

## National Conference on SUSTAINABLE INFRASTRUCTURE DEVELOPMENT-2015 (NCSID-2015)

February 26 – 27, 2015

### ABOUT CHITKARA UNIVERSITY

Chitkara University, Himachal Pradesh was established in the year 2008 by the Himachal Pradesh State Legislature under the "Chitkara University Act". It is a government-recognized university, is included in the list of universities maintained by the University Grants Commission, and has the right to confer degrees as per the Sections 2(f) and 22(1) of the UGC Act, 1956.

The Chitkara 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.

### Patrons-

Dr. M.P. Poonia,  
Director, NITTR, Chandigarh

Dr. Ashok K Chitkara,  
Chancellor, Chitkara University

### Conveners-

Dr. Sanjay K. Sharma  
Prof. & Head, Civil Engg. Dept.  
NITTR, Chandigarh

Dr. Varinder S. Kanwar  
Prof. cum Registrar,  
Chitkara University, H.P.

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Er. Jyothi PM

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18. Shri. D.K. Sharma, HP Pollution Control Board, Shimla, H.P.

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## National Conference on SUSTAINABLE INFRASTRUCTURE DEVELOPMENT-2015 (NCSID-2015)



# National Conference on Sustainable Infrastructure Development -2015 (NCSID-2015)



### Organized by

Department of Civil Engineering  
National Institute of  
Technical Teachers' Training & Research  
[Ministry of Human Resource  
Development, Govt. of India]  
Sector 26, Chandigarh 160 019  
(An ISO 2001:2008 Certified Institute)  
[www.nitttrchd.ac.in](http://www.nitttrchd.ac.in)

and

Department of Civil Engineering  
Chitkara University  
Himachal Pradesh  
Pinjore – Barotiwala Highway  
Atal Shiksha Kunj, Atal Nagar  
Barotiwala, District Solan,  
HP 174 103  
[www.chitkarauniversity.edu.in](http://www.chitkarauniversity.edu.in)

### IN ASSOCIATION WITH



### Venue of the Conference

National Institute of Technical Teachers' Training & Research Sector 26, Chandigarh  
& Chitkara University, Himachal Pradesh

# National Conference on Sustainable Infrastructure Development-2015 (NCSID-2015)

## INTRODUCTION

Often people fail to recognise the importance of infrastructure until they discover they don't have any. Infrastructure is the great enabler – it enables economic growth and, as a result, is the bedrock for better living conditions. Water, energy, transport and adequate housing are not only a source of development, they drive it forward too.

Water is a source of vital nutrients and the basis for hygiene. But it is an economic good and production factor, too. Access to this essential resource and to good sanitation is essential for health, peaceful coexistence and productivity. Dynamic development thrives on ecologically sustainable energy resources that can be accessed where they are needed – in private households, agriculture, industry and in the service sector. An effective transport system is the backbone of every modern economy. It gets people to their place of work, to school and college and brings them to doctors and hospitals. Furthermore, it also opens up rural areas for development and makes cities internationally competitive.

The Indian economy is getting bigger and better. Going with the estimates that Asia's third largest economy will become the world's third largest by 2050; a need for more robust and vast infrastructure is inevitable and continues to be the focus for the Government. Spanning from roadways to airways, ports to airports and power production facilities, infrastructure segment enjoys intense attention from top-grade policy makers of the country. Liberal and supportive Government policies coupled with deliberate strategies to promote infrastructure; spells great opportunities for engineering and construction (E&C) and Infrastructure management companies in India.

Economic development cannot go ahead if there is not sufficient energy to fuel it and no headway can be made with living conditions either. Many people are still cut off from modern energy supplies, especially in rural areas. We promote projects that give the poor better access to energy, since this creates jobs and helps improve their living conditions.

## OBJECTIVES

The conference shall serve as a platform to create awareness and appreciation amongst academicians, scientists, researchers and practitioners from various disciplines and sectors about infrastructure development; deliberate on new initiatives in latest technologies in the field of infrastructure; formulate concrete strategies with optimal utilization of available resources for developing these technologies; consolidate the suggestions, strategies and recommendations made during the conference and disseminate knowledge on the topic.

## THEMES

- Sustainable Infrastructure Development and Green Growth
- Smart materials and advanced construction practices
- Infrastructure Procurement and Project Management
- Infrastructure Maintenance and Facilities Management
- Infrastructure Planning and Management
- Infrastructure Disaster Management
- Transport Infrastructure
- Energy Infrastructure
- Water resources Management Infrastructure
- Urban Infrastructure
- Solid Waste management
- Earth moving and construction equipment industry
- Skilled manpower and safety
- Social Responsibility in Infrastructure Development
- Cultural Perspectives of Infrastructure Development
- Legislations and Government policies related to Infrastructure Development,
- Case Studies
- Sustainable Sanitation
- Geospatial Application in Sustainable Development & Management
- Sustainable Urban Mobility.

## CALL FOR PAPERS

- Academicians, Researchers and Corporate Executers are invited to send papers 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.
- The length of full paper should be about 4000 words, 12 point font size, Times New Roman, MS Word, 1.5 line spacing.
- Papers submitted in PDF format will not be accepted.
- Tables, illustrations, charts, figures, etc. should be serially numbered and should have a minimum resolution of 300 dpi
- References should be in the APA style and would be listed on a separate page at the end and should be appropriately indicated in the text of the paper by super scribing the relevant reference number.
- Each paper must contain an undertaking (duly signed by each of the authors) that it is exclusively for the said conference. The format is attached in the brochure.
- One hard copy should be sent to the conference convener along with a soft copy. The soft copy should be sent to [seminar.civil7@gmail.com](mailto:seminar.civil7@gmail.com).

