

Summary of the course report

The course titled “TEQIP-III Sponsored Short-Term Course on Advances in Civil Engineering was conducted on 7-11 October, 2020 in the Discipline of Civil Engineering at IIT Indore through online mode using Google meet platform. A total number of 225 participants had registered for the course out of which 150 participants attended the course. Out of 150 participants, 50 participants were faculty members from TEQIP institutes and 100 participants were faculty members from non-TEQIP institutes and students. The details related to the program schedule, participants, and screen shots, survey of the participants, links for conducting sessions for this program have been provided below.

1. Program schedule:

TEQIP-III Sponsored Short-Term Course on Advances in Civil Engineering (7-11 October, 2020) at IIT Indore

7.10.2020	9.45 AM-10 AM (Inauguration) Chief Guest: Professor Nilesh Kumar Jain, Director (Officiating), IIT Indore	10 AM-12 PM Talk on Impact Mechanics Speaker: Professor M. A. Iqbal (IIT Roorkee)	12 PM-02 PM Talk on Soil- Structure Interaction Speaker: Professor V. A. Sawant (IIT Roorkee)	03 PM-05 PM Talk on Eigen Perturbation Techniques for real-time vibration based condition monitoring of infrastructure Speaker: Professor B. Hazra (IIT Guwahati)	05 PM-07 PM Finite Element Modelling practical session with some example Speaker: Dr. Abhishek Rajput (IIT Indore)
8.10.2020		10 AM-12 PM Talk on Steel- Concrete composite structures Speaker: Professor Sandeep Chaudhary (IIT Indore)	12 PM-02 PM Talk on Climate Change and DRR in terms of Ecosystem Resilience of Indian River Basins Speaker: Dr. Manish Kumar Goyal (IIT Indore)	03 PM-05 PM Talk on Fibre Optic Sensing Technology for Civil Engineering Application Speaker: Dr. Lalit Borana (IIT Indore)	05 PM-07 PM Finite Element Modelling practical session with some example Speaker: Dr. Abhishek Rajput (IIT Indore)
9.10.2020		10 AM-12 PM Talk on Infrastructure Asset Management Speaker: Dr. Daijirao Mizutani (Tohoku University)	12 PM-02 PM Talk on Computational Mechanics Speaker: Dr. Saikat Sarkar (IIT Indore)	03 PM-04 PM Talk on Flexible Pavement Non- Destructive Testing & Evaluation Speaker: Dr. Priyansh Singh (IIT Indore) 04 PM-05 PM Talk on Ground water extraction related	05 PM-07 PM Finite Element Modelling practical session with some example Speaker: Dr. Abhishek Rajput (IIT Indore)

				subsidence and applications of remote sensing Speaker: Dr. Munir Ahmad Nayak (IIT Indore)	
10.10.2020		10 AM-12 PM Talk on Cement Concrete Pavements Speaker: Dr. Surender Singh (IIT Madras)	12 PM-02 PM Talk on Behaviour of materials at high strain rates and corrosive conditions Speaker: Dr. Abhishek Rajput (IIT Indore)	03 PM-05 PM Talk on Landslide forecasting and real time monitoring Speaker: Dr. Neelima Satyam (IIT Indore)	05 PM-07 PM Finite Element Modelling practical session with some example Speaker: Dr. Abhishek Rajput (IIT Indore)
11.10.2020		10 AM-12 PM Talk on Reliability of offshore structures Speaker: Dr. Jose Cabrera (University of the Américas Puebla, Mexico)	12 PM-02 PM Talk on Damage detection and prognosis on structural health monitoring Speaker: Dr. Guru Prakash (IIT Indore)	03 PM-05 PM Talk on Contemporary Civil Engineering Speaker: Professor D. N. Singh (IIT Bombay)	05 PM- 5.15 PM Valedictory Session

2. List of participants:

Faculty members from TEQIP institutes:

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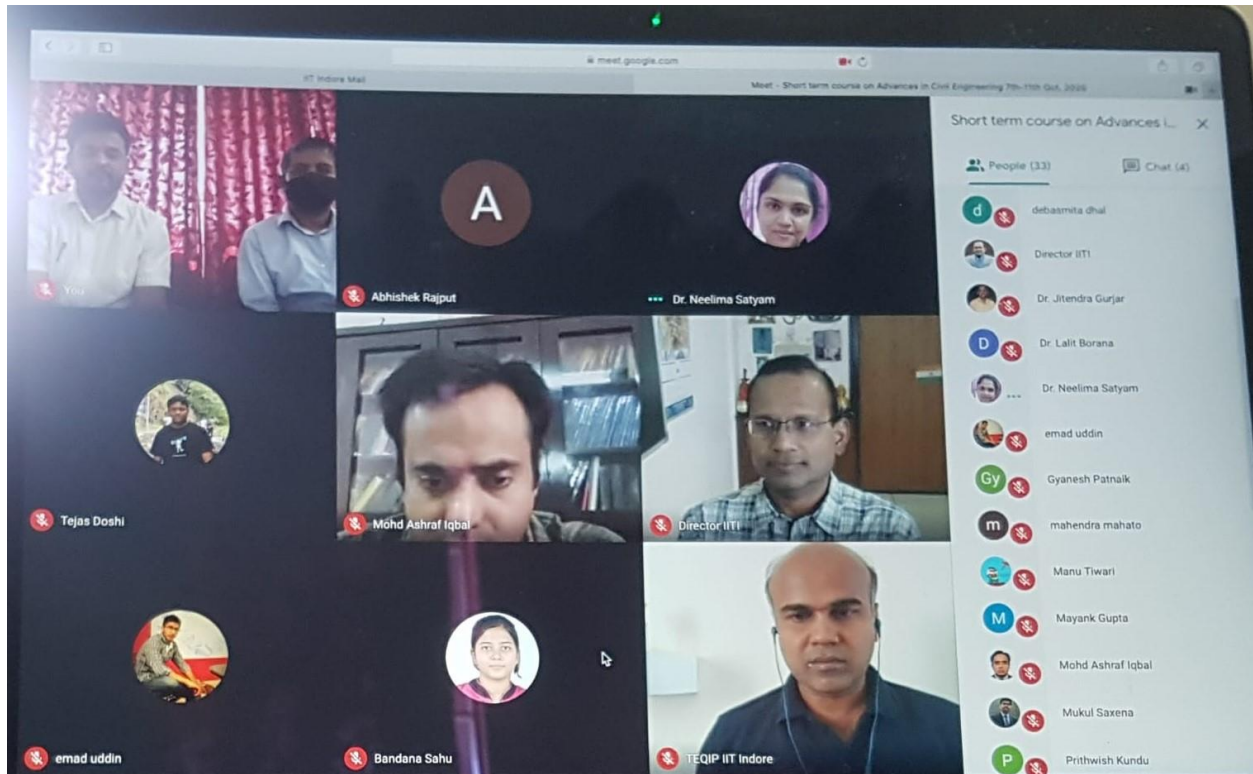
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3. Screen shots of the program:



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IIT Indore Mail Meet - Short term course on Advances in Civ... Indian Institute of Technology, Indore Profile | Prof. Sandeep Chaudhary Dr. Manish Kumar Goyal

Dr. Sandeep Chaudhary is presenting

rajendra patil and 40 more 11:59 AM

You are presenting

You're presenting to everyone

Stop presenting

rajendra patil and 40 more

You

Abhishek Rajput

Prabhanshu Tiwari

sagar sarangi

vimal sharma

R.K. Choubey

Rajat Palya

emad uddin

Mayank Gupta

Prabhanshu Tiwari

Pankaj Agrawal

Nikunj Binnani

R.K. Choubey

Rajat Palya

Mayank Gupta

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ENG 08-10-2020

Short term course on Advances in Civil E... Turn on captions Dr. Sandeep Chaudhary is presenting

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IIT Indore Mail Meet - Short term course on Advances in Civ... Indian Institute of Technology, Indore Profile | Prof. Sandeep Chaudhary Dr. Manish Kumar Goyal

sagar sarangi and 43 more 11:56 AM

Dr. Sandeep Chaudhary

Pankaj Agrawal

Prabhanshu Tiwari

R.K. Choubey

Presentation (Dr. Sandeep Chaudhary)

Fig. School building with collapsed precast RC panels - Gujarat.

Short term course on Advances in Civil E... Turn on captions Present now

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IIT Indore Mail Meet - Short term course on Advances in Civil Engineering 7th-11th Oct, 2020 YouTube

Short term course on Ad... Turn on captions Present now

People (32) Chat

Add people Host controls

- Abhishek Rajput (You)
- Abhishek Rajput
- ahmad shakir
- Amit Golder
- Anshul Kaushik
- anubhav rai
- Chetan Sharma
- Dean of Infrastructure Development
- Debjani Panda
- Dr. Lalit Borana

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IIT Indore Mail Meet - Short term course on Advances in Civ... Indian Institute of Technology, Indore Profile | Prof. Sandeep Chaudhary Dr. Manish Kumar Goyal - Distinctions

Dr. Manish Kumar Goyal is presenting

Climate Change and DRR in terms of Ecosystem Resilience of Indian River Basins

Dr. Manish Kumar Goyal
Department of Civil Engineering
Indian Institute of Technology Indore
08 Oct 2020

Short term course on Ad... Turn on captions Dr. Manish Kumar Goyal is presenting

People (47) Chat

Add people Host controls

- Abhishek Rajput (You)
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Amit Golder
- Anshul Kaushik
- anubhav rai
- chetan sharma
- Debasis Panda
- Dr. Lalit Borana
- Dr. Manish Kumar Goyal

Hindustan Times

Only 1 in 4 rivers can aid agri during drought

IT-G STUDY UP, Madhya Pradesh, Rajasthan, Gujarat, and parts of Maharashtra, Andhra Pradesh and Odisha are most vulnerable to drought

MAPPING RESILIENCE OF INDIA'S ECOSYSTEM

NON-RESILIENT BASINS
Ganga basin competing with cities and industries for water. Includes: Godavari, Krishna, Cauvery, Tapi, Narmada, Gomti, Chambal, Betwa, Mahanadi, Pennar, Gomti, Chambal, Betwa, Mahanadi, Pennar, Gomti, Chambal, Betwa, Mahanadi, Pennar.

VEGETATION THAT CAN WITHSTAND DROUGHT:
Drought-resistant crops like pulses, oilseeds, and millets.

VULNERABLE VEGETATION:
Cereals like wheat, rice, sugarcane, and cotton.

The map shows
New resilient basins are shown in green. Old basins are shown in orange and red. The map shows that India's basins are mostly in the drought-prone zone.

The study reinforces the need to use rainwater by harvesting and storing it. Even though this year the country has recorded a 5% deficiency in rainfall, there's a great disparity with some districts almost starving at a drought like situation.

Of the seven basins that are most vulnerable, the Godavari basin is the most vulnerable. It is followed by the Krishna basin and the Cauvery basin. The Godavari basin is the most vulnerable because it is the largest basin in the drought-prone zone. It is followed by the Krishna basin and the Cauvery basin. The Godavari basin is the most vulnerable because it is the largest basin in the drought-prone zone. It is followed by the Krishna basin and the Cauvery basin.

