic Research Lab, Snow & Avalanche Studies Institute, BEL, Software Technology Park, C-DAC, Medical and Engineering Colleges, Post Graduate Medical Institute, Central Scientific Instruments Organization etc. The city also offers pleasing sights in Rose Garden, Botanical Garden, Topiary Park, Terrace Garden, Rock Garden, Capital Complex, Museum and Art Gallery, Sukhana Lake, Palm Garden etc. The city is well connected with rail, road and air transport with all major cities of India.

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