



Two days' International conference on Sustainable Civil Engineering Practices

Chitkara University, Himachal Pradesh in collaboration Edith Cowan University, Australia organized "*Two days*' *International conference on Sustainable Civil Engineering Practices*" from **19th to 20th July 2019** with the support from Department of Science and Technology, New Delhi, SERB, New Delhi, QCI-NABL, New Delhi and industries from BBNDA.

The 8th Annual International conference was organized with clear objective to embed sustainable engineering practices to meet human needs for natural resources, industrial products, energy, food, transportation, shelter, and effective waste & material management. This must be done while conserving and protecting environment quality and the natural resource base, essential for future development.

The international conference was inaugurated by Mr. Dorji Tshering, Minister, Ministry of Works & Human Settlement, Royal Government of Bhutan, Thimpu, Bhutan and Dr. Madhu Chitkara, Pro-chancellor, Chitkara University. Other dignitaries and invited speakers were Dr. Varinder S. Kanwar, Vice Chancellor, Chitkara University, Himachal Pradesh, Dr. Sanjay Kumar Shukla, Professor, Edith Cowan University, Australia, Dr. Ashutosh Trivedi, Professor Civil Department, Delhi Technological University, Delhi and Dr Rajesh Kumar, Professor Civil Department, IIT BHU, Varanasi.



Mr. Dorji Tshering, Minister, Ministry of Works and Human Settlement, Royal Government of Bhutan, Thimpu in his keynote address discussed the initiatives undertaken by the Government of Bhutan on Sustainable development and that the government aims to provide a platform to all those who are working on rural innovations. He also discussed about the future trends in Civil Engineering technologies and products to adopt sustainability in growth.

Dr. Madhu Chitkara, Pro–Chancellor, Chitkara University, Himachal Pradesh in her keynote address focused on sustainable development and showed concern towards depleting resources and its adverse effects on the environment. She also spoke about the role of Civil Engineering in building a sustainable future with worldwide awareness, backed by scientific research with practices of sustainable construction methods to avoid harmful effects from construction. She reiterated that sustainability practice must start from home and by adopting these sustainable measures on the campus Chitkara University has attained the status of Zero Discharge Campus from Quality Council of India. The University has been awarded "Environment Leadership Awards from two consecutive years 2018-19, 2017-18 by Government of Himachal Pradesh for taking initiatives on sustainable development and solving the problem of society through its proactive research contribution to overcome the problems of community as a whole. It is being ranked in top ten Universities out of 3500 institutions PAN India in Swachhta Ranking for Higher Educational Institutions 2018 and 2017 by Ministry of Human Resource Management, Government of India. It is also Selected under the Unnat Bharat Abhiyan Ministry of Human Resource Management, Government of India for Rural Development.

Dr. Varinder S. Kanwar, Vice Chancellor, Chitkara University, Himachal Pradesh stated in his address the impact of man-made interventions on the environment and the ecosystem resulting to major resource crisis across the planet. He emphasized that 21st century civil engineers must consider the environmental, economic, and social sustainability of structural design.

Dr. Sanjay Kumar Shukla, Professor, Edith Cowan University, Australia spoke about the role of civil engineers in maintaining the overall safety of society in several ways, be it rural engineering, constructing highways and buildings bridges and tunnels. Later on he also presented paper on 'Sustainable Design of Slopes under Earthquake Conditions", which is very pertinent to the state of Himachal Pradesh.



The conference served as a platform to create awareness and appreciation among academicians, scientists, researchers and practioners from various disciplines and sectors about developing and implementing sustainable practices and technologies that minimize the impact on our environment. Deliberations on new initiatives in latest technologies were done in the field of infrastructure development and maintenance. 150 participants including 20 participants from overseas attended this conference. 25 researchers presented their research work on clean technologies and sustainable materials for rapid transformation for enhancing eco-efficiency and competitive strength of industries. One session of the conference was dedicated to Quality and Accreditation, where 5 officials from Quality Council of India and NABL, New Delhi presented the linkages of sustainability with quality.

The two-day conference concluded with powerful and enriching sessions by Prof. Siby John, PEC Chandigarh and Prof. Sanjay Kumar Sharma, NITTTR Chandigarh. The valedictory session was engrossed in formulating concrete strategies to optimally utilize the available resources for developing technologies and consolidating the suggestions, strategies and recommendations and putting forth the findings to appropriate authorities.