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Someone wants to join this meeting

Subha Prakash Rath (outside IIT Indore)

Deny entry Admit

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IIT Indore Mail Failed to open page Failed to open page Meet - Short term cour... YouTube Indian Institute of Technol... Profile | Prof. Sandeep Cha... Dr. Manish Kumar Goyal

Dr. Sandeep Chaudhary is presenting

FUTURE IN STEEL-CONCRETE COMPOSITE CONSTRUCTION

- **New materials and products**
high strength weldbale steels, high strength concrete, rolled plates of variable thickness
- **Construction detailing**
control of concrete slab cracking, external prestressing, better launching technique
- **Conceptual Structural Design**
double composite action through upper and lower slabs, corrugated steel webs, precast concrete slabs
- **New types of shear connectors**
adhesive shear connection
- **External longitudinal prestressing**
- **Double composite action**
concrete at the bottom of flange on either side of pier

67

Short term course on Ad... Turn on captions Dr. Sandeep Chaudhary is presenting

Short term course on Advances i... X

People (49) Chat

Add people Host controls

- Abhishek Rajput (You)
- Abhijit Anand
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Amit Golder
- Ankit Bharadawaj
- Anshul Kaushik
- Bandana Sahu
- BRIJ PANDEY
- Debasis Panda

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Dr. Sandeep Chaudhary is presenting

NUMERICAL STUDY FOR CONTROL OF CRACKING AND TIME-DEPENDENT EFFECTS

(a) EB1

(b) EB2

(c) EB3

Depth of steel section= 1,000 mm

Cross sectional area= 42630 mm²

Moment of inertia of steel section = 6.7*10⁹ mm⁴

Width of concrete slab= 2,000 mm

Depth of concrete slab, $d_c = 150, 200$ and 250 mm

60

Short term course on Ad... Turn on captions Dr. Sandeep Chaudhary is presenting

Short term course on Advances i... X

People (49) Chat

Add people Host controls

- Abhishek Rajput (You)
- Abhijit Anand
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- Abhishek Rajput
- abhishek shrivastava
- Amit Golder
- Ankit Bharadawaj
- Anshul Kaushik
- anubhav rai
- Bandana Sahu
- Debasis Panda

Dr. Sandeep Chaudhary is presenting

COMPOSITE CONSTRUCTION

Concrete slab
Steel Beam

ISOMETRIC VIEW

CROSS SECTION

Studs

Steel Beam

LONGITUDNAL SECTION ..

55

Short term course on Ad... ^

Turn on captions

Dr. Sandeep Chaudhary is presenting

Short term course on Advances i... X

People (48) Chat

Add people Host controls

- Abhishek Rajput (You)
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Amit Golder
- Anshul Kaushik
- anubhav rai
- Bandana Sahu
- Debasis Panda
- Debjani Panda
- Deepti Surana

Dr. Sandeep Chaudhary is presenting

PARKING DECK "DEZ"

Erection of composite columns over 2 storeys

Assembly of prefabricated concrete slabs

42

Short term course on Ad... ^

Turn on captions

Dr. Sandeep Chaudhary is presenting

Short term course on Advances i... X

People (46) Chat

Add people Host controls


- Abhishek Rajput (You)
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Debjani Panda
- Deepti Surana
- Devendra Dohare
- Dr. Lalit Borana

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Dr. Sandeep Chaudhary is presenting

PLACEMENT OF CONCRETE



- There is an art to the placement of concrete on metal deck and structural steel
- The work, unless shoring is used, must be executed on a deflecting surface
- An experienced concrete contractor should be employed for this work
- Concrete should be deposited over supporting members first, then spread toward the deck midspans
- The accumulation of a deep pile of concrete must be avoided

18

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People (42) Chat

Add people Host controls



- Abhishek Rajput (You)
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Debjani Panda
- Dr. Lalit Borana
- Dr. Sandeep Chaudhary
- Dr. Sandeep Chaudhary (Presentation)

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Dr. Sandeep Chaudhary is presenting

HEAT CAMBERING

- Beams may be cambered by applying heat to small wedge-shaped areas at specific increments along the beam
- The beam is placed upside down on supports so the "bottom" flange can be heated
- The heated flange expands under the heat and contracts as it cools
- Camber is induced in the opposite side of the beam as the heated flange cools

27

Short term course on Ad... Turn on captions Dr. Sandeep Chaudhary is presenting

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People (44) Chat


Add people Host controls

- Abhishek Rajput (You)
- Abhijit Anand
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Amit Golder
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Debjani Panda
- Deepak kumar Sahu

Dr. Sandeep Chaudhary is presenting

Jitendra Singh and 18 more

STEEL-CONCRETE COMPOSITE CONSTRUCTION



- In many buildings and bridges, it is common to have a concrete slab supported by steel beams. If the steel beams are connected to the concrete slab in such a way that the two act as one unit, the beam is called as composite beam.
- Composite beams are similar to concrete T-beams where the flange of the T-beam is made of concrete slab and the web of the T-beam is made of the steel section.
- Composite beam has the advantage that the concrete in the slab takes all or most of the compression (which is best suited), while the steel beam takes all the tension in the overall system.

Participant list:

- You
- Dr. Sandeep Chaudhary
- Abhishek Rajput
- Abhishek Ojha
- Er. Satyam Vishwakar...
- Najim ali
- Roushan Kumar
- Gyanesh Patnaik



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Guru Prakash is presenting

Introduction

Infrastructure Sensors Interpretation / Analysis

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People (27) Chat

Add people Host controls

- Abhishek Rajput (You)
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- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- Debabrata Giri
- Debasis Panda
- Deepti Hazari
- Devendra Dohare
- DEVENDRA SINGH Bisht
- Dr. Rakesh kumar Dubey

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INFLUENCE OF TOP TENSION

Probability

F

Pretension:
 $f = F T_m / L W_e$

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People (33) Chat

Add people Host controls

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- abhishek shrivastava
- Anshul Kaushik
- BRIJ PANDEY
- Deepti Hazari
- Devendra Dohare
- DEVENDRA SINGH Bisht
- Dhruv Saxena
- Dr. Rakesh kumar Dubey

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LHS

F_5 U \emptyset

X_1 X_2 X_3

P

0 - 0.2	●	●	●
0.2 - 0.4	●		●
0.4 - 0.6		●	●
0.6 - 0.8		●	●
0.8 - 1	●		●

Experiment	X_1	X_2	X_3
1	0.09	0.96	0.32
2	0.43	0.17	0.63
3	0.38	0.79	0.52
4	0.88	0.31	0.05

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People (32)

Chat

Add people Host controls

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- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- Deepti Hazari
- Devendra Dohare
- DEVENDRA SINGH Bisht
- Dhruv Saxena
- Dr. Rakesh kumar Dubey
- Girijesh Kumar

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PERFORMANCE INDICATORS

- Correlation coefficient

$$R = \frac{\sum_{i=1}^n (y_i - \bar{y})(y_i^{pre} - \bar{y}^{pre})}{\sqrt{\sum_{i=1}^n (y_i - \bar{y}) \sum_{i=1}^n (y_i^{pre} - \bar{y}^{pre})}}$$

- Root mean square error

$$SE = \sqrt{\frac{1}{n} \sum_{i=1}^n (y_i - y_i^{pre})^2}$$

- Mean absolute error

$$MAE = \frac{1}{n} \sum_{i=1}^n |y_i - y_i^{pre}|$$

See Nguyen et al. (2019)

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People (33)

Chat

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- Devendra Dohare
- Dhruv Saxena
- Dr. Rakesh kumar Dubey
- Girijesh Kumar
- Gunu Prakash

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RELIABILITY-BASED DESIGN

```

    graph TD
      A[Define target reliability] --> B[Identify failure modes]
      B --> C[Formulate limit state functions]
      C --> D[Probabilistic characterisation of random variables]
      D --> E{reliability ≥ target reliability}
      E -- NO --> F[Redesign]
      F --> D
      E -- YES --> G[Sensitivity analysis]
      G --> H[Final design]
      G --> F
  
```

Based on: Paik (2018)

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abhishek shrivastava
Anshul Kaushik
Debabrata Giri
Debasis Panda
Deepti Hazari
Devendra Dohare
Dhruv Saxena
Girijesh Kumar
Guru Prakash
Gyanesh Patnaik
Jose Manuel Cabrera
Jose Manuel Cabrera (Presentation)
leena sinha

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TOOLS FOR ANALYSING RISK

Qualitative: SWOT, Cause and Effect Diagrams, Checklists, HAZID, HAZOP, What-If Analysis, SWIFT

Quantitative: Probabilistic Analysis, PoF, HL, Concept of LSs, FORM, SRSM, MCS, Kriging, ISRM

Semi-Quantitative: FTA, RBD, BBN, FMECA, MA, FST, MADM/MCDA

Taken from: Leimeister and Kolios (2018)

Lusi Subhadarsini (outside IIT Indore) joined

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abhishek shrivastava
Anshul Kaushik
Debabrata Giri
Debasis Panda
Deepti Hazari
Dhruv Saxena
Girijesh Kumar
Gyanesh Patnaik
Jose Manuel Cabrera
Jose Manuel Cabrera (Presentation)
leena sinha
Lusi Subhadarsini
mahendra mahato

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People (28) Chat

- abhishek shrivastava
- Anshul Kaushik
- Debabrata Giri
- Debasis Panda
- Deepti Hazari
- Dhruv Saxena
- Girijesh Kumar
- Gyanesh Patnaik
- Jose Manuel Cabrera
- Jose Manuel Cabrera (Presentation)
- mahendra mahato
- Maresh Chandra
- Mohd Abubakr

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DECISSION-MAKING

Based on:
Faber (2012)

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abhishek shrivas... and 16 more

27 10:23 AM You

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DECISSION-MAKING

Based on:
Faber (2012)

R.K. Choubey has left the meeting

Debasis Panda (outside IIT Indore) joined

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VOLCANIC ERUPTION



Popocatepetl, Mexico, 31 March 2019



Rababul, Papua Nueva Guinea, 1984



Whakaari / White Island in New Zealand, 9 December 2019

<https://apnews.com/article/c3528f13a47d24f3549f7bffd83fd5fe>












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People (26) Chat

Add people Host controls

-  Abhishek Rajput (You)
-  Abhishek Rajput
-  abhishek shrivastava
-  Anshul Kaushik
-  Debabrata Giri
-  Debjani Panda
-  Deepti Hazari
-  Dhruv Saxena
-  Girjesh Kumar
-  Gyanesh Patnaik
-  Jose Manuel Cabrera

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SAFETY IN CIVIL ENGINEERING

- Promote development
- Take care of life and environment
- Take care of investments
- Design for $R > S$












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People (23) Chat

Add people Host controls

-  Abhishek Rajput (You)
-  Abhishek Rajput
-  abhishek shrivastava
-  Anshul Kaushik
-  Debabrata Giri
-  Debjani Panda
-  Deepti Hazari
-  Dhruv Saxena
-  Girjesh Kumar
-  Gyanesh Patnaik
-  Jose Manuel Cabrera

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D N Singh is presenting

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People (38) Chat

- Gurpreet kumar
- Guru Prakash
- Gyanesh Patnaik
- HARI OM TAMRAKAR
- Irfan Mohi Ud Din
- JOHNSON SINGH
- Karthick S
- Mintoo kumar Gautam
- Prabhanshu Tiwari
- Punyamayee Pattanaik
- R K Bhatia
- R.K. Choubey
- rahul kumar

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Turn on captions

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People (39) Chat

- HARI OM TAMRAKAR
- Irfan Mohi Ud Din
- JOHNSON SINGH
- Karthick S
- mahendra mahato
- Mintoo kumar Gautam
- Prabhanshu Tiwari
- Punyamayee Pattanaik
- R K Bhatia
- rahul kumar
- RAJAN KUMAR
- RAKESH GROVER

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Turn on captions

D N Singh is presenting

“Relevance/Importance”

“Quality/Quantity/Output”

“Motivation”

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D N Singh is presenting

“Relevance/Importance”

“Quality/Quantity/Output”

“Motivation”

Short term course on Ad... ^

Turn on captions

D N Singh is presenting

Short term course on Advances i... X

People (38) Chat

- BRIJ PANDEY
- D N Singh
- D N Singh (Presentation)
- D N Singh
- Debabrata Giri
- Debasis Panda
- Dr. Lalit Borana
- Dr. Rakesh kumar Dubey
- Dr. Sandeep Thakur
- emad uddin
- Girijesh Kumar
- Guru Prakash