## PROCEEDINGS

All papers accepted for presentation in the Conference will be published in the proceedings having ISBN Number. Few selected papers will be published in the National Journal of Engineering of Technology Education published by National Institute of Technical Teachers Training & Research (NITTTR) and in the Journal of Today's Ideas Tomorrows Technologies, published by Chitkara University.

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## SUBMISSION DEADLINES

Submission of abstract	-	14th January, 2015
Intimation of acceptance of abstract	-	19th January, 2015
Receipt of Full length Paper as per prescribed format	-	2nd February, 2015
Last date of receipt of Application for Registration	-	20th February, 2015

## SPONSORSHIPS

Joint collaboration	- ₹ 50,000/- (6 free delegates)	Sponsors	- ₹ 30,000/- (4 free delegates)
Co-Sponsors	- ₹ 15,000/- (2 free delegates)	Proceedings	- ₹ 50,000/-Conference/Dinner-40,000/-

## Advertisement in proceedings

Full color page	- ₹ 7500/-	Half color page	- ₹ 5000/-
Full black page	- ₹ 3000/-	Half black page	- ₹ 2000/-

## CONTACT PERSONS:

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Phone / Mobile Nos. 0172-2759514 (O); 098720 05961 (M)

**Dr. Varinder S. Kanwar**  
Registrar cum Professor, Chitkara University, HP  
Phone / Mobile Nos. 01795-661002 (O); 09805965401 (M)

## REGISTRATION FEE

Academic/Research Institutes	- ₹ 2000/-	Research Scholars/Students	- ₹ 1000/-
Industry	- ₹ 3000/-	Foreign delegates	- US \$ 100

The registration fee covers the proceedings, conference, kit, refreshment and lunch during the days of the Conference. The registration fee may be paid by cash/demand draft in favour of Director, NITTTR, Chandigarh, Payable at Chandigarh.

Accommodation can be provided in the institute hostel for delegates on request. Participant are requested to ask for accommodation in advance latest by 10th February 2015.

## CHANDIGARH – THE CITY BEAUTIFUL

Located at 270 km north-west of New Delhi, City Beautiful Chandigarh, 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.

## WEATHER

In the month of February, there will be cold conditions. Woolen clothes will be required during this period.

## ABOUT NATIONAL INSTITUTE OF TECHNICAL TEACHER'S TRAINING AND RESEARCH

National Institute of Technical Teachers' Training and Research, Chandigarh has been established by Ministry of Human Resource Development, Government of India for the development of Technical Education. The institute has excellent laboratories, library, computer centre and modern reprographic and other production facilities. The institute offers short term courses in the areas of Civil, Mechanical, Electrical and Electronics Engineering, Educational Management, Entrepreneurship Development, Rural Development, Applied Science and Computer Science.

Civil Engineering Department offers a variety of professional level courses such as Concrete Quality and Mix Design, R.C.C. Design, Repair and Rehabilitation of Structures, Construction Planning and Management, Construction, Operation and Maintenance of Tubewells etc. in addition to courses in areas like Soil Engineering, Environmental Engineering, Highway Engineering and Irrigation and Hydraulics Engineering, Software Applications etc. Civil Engineering laboratories in the relevant field are well equipped for carrying out laboratory and field experiments.



**REGISTRATION FORM**  
**National Conference on**  
**Sustainable Infrastructure Development-2015 (NCSID-2015)**

February 26-27, 2015 at NITTTR, Chandigarh & Chitkara University, Himachal Pradesh

Name: \_\_\_\_\_

Age : \_\_\_\_\_ Sex : Male  Female

Designation: \_\_\_\_\_

Official Address : \_\_\_\_\_

Phone (With STD Code) : \_\_\_\_\_ Mobile : \_\_\_\_\_

E-mail: \_\_\_\_\_

Whether presenting a paper: Yes  No

If yes, kindly indicate the title \_\_\_\_\_

Whether Accommodation Needed: Yes  No

Arrival/Departure Details:

Date and Time of Arrival \_\_\_\_\_

Date and Time of Departure \_\_\_\_\_

Details of Registration Fee: DD/Cheque  Cash

DD/Cheque No. & date \_\_\_\_\_

Amount in Rs. \_\_\_\_\_

Name of Bank \_\_\_\_\_

**(Demand Draft/Cheque to be drawn in the favour of Director, NITTTR Chandigarh,  
Payable at Chandigarh)**

**Signature of the Applicant**

**Signature of the Sponsoring Authority  
with office seal**

**Date :** \_\_\_\_\_

**Place** \_\_\_\_\_

**AUTHOR'S DECLARATION**  
**National Conference on**  
**Sustainable Infrastructure Development-2015 (NCSID-2015)**

February 26-27, 2015 at NITTTR, Chandigarh & Chitkara University, Himachal Pradesh

I declare that the paper entitled “ \_\_\_\_\_ ”

authored by “ \_\_\_\_\_ ”

submitted for the National Conference on “Sustainable Infrastructure Development-2015 (NCSID-2015)” held by the Civil Engineering Department, National Institute of Technical Teachers' Training and Research, Chandigarh and Civil Engineering Department, Chitkara University, Himachal Pradesh from 26-27 February, 2015 at NITTTR, Chandigarh & at Chitkara University, Himachal Pradesh is work carried out by me/under me. Due acknowledgment has been made for references from other sources. The paper has not been published elsewhere.

**Dated:**

**(Author(s))**