

Report

Six Day Online Workshop on

“Mix-Design Methodology for Concrete and Bitumen”

A six day online workshop on “**Mix-Design Methodology for Concrete and Bitumen**” was organized by the Department of Civil Engineering. The program was organized from 24th June 2019 to 29th June 2019 (6 Days). The workshop was designed for the Academicians/Engineers and Engineering students to give an exposure to the new innovative ideas and current sustainable construction practices in Civil Engineering in order to make them familiar to mix design method for flexible and rigid pavement.

The program was successfully completed under the auspices of

- Prof. Vinod Kumar – Vice Chancellor of JUIT Waknaghat and Patron of the organized CEP by the Department of Civil Engineering
- Prof. Samir Dev Gupta – Director and Dean of Academics, JUIT Waknaghat
- Major General Rakesh Bassi (Retd.) - Registrar and Dean of Students of JUIT Waknaghat
- Prof. Ashok Kumar Gupta – HOD, Department of Civil Engineering, JUIT Waknaghat and Program Chair of the organized CEP by the Department of Civil Engineering
- Dr. Amardeep – Assistant Professor, Department of Civil Engineering, JUIT Waknaghat and Program Convener.
- Dr. Pankaj – Assistant Professor, Department of Civil Engineering, JUIT Waknaghat and Program Convener.
- Dr. Tanmay Gupta – Assistant Professor, Department of Civil Engineering, JUIT Waknaghat and Program Convener.

Workshop Schedule

24/06/19 First Day		
09:00- 10:00 am	Prof. Ashok Kumar Gupta	Inaugural Lecture
High Tea		
10:30- 12:30 pm	Dr. Pankaj Kumar	Concrete Mix Design: Overview
Lunch		
02:00- 05:00 pm	Dr. Pankaj Kumar Mr. Jaswinder	Casting of Concrete Mix-Design Samples of Various Strengths (Concrete Lab) <ul style="list-style-type: none"> • Mix-Design Cubes of Standard Sizes • Split Tensile Testing Cylinder of Standard Sizes
25/06/19 Second Day		
09:00- 10:00 am	Dr. Pankaj Kumar	Introduction to Cement and its Testing Methodologies
High Tea		
10:30- 12:30 pm	Dr. Pankaj Kumar Mr. Jaswinder	Cement Lab Testing: <ul style="list-style-type: none"> • Normal Consistency • Initial and Final Setting Time
Lunch		
02:00- 05:00 pm	Dr. Pankaj Kumar Mr. Jaswinder	Cement Lab Testing Continued: <ul style="list-style-type: none"> • Specific Gravity of Cement • Compressive strength of Cement • Tensile strength of Cement • Soundness of Cement
26/06/19 Third Day		
09:00- 10:00 am	Dr. Pankaj Kumar	Concrete Matrix and its Constituents
High Tea		
10:30- 12:30 pm	Dr. Pankaj Kumar Mr. Jaswinder	Concrete Matrix Lab Testing: <ul style="list-style-type: none"> • Characterization of Fine Aggregate • Bulking of Sand • Specific Gravity of Fine Aggregate
Lunch		
02:00- 05:00 pm	Dr. Pankaj Kumar Mr. Jaswinder	Concrete Matrix Lab Testing Continued: <ul style="list-style-type: none"> • Specific Gravity of Coarse Aggregate • Flakiness Index and Elongation Index of Coarse Aggregate • Impact Abrasion Test • Workability Tests on Concrete
27/06/19 Fourth Day		
09:00- 10:00 am	Dr. Amardeep	Bitumen Grading, Properties and Mix Design in Pavement Construction: Methodological Discussion

High Tea		
10:30- 12:30 pm	Dr. Amardeep Mr. Jaswinder	Bitumen Lab Tests: <ul style="list-style-type: none"> • Introduction to different graded Bitumen <ul style="list-style-type: none"> ▪ Penetration Test ▪ Viscosity Test
Lunch		
02:00- 05:00 pm	Dr. Amardeep Mr. Jaswinder	<ul style="list-style-type: none"> • Specific Gravity Test • Ductility Test • Softening Point Test • Flash and Fire Test
28/06/19 Fifth Day		
09:00- 10:00 am	Dr. Amardeep Mr. Jaswinder	Different Specifications for Bitumen Mix Design
High Tea		
10:30- 12:30 pm	Dr. Amardeep Mr. Jaswinder	<ul style="list-style-type: none"> • Bitumen Mix Design
Lunch		
02:00- 05:00 pm	Dr. Amardeep Mr. Jaswinder	<ul style="list-style-type: none"> • Bitumen Mix Design Continuation
29/06/19 Sixth Day		
09:00- 11:00 am	Dr. Pankaj Kumar Mr. Jaswinder	Concrete Sample Testing (Strength Assessment)
High Tea		
11:30-1:00 pm	Dr. Amardeep Dr. Pankaj Kumar	Feedback Session
Lunch		
02:00- 05:00 pm	Prof. Ashok Kumar Gupta	Closing Ceremony

Other Salient Features

- Video Recording of all lectures by the speakers for the Workshop available with the organizing committee.
- Presentation slides of all lectures by the speakers for the Workshop available with the organizing committee and has been distributed to participants.
- Certificates of participation issued to all registered participants.
- Certificates of resource persons issued to all the listed speakers.

- Feedback collected from participants for further improvement in conducting such future online Workshops

Summary of the Participants

Types of Participants	Total No. of Registered Participants
HPPWD Assistant and Junior Engineers	25
Other Participants	60

Feedback of the Participants

Types of Participants	Total No. of Registered Participants
HPPWD Assistant and Junior Engineers (25)	Excellent (87%) Very Good (10%) Good (3%)
Other Participants (60)	Excellent (78%) Very Good (20%) Good (2%)

With Regards

Dr. Amardeep,

Program Coordinator

Department of Civil Engineering

Jaypee University of Information Technology Waknaghat