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Favourites

D N Singh is presenting

Recent Trends

- **Materials Science (Neo/Nano Materials)**
- **Mining (Mineral Engineering)**
- **Geo-hazard Mitigation**
- **IT/ AI/Expert Systems**
- **Bio-geo interface (Molecular mechanics)**
- **Fire Protection Engineering**
- **Infrastructure Engineering (Land creation)**
- **Preservation/Restoration and Rehabilitation of Monumnets/old structures**
- **Arctic (Cold Region) /Lunar/Martian Soil Mechanics**
- **Forensic Engineering (Engineering aspects of legal problems)**
- **Energy**

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Turn on captions

D N Singh is presenting

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People (39) Chat

- Debasis Panda
- Dr. Lalit Borana
- Dr. Rakesh kumar Dubey
- Dr. Sandeep Thakur
- emad uddin
- Girijesh Kumar
- Guru Prakash
- Gyanesh Patnaik
- HARI OM TAMRAKAR
- Irfan Mohi Ud Din
- JOHNSON SINGH
- Karthick S
- leena sinha

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Recent Trends

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People (38) Chat

Add people Host controls

- Abhishek Rajput (You)
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- Anshul Kaushik
- anubhav rai
- BRIJ PANDEY
- D N Singh
- D N Singh (Presentation)
- D N Singh
- Debasis Panda
- Debjani Panda
- Dr. Lalit Borana

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Recent Trends

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People (37) Chat

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- D N Singh
- Debasis Panda
- Debjani Panda

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- **Fire Protection Engineering**

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People (36) Chat

Add people Host controls

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- Anshul Kaushik
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- Debjani Panda

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People (34) Chat

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Recent Trends

- **Materials Science (Neo/Nano Materials)**
- **Mining (Mineral Engineering)**
- **Geo-hazard Mitigation**

Shilpi Bhuiyan (outside IIT Indore) joined

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People (31) Chat

Add people Host controls

- Abhishek Rajput (You)
- Abhishek Rajput
- Anshul Kaushik
- anubhav rai
- BRIJ PANDEY
- D N Singh
- D N Singh (Presentation)
- D N Singh
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Recent Trends

- **Materials Science (Neo/Nano Materials)**
- **Mining (Mineral Engineering)**

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Short term course on Advances i... X

People (30) Chat

Let everyone send messages

thank you very much sir , for sharing your knowledge even at mid night

Jose Manuel Cabrera 11:43 AM
<http://www.tandfonline.com/eprint/efwVg6rWQCyeZ6pCqib/full>
 jose.cabrera@udlap.mx

You 12:38 PM
 It is requested to fill the feedback form on following link
<https://docs.google.com/forms/d/1neQDwHwBIJCK07mJKdNCqjBfL7bLH7V29ju6JO41g/edit?usp=sharing>
 kindly ignore if you already filled the same.
 thanks

Prabhanshu Tiwari 2:44 PM
 hank you sir
 thank*

You 2:58 PM
 Dear all
 we will start in 5 mins

Send a message to everyone

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Recent Trends

- **Materials Science (Neo/Nano Materials)**
- **Mining (Mineral Engineering)**

🔊 🔇 🗑️

Short term course on Ad... | Turn on captions | D N Singh is presenting

Short term course on Advances i... X

👤 People (28) | Chat

Let everyone send messages

thank you very much sir , for sharing your knowledge even at mid night

Jose Manuel Cabrera 11:43 AM
<http://www.tandfonline.com/eprint/efwVg6rWQCye6Z6pCqIb/full>
 jose.cabrera@udlap.mx

You 12:38 PM
 It is requested to fill the feedback form on following link
<https://docs.google.com/forms/d/1neODWpHWBIJcK07mJKdNCqjBfiZbLHVZ9ju6J041g/edit?usp=sharing>
 kindly ignore if you already filled the same.
 thanks

Prabhanshu Tiwari 2:44 PM
 thank you sir
 thank*

You 2:58 PM
 Dear all
 we will start in 5 mins





Send a message to everyone

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Surender Singh is presenting

Research Group at IITM

			
Prof. Ravindra Gettu	Prof. Manu Santhanam	Prof. K.N. Satyanaranya	Prof. A..Veeraragavan

🔊 🔇 🗑️

			
Prof. K. Ramamurthy	Dr. Radhakrishna G. Pillai	Dr. Piyush Chaunsali	Dr. Surender Singh

10/10/2020
Sustainable Concrete Pavements
52

Short term course on Advances in Civil E... | Turn on captions | Surender Singh is presenting

Abhishek Rajput and 29 more

11:21 AM

You | Surender Singh

Nitin Tiwari | Girijesh Kumar

Shuddhashil Ghosh | Sanchit Gupta

vaqas sheikh | vimal sharma

Concrete Recycling: Indian Scenario

Rohit et al. (In preparation)

10/10/2020 Sustainable Concrete Pavements 30

Participants in the meeting:

- You
- Surender Singh
- Nitin Tiwari
- Girijesh Kumar
- Debabrata Giri
- Sanchit Gupta
- vaqas sheikh
- vimal sharma

ITZs in Recycled aggregate concrete (RAC)

Interfacial transition zone (ITZ) in concrete is considered as the weakest zone in concrete. In recycled aggregate concrete, the influence is magnified due to presence of two ITZ. RCA in concrete may be considered as a composition of five distinct phases.

(Limbachiya, 2010, Butler et al., 2014)

10/10/2020 Sustainable Concrete Pavements 28

Participants in the meeting:

- You
- Surender Singh
- anubhav rai
- Girijesh Kumar
- Debabrata Giri
- Sanchit Gupta
- vaqas sheikh
- vimal sharma

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Surender Singh is presenting

Debasis Panda and 31 more

11:00 AM

ITZs in Recycled aggregate concrete (RAC)

Transition zone
Bulk hydrated cement zone
Aggregate particles
ITZ in normal concrete

New cement paste
Old cement paste
New ITZ
Aggregate
Old ITZ
ITZ in RAC

Interfacial transition zone (ITZ) in concrete is considered as the weakest zone in concrete. In recycled aggregate concrete, the influence is magnified due to presence of two ITZ. RCA in concrete may be considered as a composition of five distinct phases.

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(Limbachiya, 2010, Butler et al., 2014)

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10:56 AM

Acceptance Criterion for High Quality RCA

Aggregate	Coarse		Fine	
	Dry density (kg/m ³)	Water absorption (%)	Dry density (kg/m ³)	Water absorption (%)
Japan	-	<2	-	< 5
China	> 2450	-	-	-
Hong Kong	> 2000	< 10	-	-
RILEM	2400	3	-	-
Australia	> 2100	< 6	-	-
South Korea	> 2500	3	> 2200	3

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Pratikhya Mishra and 28 more

10:51 AM

Case Study on Recycled Aggregates: Recycled Concrete Aggregates

In India, more than 700 million tonnes of construction and demolition (C&D) waste generated every year (GIZ Report, 2016).

Material	Percentage
Concrete	23%
Masonry	30%
Soil	22%
Boulders	10%
Tiles	8%
Others	7%

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10:18 AM

Rigid Pavement : Components

Joints

- Longitudinal joints - separates pavement slabs in the transverse direction
- Transverse joints

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Participants: You, Surender Singh, Guru Prakash, Girijesh Kumar, Anshul Kaushik, Sanchit Gupta, vaqas sheikh, keshav Kumar Sinha

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10:16 AM

Rigid Pavements: Need & Advantages

- Need

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Saikat Sarkar is presenting

Computational Mechanics.pptx - Google Slides - Mozilla Firefox

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General Introduction

Physical system → Idealized system → Mathematical representation → Solution

Assumption: No drag and Coriolis effect

$$\frac{dv}{dt} = g;$$

With $V_0 = 0;$
 $y_0 = h;$
 $y_f = 0$

$$v(t) = gt$$

$$y(t) = h - \frac{1}{2}gt^2$$

10/9/2020 Advances in civil engineering - Computational Mechanics 3

Windows taskbar: Type here to search, 12:20 PM 09-10-2020

Participants: Abhishek Rajput (You), Aarohi Kr. Munshi, Abhishek Rajput, abhishek shrivastava, Anshul Kaushik, anubhav rai, Debasis Panda, Debjani Panda, Dr. Jitendra Gurjar, emad uddin, Girijesh Kumar

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12:19 PM

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General Introduction

"Computational Mechanics is the intersection of mechanics, applied mathematics, and computer science, which is aimed at developing new methods for solving computationally-challenging problems in science and engineering."

- Discretization techniques: Finite elements, Peridynamics, Molecular dynamics, etc.
- Multiscale and multigrid methods in space and time: coupling of discrete/continuum systems
- Challenging problems: Impact and blast protection, Earthquake hazard mitigation, high rise building etc.
- Numerical analysis, Inverse problems, Optimization.
- Software development: High performance computing and adaptive methods

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水谷 水谷大二是 presenting

Short term course on Advances i... People (38) Chat

p indu Prabhanshu Tiwari Prof. Sanjay Verma R K Bhatia Ramsevak Kushwaha Sachin Ramesh Rao Geed sagar sarangi Sanchit Gupta Shilpi Bhuiyan Shuddhashil Ghosh syam sundar Tejas Doshi vaqas sheikh

[Recent research]

Example of determining repair and work zone policy based on simplified rule

Example of observed CS α : (Supposing that $(L, Y, Z) = (4, 3, 2)$ and $L = 4$)

CS → 1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

Step 1

- Define set of primary sections: $L = (4, 10)$
- Define set of secondary sections: $C = (2, 7, 11)$
- Define set of repair and work zone sections: $\mathcal{R} = \emptyset$
- Define set of work zone sections: $\mathcal{X} = \emptyset$

1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

Step 2

- Focus on section \hat{n} : $\hat{n} = \min(L \setminus \mathcal{R}) = \min(\{(4, 10) \setminus \emptyset\}) = 4$
- Update set of repair and work zone sections: $\mathcal{R} = \mathcal{R} \cup \{\hat{n}\} = (4)$
- Define length of continuous work zone sections: $\zeta = |\mathcal{R}| = 1$

1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

Step 3 and Step 4

- Define temporal search distance: $Z = 1$
- Neither $Z > Z$ nor $\zeta + Z > L$ is satisfied. → Proceed to Step 5

Step 5 and Step 6: Forward/backward search with temporal search distance: $Z = 1$

1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

- \mathcal{R} is not updated, because sections within temporal search distance are not included in both L and C , i.e. neither $\max \mathcal{R} + Z = 4 + 1 = 5 \in L \cup C \setminus \mathcal{R} = (4, 10) \cup (2, 7, 10) \setminus (4) = (2, 7, 10)$ nor $\min \mathcal{R} - Z = 4 - 1 = 3 \in L \cup C \setminus \mathcal{R} = (4, 10) \cup (2, 7, 10) \setminus (4) = (2, 7, 10)$ is satisfied. → Proceed to Step 7

Step 5: Forward search with temporal search distance: $Z = 2$

1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

- \mathcal{R} is not updated, because section within temporal search distance is not included in both L and C , i.e. $\max \mathcal{R} + Z = 4 + 2 = 6 \in L \cup C \setminus \mathcal{R} = (4, 10) \cup (2, 7, 10) \setminus (4) = (2, 7, 10)$ is not satisfied. → Proceed to Step 6

Step 6: Backward search with temporal search distance: $Z = 2$

1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

- \mathcal{R} is updated as $\mathcal{R} = \mathcal{R} \cup \{\min \mathcal{R} - Z\} = (4) \cup (4 - 2) = (2, 4)$, because section within temporal search distance is included in C , i.e. $\min \mathcal{R} - Z = 4 - 2 = 2 \in L \cup C \setminus \mathcal{R} = (4, 10) \cup (2, 7, 10) \setminus (4) = (2, 7, 10)$ is satisfied.
- Update set of continuous work zone sections: $\mathcal{X} = \mathcal{R} \cup \{\min \mathcal{R} - 1, \dots, \min \mathcal{R} - Z\} = (4) \cup (3, 2) = (2, 3, 4)$
- Update length of continuous work zone sections: $\zeta = |\mathcal{R}| = 3$
- Return to Step 3 and Step 4. → In this case, no more sections are selected with respect to $\hat{n} = 4$. → Update \mathcal{X} as $\mathcal{X} = \mathcal{X} \cup \mathcal{R} = \emptyset \cup (2, 3, 4) = (2, 3, 4)$, and return to Step 2

Step 2: Search with respect to $\hat{n} = 10$

1 3 2 4 1 1 3 2 1 4 3 1 2 1 1

- In the same manner, \mathcal{R} and \mathcal{X} are defined with $\hat{n} = 10$
- \mathcal{R} and \mathcal{X} become $(2, 4, 10, 11)$ and $(2, 3, 4, 10, 11)$, respectively


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水谷 水谷大二郎 is presenting

Example of optimization of asset management policy targeting "single" infrastructure



Corrective policy →	LCC(50 years) inspection + repairment: 25,516 [m.u.]
Preventive policy 1 →	LCC(50 years) inspection + repairment: 23,117 [m.u.]
Preventive policy 2 →	LCC(50 years) inspection + repairment: 28,636 [m.u.]

"Preventive policy 1" is the best policy here

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People (38) | Chat

- Sachin Ramesh Rao Geed
- sagar sarangi
- Sanchit Gupta
- Shilpi Bhuiyan
- Shuddhashil Ghosh
- Sunil Ahirwar
- syam sundar
- Tejas Doshi
- vaqas sheikh
- Vikas Tyagi
- vimal sharma
- Yogendra Kumar Pandey
- 水谷 水谷大二郎

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Example of optimization of asset management policy targeting "single" infrastructure

Computation of optimal policy

- If the size of the state space of policy is $2^{(I-2)}$ and the number of condition state is a single digit, value of the objective function in both $T \ll \infty$ and $T \rightarrow \infty$ can be computed by exhaustive search.
- For a single-facility, a group of non-interacting (homogeneous) facilities, or several interacting facilities, it is easy to find optimal policy minimizing expected life-cycle-cost. (Risk or/and budget constraints can be easily considered.)

※User costs caused by deterioration can be easily incorporated in objective function if targeting single-facility. (though determination of them is hard)

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People (38) | Chat

- Abhijit Anand
- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Dr. Rakesh kumar Dubey
- emad uddin
- Girijesh Kumar
- Gyanesh Patnaik
- HARI OM TAMRAKAR
- Kanhaiya Kumar Yadav
- leena sinha

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水谷 水谷大二郎 is presenting

Mahesh Chandra and 26 more | 11:31 AM

Example of optimization of asset management policy targeting "single" infrastructure

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Computation of optimal policy

- If the size of the state space of policy is $2^{(I-2)}$ and the number of condition state is a single digit, value of the objective function in both $T \ll \infty$ and $T \rightarrow \infty$ can be computed by exhaustive search.
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※ User costs caused by deterioration can be easily incorporated in objective function if targeting single-facility. (though determination of them is hard)

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sagar sarangi and 27 more | 11:13 AM

Minimization of life cycle cost

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CS

Deteriorate

Deteriorate

Deteriorate

Intervened (Repair, Rehabilitation, etc.)

Intervened

Threshold

Time

Initial construction

Construction cost

Repair cost

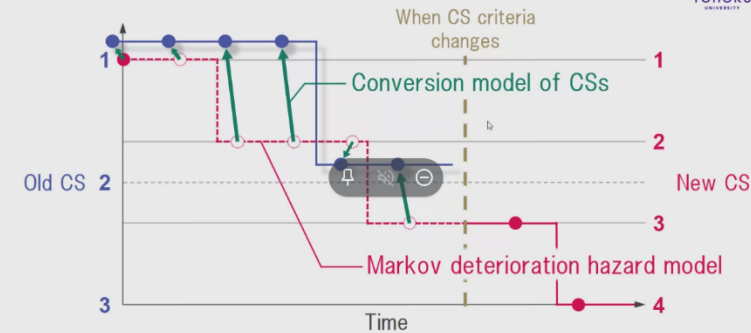
Repair cost

Life cycle cost

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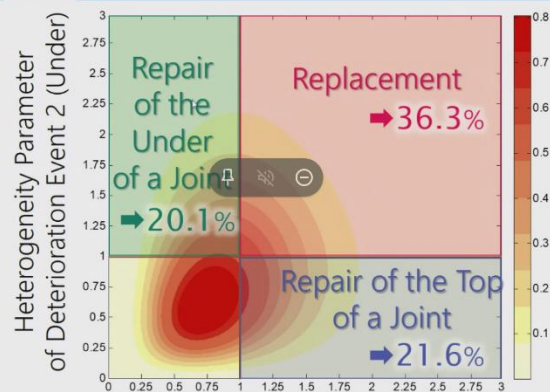
Hidden Markov model



Unobservable CSs with new criteria can be treated as latent variables

$$\text{Completed likelihood: } L = \pi_{1s_1}(\bar{z}_0) \prod_{t=1}^{t'} \pi_{s_t s_{t+1}}(\bar{z}_t) f_{s_t}(\bar{m}_t | \alpha_{s_t}) \prod_{t=t'+2}^T \pi_{i_t - i_{t-1}}(\bar{z}_{t-1})$$

Quantification of Multidimensional Heterogeneity



Heterogeneity Parameter of Deterioration Event 1 (Top)
(Equivalent to deterioration speed or life expectancy)

水谷大二郎 is presenting

Mixed Markov deterioration hazard model

□ Hazard function (deterioration rate) for a CS

$$\lambda = \varepsilon \exp(\mathbf{x} \boldsymbol{\beta}')$$

Heterogeneity parameter

We can deal with the mixed Markov deterioration hazard model as a random effect model (one of panel data models)
 -> Assume Gamma distribution as distribution of heterogeneity parameter, and estimate parameters of Gamma distribution in hierarchical Bayes modeling framework

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Markov deterioration hazard model

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CS

- 1 Exponential hazard rate 1 $\lambda_1 = \exp(\mathbf{x} \boldsymbol{\beta}'_1)$
- 2 Exponential hazard rate 2 $\lambda_2 = \exp(\mathbf{x} \boldsymbol{\beta}'_2)$
- 3 Exponential hazard rate 3 $\lambda_3 = \exp(\mathbf{x} \boldsymbol{\beta}'_3)$
- 4

\mathbf{x} : Explanatory variable vector
 $\boldsymbol{\beta}_i$: Parameters to estimate
 z : Time interval

$$\pi_{ij}(z) = \int_0^z \int_0^{z-z_1} \dots \int_0^{z-\sum_{m=1}^{j-2} z_m} \lambda_i \exp(-\lambda_i z_i) \prod_{m=i+1}^{j-1} \lambda_m \exp(-\lambda_m z_m) \exp\left\{-\lambda_j \left(z - \sum_{m=i}^{j-1} z_m\right)\right\} dz_i \dots dz_{j-1}$$

$$= \sum_{k=i}^j \prod_{m=i}^{k-1} \frac{\lambda_m}{\lambda_m - \lambda_k} \prod_{m=k}^{j-1} \frac{\lambda_m}{\lambda_{m+1} - \lambda_k} \exp(-\lambda_k z)$$

Markov transition probability

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水谷 水谷大二郎 is presenting | Lusi Subhadarsini and 24 more | 10:23 AM

Statistics based stochastic deterioration prediction

```

    graph TD
      DP[Deterioration process] --> ID[Inspection data]
      DP --> SDM[Stochastic deterioration model]
      ID --> PE[Parameter estimated]
      PE --> SDM
      PE --> LFD[Define likelihood function to estimate parameters statistically]
      LFD --> ML[Maximum likelihood methods or Markov chain Monte Carlo (MCMC) methods is available.]
  
```

- Statistical deterioration forecasting is available for various types of infrastructure when inspection data is obtained.
- Uncertainty of deterioration processes can be considered.

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Hazard model for deterioration

Hazard rate (deterioration rate)

Constant hazard rate:
→ Exponential hazard model

Hazard rate changes over time:
→ e.g. Weibull hazard model

Probability density of lifetime

Survival function

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水谷 水谷大二郎 is presenting

syam sundar and 17 more

10:17 AM

A life of infrastructure

Initial construction

Time

Threshold

Intervened (Repair, Rehabilitation, etc.)

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Debasish Panda and 14 more

10:11 AM

Fundamental meaning of asset management

- Consider infrastructure as assets (We pay for constructions and management works.)
- Evaluate the value of assets (e.g. total surplus, life cycle cost)
- Intervene in assets appropriately (conduct repair, replacement, etc. based on inspection results for deteriorating infrastructure)
- Maximize the value of assets

- Studies have been accumulated from 1980s or 1990s
- Standards for practice: ISO 55000, ISO 55001, ISO 55002
- Interdisciplinary research field

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水谷 水谷大二郎 is presenting | Siddhartha Seng... and 11 more | 10:08 AM | You

Self introduction

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水谷 水谷大二郎 is presenting | Roushan Kumar and 11 more | 10:08 AM | You

Self introduction

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Dr. Munir Ahmad Nayak is presenting

shivani verma and 17 more

09:28 | 4:21 PM

Darcy's Law

$$q \propto \frac{\Delta h}{\Delta L}$$

$$q = -K \frac{\Delta h}{\Delta L}$$

$$Q = -KA \frac{\Delta h}{\Delta L}$$

$\frac{\Delta h}{\Delta L}$ = Hydraulic gradient

q = Volumetric or Darcy flux [LT⁻¹], in general a vector

$q = \frac{Q}{A}$

Darcy, H. (1856).

Darcy's Experimental setup (From Les Fontaine Publiques de la Ville de Dijon, Atlas, Figure 3)

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Advances in civil engineering - Computational Mechanics

10/9/2020 | 23

01:10 PM 09-10-2020

Short term course on Advances i... | People (32) | Chat

Let everyone send messages

Good Morning to all

You 9:59 AM
we will start in 2-3 mins
good morning to all

Prabhanshu Tiwari 12:03 PM
thank you sir

You 12:10 PM
It is requested to Teqjp participants that you please send your Identity Card of your institute. also pass this information to your knowns

Mahesh Chandra 12:11 PM
ok sir

abhishek shrivastava 12:11 PM
Okay sir

Prabhanshu Tiwari 12:13 PM
sure sir

Tejas Doshi 12:21 PM
ok sir

Send a message to everyone

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Gy Gyanesh Patnaik is presenting

CFRP

- CFRP: Man made composite material made of carbon fibers and matrices.
- Strength
- Weight
- Stiffness
- Wear resistance
- Corrosion resistance
- Fatigue life
- Thermal conductivity
- Acoustical insulation

Carbon fibers
10 times stronger than steel
High toughness
High specific modulus
High specific strength
High tensile strength
A small thermal expansion coefficient
Light weight

Activate Windows
Go to Settings to activate Windows.

Short term course on Ad... ^

Turn on captions

Gyanesh Patnaik is presenting

People (15)

Chat

Add people

Host controls

- Abhishek Rajput (You)
- Abhishek Rajput
- Anshul Kaushik
- anubhav rai
- Girjesh Kumar
- Gy Gyanesh Patnaik (Presentation)
- Gyanesh Patnaik
- Nikunj Binnani
- Nitin Tiwari
- Prabhanshu Tiwari
- R.K. Choubey

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D Dr. Lalit Borana is presenting

SHEAR STRENGTH

Shear strength equations for unsaturated soils

```

    graph TD
      Root[Shear strength equations for unsaturated soils] --> Fredlund[Fredlund et al. (1977)]
      Root --> Vanapalli[Vanapalli et al. (1996)]
      Root --> Zhan[Zhan and Ng (2005)]
      Root --> Hossain[Hossain and Borana (2014)]
      Fredlund --> Bishops[Bishops (1959)]
      Fredlund --> Vanapalli
      Vanapalli --> Bishops
      Vanapalli --> Hossain
      Zhan --> Hossain
      Bishops --> Note1[Includes two stress state variables, no volume change]
      Note1 --> Note2[Fails to explain the collapse potential of soil in wetting.]
      Vanapalli --> Note3[More practical model, based on SWCC]
      Hossain --> Note4[Considers dilation caused by suction.]
      Note4 --> Note5[Based on SWCC and considers dilation]
  
```

$$\tau_f = c' + (\sigma_n - u_a) \tan(\phi' + \psi) + (u_a - u_w) \tan(\phi^s + \psi)$$

where, τ_f is shear strength, c' is effective cohesion, ϕ' is effective friction angle, σ_n is total stress, u_a is pore air pressure and u_w is the porewater pressure, where $(\sigma_n - u_a)$ is the net normal stress on the failure plane, u_a is the pore air pressure at failure, $(u_a - u_w)$ is the matric suction at failure, (ϕ^s) is the normalized water content obtained from the SWCC, k is a soil specific

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People (20)

Chat

Let everyone send messages

Is it possible to use this technique in slope stability purpose in coal mines OB dump where bore pile is not feasible?

Tejas Doshi 3:49 PM
How can FBG technique help to analyze the potential mechanism or cause for ground subsidence.

Tejas Doshi 3:51 PM
2. Also can FBG Sensor be used for measuring Large Range and Multi-Directional Settlement

Tejas Doshi 3:56 PM
Thank you.

sagar sarangi 3:58 PM
Thank you sir

Nitin Tiwari 3:58 PM
Thank you sir for the information, can it be use to monitor the long term performance of the road pavement. Is it economical solution?

Nitin Tiwari 4:01 PM
Thank you sir

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FBG sensor

Mechanical Buffer
• Elastomeric

Cladding
• Glass
• Coating

Core
• Glass

$9 \mu\text{m} = 9 \times 10^{-6} \text{ m} = 9 \times 10^{-3} \text{ mm} \approx 0.01 \text{ mm}$

Single mode fiber (The chemical component is: silica or SiO_2)

Physical view of optical fiber

Small Strain measurement

(Srinivasan, 2014 and Bennett et al., 2012)

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People (22) Chat

Let everyone send messages

Thank you sir

It was highly informative

Prabhanshu Tiwari 2:01 PM
thank you sir

Chetan Sharma 2:01 PM
Thankyou Dr Abhishek

You 2:02 PM
THanks

we will meet at 3PM

Tejas Doshi 2:03 PM
Nice session

rajendra patil 2:42 PM
Thanks

Prof. Sanjay Verma 3:05 PM
Good Afternoon All - Regards Dr. Sanjay Kumar Verma

You 3:06 PM
Good afternoon to all

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Ground / Slope instability imposes a great threat to the human life and property

- Factors affecting the stability are various and interconnected to each other;
 - geologic structure and geometry
 - soil characteristics
 - rainfall
 - evaporation
 - Earthquake
 - creep
- The theoretical analysis, **geotechnical monitoring** provides a **direct way** to understand the ground and slope behavior.
- There is predominant effect of climate change, environmental conditions, rainfall on the **internal displacement movement and ground stability**.

Settlement of soil ground - 1

The Tower of Pisa

Construction began 1173 and settled approximately 3m into ground 1911-1991. Inclined in N-S direction 2°26'

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People (23) Chat

Let everyone send messages

Thank you sir

It was highly informative

Prabhanshu Tiwari 2:01 PM
thank you sir

Chetan Sharma 2:01 PM
Thankyou Dr Abhishek

You 2:02 PM
THanks

we will meet at 3PM

Tejas Doshi 2:03 PM
Nice session

rajendra patil 2:42 PM
Thanks

Prof. Sanjay Verma 3:05 PM
Good Afternoon All - Regards Dr. Sanjay Kumar Verma

You 3:06 PM
Good afternoon to all

Send a message to everyone

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D Dean of Infrastructure Development is presenting

Characterizing Atmospheric river

AR is combination of moisture and strong winds. So thresholding criteria for the characterization of AR may depends on various factors:

- Location of area of interest
- Seasonal variation
- Landfalling probability

Short term course on ... Turn on captions Dean of Infrastructure Develo... is presenting

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People (31) Chat

Add people Host controls


- A Abhishek Rajput (You)
- a aaqib hussain ganaie 6837
- A Abhishek Rajput
- Amit Golder
- A Anshul Kaushik
- a anubhav rai
- C Chetan Sharma
- D Dean of Infrastructure Development (...)
- D Dean of Infrastructure Develo... ▾
- Debjani Panda
- Dr. Rakesh kumar Dubey

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IIT Indore Mail Meet - Short term course on Advances in Civil Engineering 7th-11th Oct, 2020 12:52 PM You

n neev sawant is presenting **S** Saleem Akhtar and 26 more

Beam Element Stiffness



$$[K] = \begin{bmatrix} \frac{12EI_y}{L^3} & 0 & 0 & 0 & \frac{6EI_x}{L^2} & -\frac{12EI_y}{L^3} & 0 & 0 & 0 & \frac{6EI_x}{L^2} \\ 0 & \frac{12EI_x}{L^3} & 0 & \frac{6EI_y}{L^2} & 0 & 0 & -\frac{12EI_x}{L^3} & 0 & \frac{6EI_y}{L^2} & 0 \\ 0 & 0 & \frac{EA}{L} & 0 & 0 & 0 & 0 & -\frac{EA}{L} & 0 & 0 \\ 0 & \frac{6EI_x}{L^2} & 0 & \frac{4EI_y}{L} & 0 & 0 & -\frac{6EI_x}{L^2} & 0 & \frac{2EI_y}{L} & 0 \\ \frac{6EI_x}{L^2} & 0 & 0 & 0 & \frac{4EI_x}{L} & \frac{6EI_y}{L^2} & 0 & 0 & 0 & \frac{2EI_y}{L} \\ -\frac{12EI_y}{L^3} & 0 & 0 & 0 & \frac{6EI_x}{L^2} & \frac{12EI_y}{L^3} & 0 & 0 & 0 & -\frac{6EI_x}{L^2} \\ 0 & -\frac{12EI_x}{L^3} & 0 & -\frac{6EI_y}{L^2} & 0 & 0 & \frac{12EI_x}{L^3} & 0 & -\frac{6EI_y}{L^2} & 0 \\ 0 & 0 & -\frac{EA}{L} & 0 & 0 & 0 & 0 & \frac{EA}{L} & 0 & 0 \\ 0 & \frac{6EI_x}{L^2} & 0 & \frac{2EI_y}{L} & 0 & 0 & -\frac{6EI_x}{L^2} & 0 & \frac{4EI_y}{L} & 0 \\ \frac{6EI_x}{L^2} & 0 & 0 & 0 & \frac{2EI_x}{L} & -\frac{6EI_y}{L^2} & 0 & 0 & 0 & \frac{4EI_y}{L} \end{bmatrix}$$

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vimal sharma and 37 more

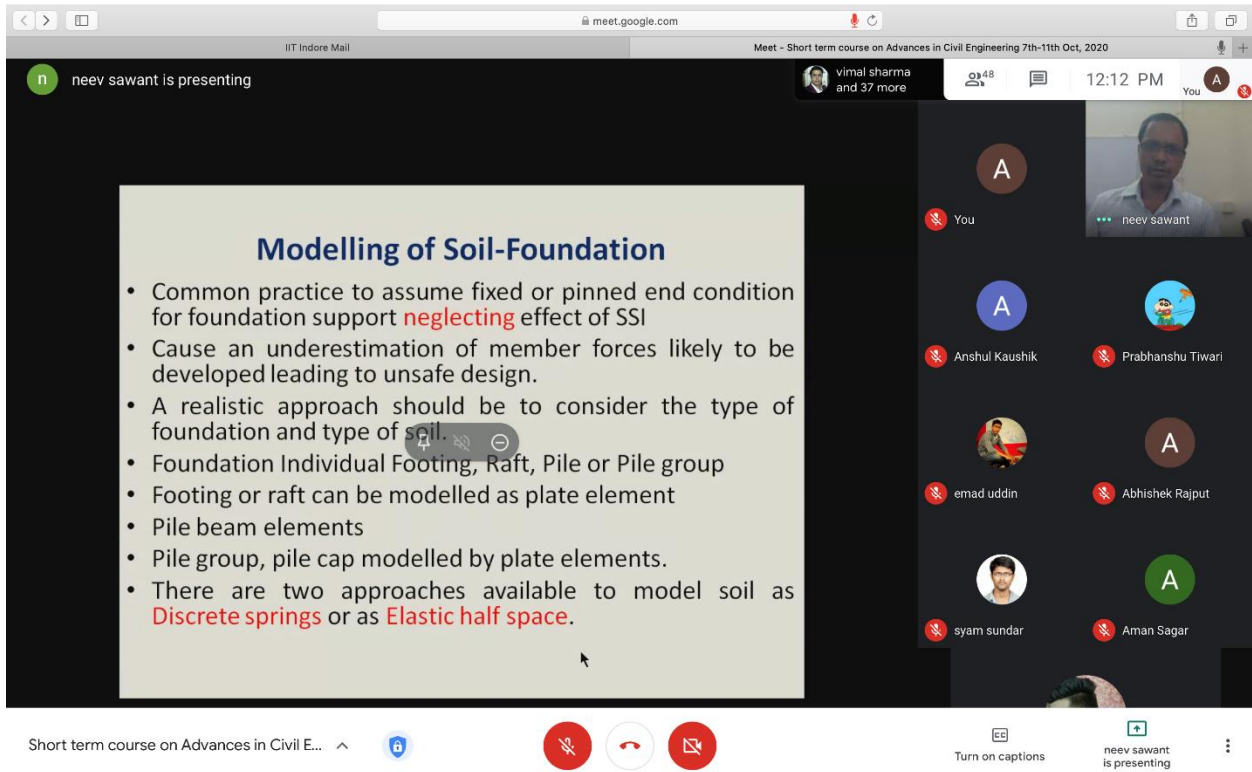
12:12 PM

Modelling of Soil-Foundation

- Common practice to assume fixed or pinned end condition for foundation support **neglecting** effect of SSI
- Cause an underestimation of member forces likely to be developed leading to unsafe design.
- A realistic approach should be to consider the type of foundation and type of soil.
- Foundation Individual Footing, Raft, Pile or Pile group
- Footing or raft can be modelled as plate element
- Pile beam elements
- Pile group, pile cap modelled by plate elements.
- There are two approaches available to model soil as **Discrete springs** or as **Elastic half space**.

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Vivek Gupta and 36 more

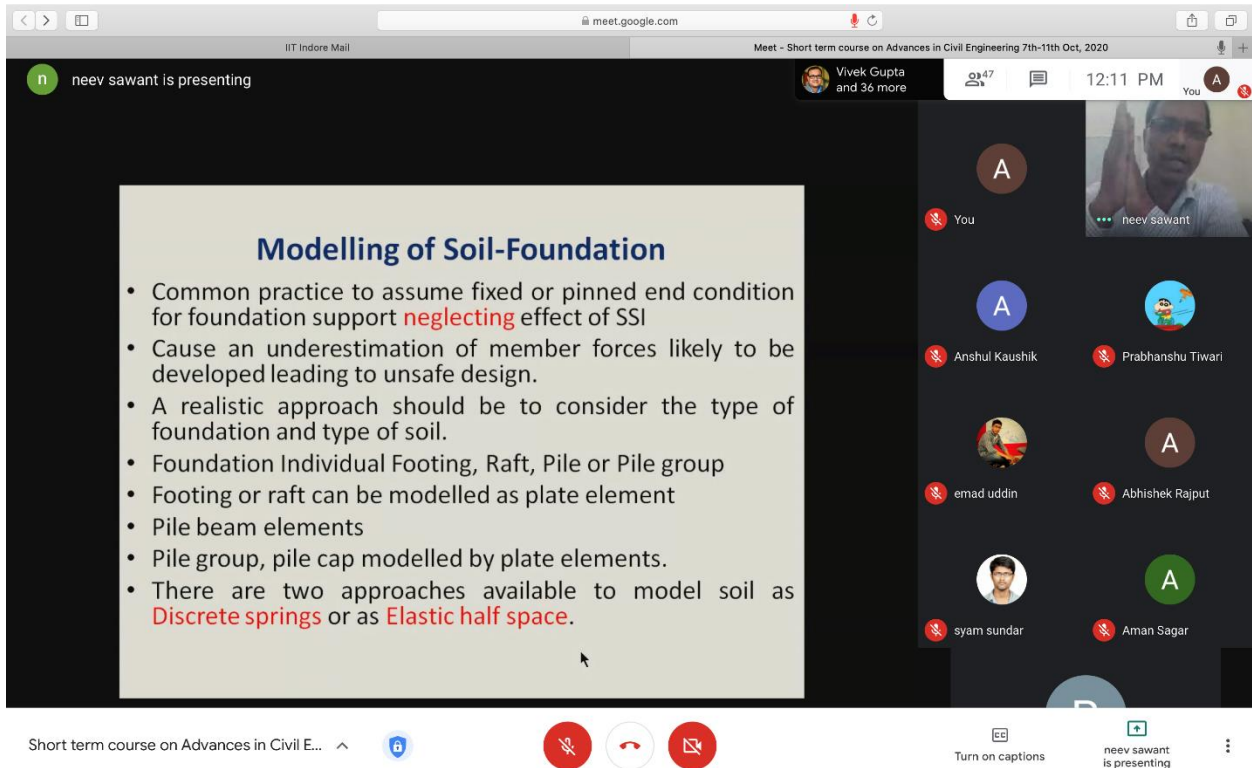
12:11 PM

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- Pile group, pile cap modelled by plate elements.
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Anshul Kaushik is presenting

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People (13)

Add people Host controls

- Abhishek Rajput (You)
- Abhishek Rajput
- Anshul Kaushik
- Anshul Kaushik (Presentation)
- Debasis Panda
- Gyanesh Patnaik
- Kamil Khan
- Prabhanshu Tiwari
- R.K. Choubey
- Ramakanta Choudhury
- Ramsevak Kushwaha

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Anshul Kaushik is presenting

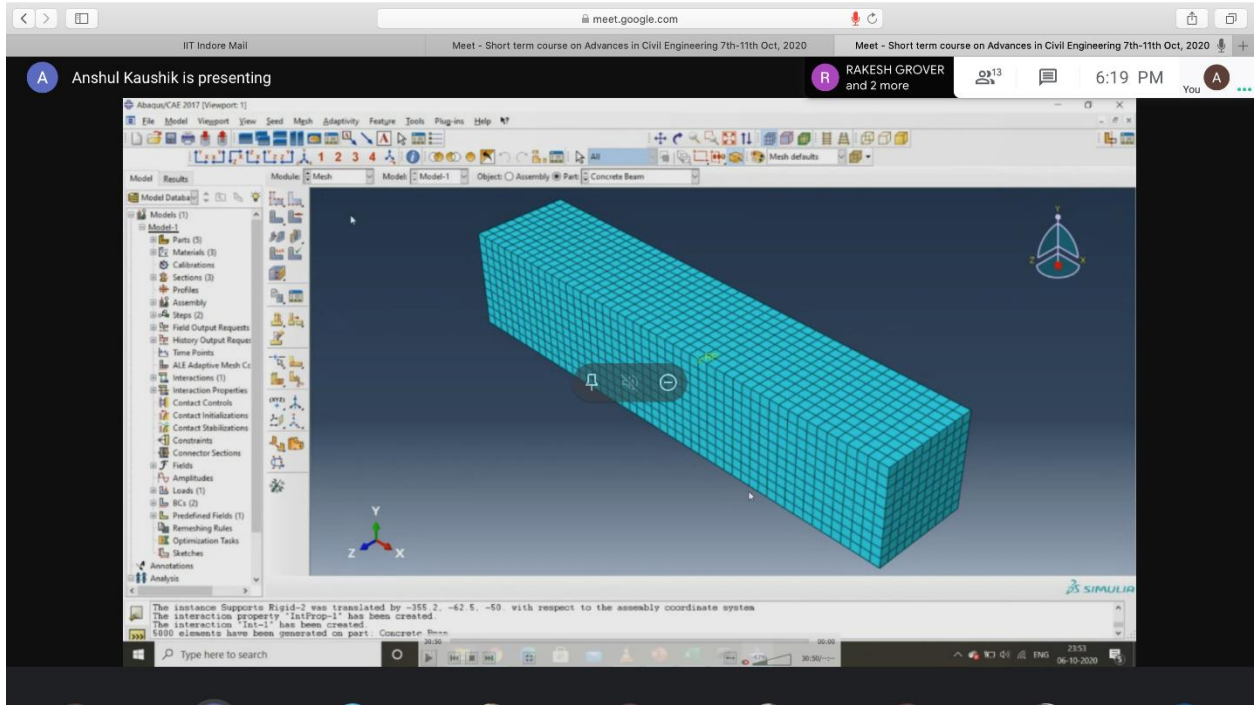
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Add people Host controls

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- Abhishek Rajput
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- Anshul Kaushik (Presentation)
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- Gyanesh Patnaik
- Prabhanshu Tiwari
- R.K. Choubey
- RAKESH GROVER
- Ramsevak Kushwaha
- sagar sarangi

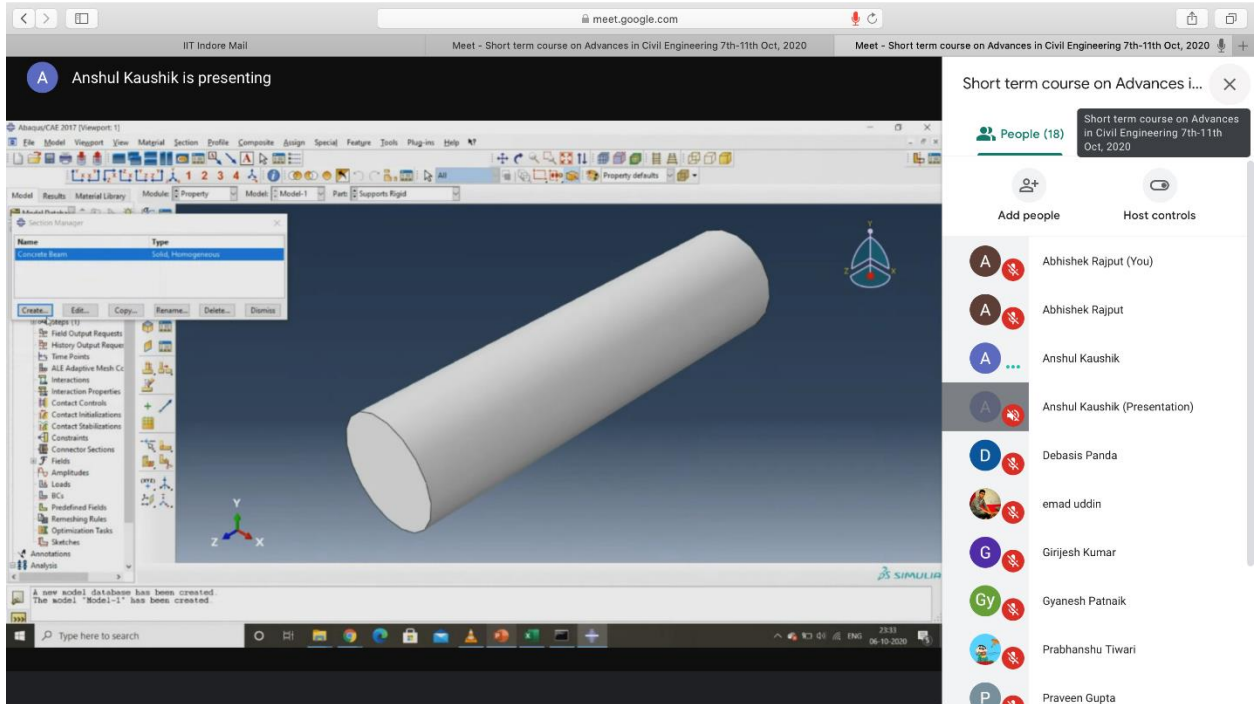
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People (18) Short term course on Advances in Civil Engineering 7th-11th Oct, 2020

- Add people Host controls
- Abhishek Rajput (You)
 - Abhishek Rajput
 - Anshul Kaushik
 - Anshul Kaushik (Presentation)
 - Debasis Panda
 - emad uddin
 - Girijesh Kumar
 - Gyanesh Patnaik
 - Prabhanshu Tiwari
 - Praveen Gupta
 - PRIYANKA PRIYADARSANI SAHU

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Anshul Kaushik is presenting Ramsevak Kush... and 6 more 5:16 PM You

Properties of supporting system & drop hammer

Component	Elastic properties	Value
Supporting system	Elastic modulus (GPa)	210
	Density (kg/m ³)	7850
	Poisson's ratio	0.3
Drop weight	Elastic modulus (GPa)	210
	Density (kg/m ³)	3770
	Poisson's ratio	0.3

Prabhanshu Tiwari R.K. Choubey

Abhishek Rajput emad uddin

Ramakanta Choudhury Debasis Panda

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Anshul Kaushik is presenting

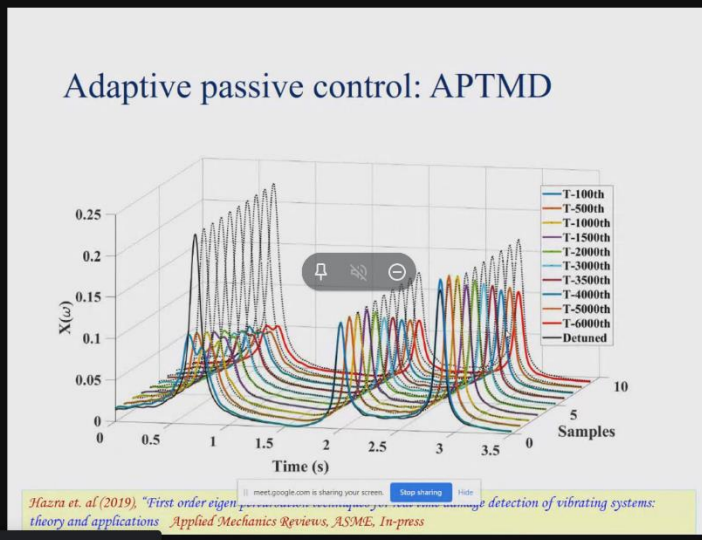
Prabhanshu Tiwari R.K. Choubey

Abhishek Rajput mahendra mahato

Ginjes Kumar Sanchit Gupta

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Dr. Hazra is presenting



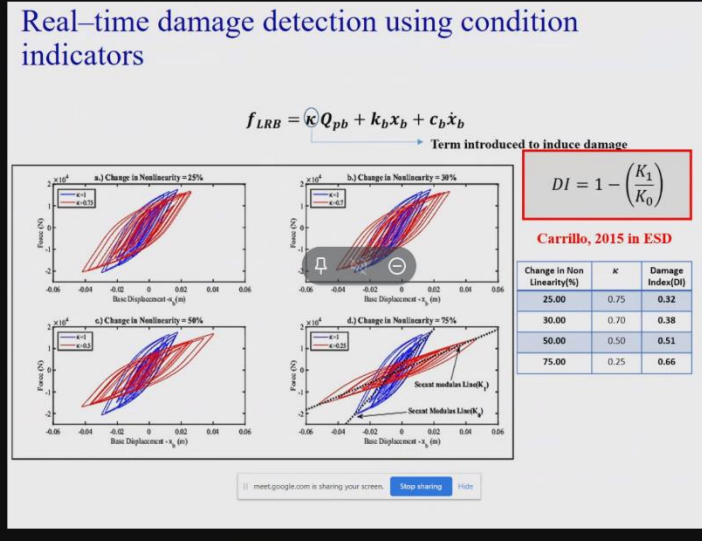
damodar meena has left the meeting

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- People (31) Chat (4)
- Punyamayee Pattanaik
 - R K Bhatia
 - RAJAN KUMAR
 - RAKESH GROVER
 - Roushan Kumar
 - sagar sarangi
 - Sanchit Gupta
 - Shuddhashil Ghosh
 - syam sundar
 - Tejas Doshi
 - vimal sharma
 - Yogendra Kumar Pandey
 - Yogi

Dr. Hazra is presenting



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- People (34) Chat (3)
- Add people Host controls
- Abhishek Rajput (You)
 - Abhijit Anand
 - Abhishek Rajput
 - abhishek shrivastava
 - Anshul Kaushik
 - anubhav rai
 - Debasis Panda
 - Devendra Dohare
 - Dr. Hazra
 - Dr. Hazra (Presentation)
 - emad uddin

Dr. Hazra is presenting

Real time Modal Identification of a 5-storied building

- The mass of the system is considered as 10kg at each floor level and the stiffness of the individual floors are assumed to be 2000 N/m
- Damping = 2% of critical for all modes
- Natural frequencies: 0.64, 1.87, 2.95, 3.79 & 4.32 Hz respectively

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Short term course on Advances i... Chat (3)

People (36) Add people Host controls

- Abhishek Rajput (You)
- Abhijit Anand
- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Devendra Dohare
- DEVENDRA SINGH Bisht
- Dr. Hazra
- Dr. Hazra (Presentation)

Dr. Hazra is presenting

PCA and Structural Dynamics

EVD of the sample covariance matrix

$$R_X = \frac{1}{N} X X^T$$

Principal Orthogonal Mode (POM)

$$R_X = W Y W^T$$

Principal Orthogonal Value (POV)

$$\Psi = W^T X$$

Principal Orthogonal Component (POC)

$$(M^{-1}K) = V \Omega V^T$$

V - Mode Shape Matrix
 Ω - Eigen Value Matrix

$$X = V Q$$

$$Q = V^T X$$

Normal Coordinates

POM(W) approximate to V when damping decreases and number of sample increases.

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People (35) Add people Host controls

- Abhishek Rajput (You)
- Abhijit Anand
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Devendra Dohare
- DEVENDRA SINGH Bisht

Dr. Hazra is presenting

Batch to Online: A Case study with PCA

From k original variables: x_1, x_2, \dots, x_k :
 Produce k new variables: y_1, y_2, \dots, y_k :

$$y_1 = p_{11}x_1 + p_{12}x_2 + \dots + p_{1k}x_k$$

$$y_k = p_{k1}x_1 + p_{k2}x_2 + \dots + p_{kk}x_k$$

$$Y = PX$$

such that,

- $y_1, y_2 \dots y_k$ are uncorrelated
- y_1 explains max variance

First Eigen Vector

$$Y = \begin{bmatrix} p_{11} & p_{12} & \dots & p_{1k} \\ p_{21} & p_{22} & \dots & p_{2k} \\ \vdots & \vdots & \ddots & \vdots \\ p_{k1} & p_{k2} & \dots & p_{kk} \end{bmatrix}$$

$Y =$ Principal Orthogonal Component

Principal Orthogonal Mode (POM)

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People (33) Chat (2)

Add people Host controls

- Abhishek Rajput (You)
- Abhishek Ojha
- Abhishek Rajput
- abhishek shrivastava
- Anshul Kaushik
- anubhav rai
- Debasis Panda
- Devendra Dohare
- DEVENDRA SINGH Bisht

Dr. Hazra is presenting

neev sawant is presenting

Constitutive Model

- The theory of plasticity is implemented to account for the constitutive law of the soil. The constitutive relationships arising from the theory of plasticity are incremental in nature due to the stress path dependence of the material behaviour. The essential features of the plasticity theory are:
- A yield function, separating the elastic and plastic states of stresses in the body under consideration.
- A plastic potential function defining the direction of plastic straining when yielding occurs (flow rule).
- A hardening/softening law describing the dependence of the yield function on the plastic strains.
- Some assumed elastic behaviour within the yield surface.

$$\begin{Bmatrix} \sigma_1 \\ \sigma_2 \\ \sigma_3 \end{Bmatrix} = \begin{Bmatrix} p \\ p \\ p \end{Bmatrix} + \begin{Bmatrix} \sigma_1 - p \\ \sigma_2 - p \\ \sigma_3 - p \end{Bmatrix} \quad \text{where } p = \frac{\sigma_1 + \sigma_2 + \sigma_3}{3}$$

$$J = \frac{1}{\sqrt{6}} \sqrt{(\sigma_1 - \sigma_2)^2 + (\sigma_2 - \sigma_3)^2 + (\sigma_3 - \sigma_1)^2}$$

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Gy Gyanesh Patnaik and 29 more

03:40

1:14 PM

You

- First an independent analysis of frame is carried out assuming the column bases to be fixed (FEA-1). Individual columns are supported on pile caps, which are interconnected by strap beams. Each pile cap is 2m×2m×1m size and supported on five vertical piles, one at the centre and one at each corner at 0.3m from the edges. Piles are round, 40cm in diameter and 20m long.
- k_s assumed for soil is to vary with depth as $k_s=100+200z^{0.67}$ t/m³,
- A second interactive analysis is carried out considering SSI for pile group (FEA-2).
- The results of independent (FEA-1) and interactive (FEA-2) analyses are compared for studying the effect of SSI.
- AF and BM at column bases are presented in Table 2 and the changes in BM at the ends of beams and columns of the top floor are shown in Table 3.

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Abhishek Kumar and 26 more

03:37

1:12 PM

You

Final relation between force and displacements in terms of flexibility matrix

$$\begin{Bmatrix} u \\ v \\ w \\ \theta_x \\ \theta_y \\ \theta_z \end{Bmatrix} = \begin{bmatrix} f_{11} & f_{12} & f_{13} & f_{14} & f_{15} & f_{16} \\ f_{21} & f_{22} & f_{23} & f_{24} & f_{25} & f_{26} \\ f_{31} & f_{32} & f_{33} & f_{34} & f_{35} & f_{36} \\ f_{41} & f_{42} & f_{43} & f_{44} & f_{45} & f_{46} \\ f_{51} & f_{52} & f_{53} & f_{54} & f_{55} & f_{56} \\ f_{61} & f_{62} & f_{63} & f_{64} & f_{65} & f_{66} \end{bmatrix} \begin{Bmatrix} F_x \\ F_y \\ F_z \\ M_x \\ M_y \\ M_z \end{Bmatrix}$$

$$\{\delta\} = [f]\{F\} \quad [k] = [f]^{-1}$$

Short term course on Advances in Civil E...

Turn on captions

neev sawant is presenting

4. Survey of the participants:

The feedback form for the short-term course was shared with all the participants in order to get an opinion whether the course was up to the mark in terms of organization, theme, research and practical industry applications. Feedback was collected using Google Forms, the link to which is as given:

<https://docs.google.com/forms/d/1neQDWpHWBJCK07jmJKdNCgjBfLZbLH7V29ju6JO41g/edit?usp=sharing>

Feedback obtained from the participants are as follows:

Email Address	Are you satisfied with the lectures?	How the course was organized?	The lectures agree with the theme of the course	The course contents are significant for practical industry applications	The course contents motivate for future research	The courses run timely	I would recommend similar courses to my peers	Your comments (if any)
rasmiranjan.samal@silicon.ac.in	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
Nitintiwari077@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
imrabindrakumar@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Agree	Strongly Agree	The sessions was wonderful.
nareshgupta092@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	
sagarsarangicit@gmail.com	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
satya.samal@kiit.ac.in	Very Satisfied	Very well	Strongly disagree	Strongly disagree	Strongly disagree	Strongly Disagree	Strongly disagree	
praveen.gupta@knit.ac.in	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
kanha.yadav1993@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Agree	Agree	Agree	
siddharth3151@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Strongly Agree	
vipintiwari2050@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
VIKASFCE@RKGIT.EDU.IN	Very Satisfied	Very well	Strongly Agree	Strongly agree	Agree	Agree	Strongly Agree	
rkchoubey.ggv@gmail.com	Very Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Course design was commendable.
irfanmohiuddin@hotmail.com	Satisfied	Very well	Agree	Agree	Agree	Agree	Strongly Agree	I am overall satisfied with the contents and delivery of webinar.
hari09omtamrakar@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	
lmohanty_ce@vssut.ac.in	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	Good
structengg.acad@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	
vivek.200100@gmail.com	Very Satisfied	Very well	Agree	Strongly agree	Agree	Strongly agree	Strongly Agree	
rabbani.ahsan@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Strongly Agree	

punyamayee94@gmail.com	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
mohitvermagsti@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Agree	Agree	Agree	Nice workshop
bajajkishay@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	No
18BCL040@nirmauni.ac.in	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Agree	everthing was fine
debagiri@gmail.com	Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Strongly agree	Agree	
253aditya@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
rajpatilcivil@gmail.com	Very Satisfied	Very well	Strongly disagree	Agree	Strongly Agree	Strongly agree	Strongly Agree	No Thanks
phd2001104003@iiti.ac.in	Satisfied	Very well	Strongly Agree	Agree	Agree	Strongly agree	Agree	
shambhu15987@mitsgwalior.in	Satisfied	Very well	Agree	Agree	Strongly disagree	Agree	Agree	Very informative and useful all Session thanks for giving opportunity for this STTP
sachingeed@mitsgwalior.in	Very Satisfied	Very well	Strongly disagree	Strongly disagree	Strongly disagree	Strongly Disagree	Strongly disagree	No
sahu.pryanka1995@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly disagree	Strongly agree	Strongly Agree	
d.l.meenanitdgp724@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	It was excellent
nikunjbinnani@gmail.com	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	All the sessions were Wonderful
ersatyam94@gmail.com	Very Satisfied	Very well	Strongly disagree	Strongly agree	Strongly Agree	Strongly agree	Agree	
sarthakjain.bm@gmail.com	Satisfied	Well	Neutral	Agree	Agree	Agree	Agree	
debjanipanda2709@gmail.com	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
mahirocking.786@gmail.com	Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Inform if such type of courses organized again.
ce180004015@iiti.ac.in	Satisfied	Well	Strongly Agree	Strongly agree	Strongly Agree	Agree	Strongly Agree	
abubakrjabal@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	excellent program
rafia.jan099@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	Satisfied
chetan.cvl@gmail.com	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Agree	Strongly Agree	Nice coverage of the important aspects in civil engineering.

sroushan40@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
lusi.iter9@gmail.com	Very Satisfied	Very well	Strongly disagree	Strongly agree	Agree	Strongly agree	Agree	Very good intellectual session
aloknarvariya6@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Agree	Strongly Agree	Webinar was really awesome.
anubhavrai.str4@gmail.com	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Strongly agree	Agree	Nice sessions
abhishek22dec@gmail.com	Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Strongly agree	Agree	
ramakanta@nist.edu	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Good Sessions
sufyan.ce19@nitp.ac.in	Very Satisfied	Very well	Strongly disagree	Strongly disagree	Strongly disagree	Strongly Disagree	Strongly disagree	
shahnamrata1234@gmail.com	Very Satisfied	Very well	Neutral	Strongly agree	Agree	Agree	Agree	
rkbhatia12021965@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	NIL
sumitpathak2601@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	No
dhruv.saxena@ecajmer.ac.in	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	
amitsahu43@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Agree	Agree	
shubham.dashore@bitdurg.ac.in	Very Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
bandanasahu007@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
deeptihazari09@gmail.com	Very Satisfied	Well	Agree	Strongly disagree	Strongly Agree	Agree	Agree	It was a wonderful session ..though a little more enhancement on the topic concrete will do more good
rajankrnit2019@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	it was awesome experience to be part of this short term course on Advance in civil engineering.
skasgsits@gmail.com	Satisfied	Very well	Strongly Agree	Agree	Agree	Strongly agree	Agree	
sinha.leena@gmail.com	Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	
vaqas.sheikh@islamicuniversity.edu.in	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	Involvement of more audience is a

									prime need for that use more tools an reminders to reach a bigger audience.
devendradohare@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	No
keshavpotters@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Agree	Strongly Agree	Strongly Agree	
tejas019@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Agree	Strongly agree	Agree	Agree	Very good and informative sessions
lalit.singhal88@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Strongly Agree	Strongly Agree	No
uddinemad7@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Agree	Agree	This course is pure on the research basis that's the best things I got there.
rme1358@mnnit.ac.in	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	Thanks to all the organising members.
amitgolder91@gmail.com	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Agree	Agree	Agree	Each and every session was very helpful
rajatpalya90@gmail.com	Very Satisfied	Very well		Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	No
mohitjvg@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	
jeeps2510@gmail.com	Satisfied	Well	Agree	Strongly agree	Agree	Agree	Agree	Agree	Internet glitches happen
hs615391@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Agree	Strongly Agree	Strongly Agree	It was great experience
iqbal.sheikh046@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Agree	Agree	Neutral	Neutral	
dkaggarwal92@gmail.com	Very Satisfied	Well	Agree	Agree	Agree	Agree	Agree	Agree	NA
abhishekkmr1992@gmail.com	Very Satisfied	Very well	Strongly disagree	Agree	Agree	Agree	Agree	Agree	
shivamg25@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	
anand.iitdhn@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Agree	Strongly agree	Strongly Agree	Strongly Agree	
sargpv@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	Agree	It was a good effort
devendradohare@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	No
nageshmohit123@gmail.com	Satisfied	Well	Agree	Neutral	Agree	Agree	Neutral	Neutral	It's webinar is very useful

									to us...And leart a lot of thing & also motivate
rkbhatia12021965@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	NIL
ganaieaaqib1999@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	
shashikantyada v0911@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	Agree	
nikhilvermanit@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	
someshjain004@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	Nice to learn about new topic
kuldeep1210299@gmail.com	Very Satisfied	Well	Neutral	Strongly agree	Strongly Agree	Strongly Disagree	Strongly Agree	Strongly Agree	
najimalig@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Agree	Agree	
sss.padam.omar@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Agree	Agree	
shubhsuryawan shi786@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Agree	Agree	Agree	
rahulprajapat642@gmail.com	Very Satisfied	Very well	Neutral	Neutral	Neutral	Agree	Disagree	Disagree	Helpful session
rajpatilcivil@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	Keep it up fine
lusi.iter9@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	Very good intellectual session
d.l.meenanitdgp724@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	It was excellent
prabhanshu2@gmail.com	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	Strongly Agree	Thank you for organizing such course for everyone, and also for the workshops of softwares, looking forward for next course like this.
prabhatdhakad@gmail.com	Satisfied	Average	Agree	Agree	Strongly Agree	Agree	Agree	Agree	
debasispanda777@gmail.com	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Strongly agree	Agree	Agree	
Kumar200829@gmail.com	Satisfied	Very well	Agree	Agree	Strongly Agree	Agree	Agree	Agree	
abhishekshrivas tava086@gmail.com	Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Agree	Agree	Agree	No

rahul.kumarce@sanskar.org	Satisfied	Well	Agree	Agree	Strongly Agree	Agree	Strongly Agree	Need similar fdp
vipin@thdcihet.ac.in	Very Satisfied	Very well	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly Agree	N/A
dubeyable@mitsgwalior.in	Very Satisfied	Very well	Agree	Agree	Strongly Agree	Agree	Agree	Well managed course
bharadwajankit644@gmail.com	Satisfied	Well	Agree	Strongly agree	Agree	Strongly agree	Agree	
bickycivil@gmail.com	Very Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Agree	Strongly Agree	
nirajdsi10@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
deveshjaysawal755@gmail.com	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	Fine
payal.rtu3015@gmail.com	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
vyotiprakash.padhifce@kiit.ac.in	Very Satisfied	Very well	Agree	Agree	Agree	Agree	Strongly Agree	
dubeyable@mitsgwalior.in	Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	
prabhakarkumar51@gmail.com	Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Agree	Agree	
siddhartha@bitmesra.ac.in	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
kumarsantosh386@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	
karthick.iiti@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Good
abhimce11@gmail.com	Satisfied	Very well	Agree	Strongly agree	Agree	Agree	Agree	
jiten.manit@gmail.com	Very Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Strongly agree	Agree	It is a great and fruitful program
sc3973@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Strongly agree	Agree	nice
mail2vksahu@gmail.com	Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	Nice
verma.sanjay090@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Excellent Event - Congratulations Organizers - Regards Dr. Sanjay Kumar Verma
yusufsultan1@gmail.com	Satisfied	Well	Agree	Agree	Agree	Agree	Agree	
ssisodiya.npiu.c@rtu.ac.in	Satisfied	Well	Strongly Agree	Disagree	Agree	Strongly agree	Agree	
indup901@gmail.com	Very Satisfied	Very well	Agree	Neutral	Agree	Agree	Agree	Very useful and informative
rajatpalya90@gmail.com	Very Satisfied	Very well	Strongly disagree	Strongly disagree	Strongly disagree	Strongly Disagree	Strongly disagree	

devendradohare@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	No
lusi.iter9@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Very good intellectual session
m.chandra9146@gmail.com	Satisfied	Very well	Agree	Agree	Strongly Agree	Agree	Strongly Agree	
rkchoubey.ggv@gmail.com	Very Satisfied	Very well	Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	course was very informative and excellent
Mahesh93.happy@gmail.com	Satisfied	Very well	Agree	Agree	Strongly Agree	Agree	Agree	
phd1901204003@iiti.ac.in	Very Satisfied	Very well		Agree	Agree	Agree	Agree	
shivanivermace0094@gmail.com	Very Satisfied	Very well	Agree	Agree	Agree	Agree	Agree	
rkbhatia12021965@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Strongly agree	Strongly Agree	Excellent STTP
yranvijay.yadav@gmail.com	Very Satisfied	Very well	Strongly Agree	Strongly agree	Strongly Agree	Agree	Agree	

5. Link for conducting sessions:

meet.google.com/uqy-xdaz-hsx

श्री जी० एस० प्रौद्योगिकी एवं विज्ञान संस्थान

23, पार्क रोड, इन्दौर (म०प्र०)

क्रमांक: स्था/संविदा/2020/205-9

दिनांक : 06/08/2020

सहायक प्राध्यापक (संविदा) हेतु संविदा नियुक्ति – संविदा पत्र

यह संविदा निदेशक, श्री जी० एस० प्रौद्योगिकी एवं विज्ञान संस्थान, इन्दौर एवं

अभ्यर्थी का नाम (श्री/श्रीमती/कु.)

ADITYA LAGHATE

आत्मज/आत्मजा/पत्नि श्री

Mileen Laghate

आयु

24 Years

निवासी

6/6, SGSITS Campus, Yeshwant Niwas Road, Indore

के मध्य संस्थान में दिनांक 06.08.2020 या उसके पश्चात

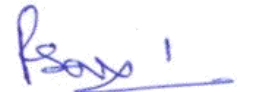
कार्यभार ग्रहण करने के दिनांक से 31-12-2020 तक

विषय/विभाग

Civil Engineering & Applied Mech

में अध्यापन कार्य हेतु व्यवस्था निम्न शर्तों पर अभ्यर्थी के संस्थान में कार्यग्रहण करने की दिनांक को निष्पादित की जाती है।

1. संस्थान में आपकी शैक्षणिक वर्ष 2019-20 हेतु संविदा नियुक्ति, जिसकी अवधि दिनांक 31/05/2020 को समाप्त हो चुकी है, को उपरोक्त उल्लेखित अवधि हेतु वर्ष 2020-21 हेतु नवीनी कृत किया जाता है। यह व्यवस्था वर्तमान में कोविड-19 के कारण उत्पन्न परिस्थितियों में नवीन चयन प्रक्रिया आयोजित न हो पाने के कारण की जा रही है। अभ्यर्थी के शिक्षण प्रदर्शन (Performance) एवं विद्यार्थियों की प्रतिपुष्टि (Feedback) के आधार पर इस अवधि को शैक्षणिक सत्र के अंत तक बढ़ाया जा सकेगा।
2. यह संविदा नियुक्ति अभ्यर्थी के इस संविदा पत्र की द्वितीय मूल प्रति हस्ताक्षर कर एवं समस्त मूल दस्तावेजों की सत्यापित प्रतिलिपि स्थापना विभाग में जमा करते हुए संस्थान में कार्यग्रहण करने पर ही प्रभावशील होगी।
3. अभ्यर्थी संस्थान में अनुशासन एवं गरिमापूर्ण तरीके से अपना कार्य सम्पन्न करेगा/करेगी।
4. अभ्यर्थी अध्यापन एवं अन्य संबंधित कार्य का निष्पादन निदेशक/विभागाध्यक्ष के निर्देशों के अनुसार करेगा/करेगी।
5. संस्थान सामान्यतः सात दिन की पूर्व सूचना देकर इस संविदा को समाप्त कर सकेगा और इसी प्रकार संबंधित व्यक्ति भी सात दिन की पूर्व सूचना देकर इस संविदा से अपने आपको अलग कर सकेगा/सकेगी। परन्तु यह भी, कि पर्याप्त औचित्य होने पर यथा संतोषजनक कार्य-निष्पादन अथवा आचरण न पाए जाने पर बिना किसी पूर्व सूचना के भी संस्थान इस संविदा को समाप्त कर सकेगा।
6. अभ्यर्थी निदेशक की पूर्व अनुमति से अपने कार्य से अनुपस्थित रह सकता/सकती है, परन्तु बिना किसी सूचना/अनुमति के निरंतर सात दिनों तक अनुपस्थित रहने पर यह संविदा स्वयंमेव ही समाप्त मानी जावेगी।
7. अभ्यर्थी को कार्य के लिए पारिश्रमिक के रूप में प्रतिमाह रु. 30000/- (तीस हजार मात्र) का भुगतान किया जावेगा और अन्य किसी प्रकार का भुगतान नहीं किया जावेगा। अभ्यर्थी की कार्य से अनुपस्थिति की स्थिति में पारिश्रमिक का आनुपातिक रूप से कटौती किया जावेगा।
8. संविदा में निहित शर्तों से हटकर अभ्यर्थी यदि कोई मांग करता/करती है, या मांग पूर्ति हेतु आन्दोलनात्मक गतिविधियों में भाग लेता/लेती है तो यह संविदा स्वयंमेव समाप्त मानी जावेगी।
9. अभ्यर्थी किसी भी सेवा में नियोजन हेतु सीधे आवेदन पत्र भेज सकेगा/सकेगी। निदेशक के माध्यम से आवेदन पत्र भेजने की आवश्यकता नहीं है, परन्तु वह तत्काल इसकी जानकारी संस्थान को देगा/देगी।
10. संविदा समाप्ति की स्थिति में अभ्यर्थी संस्थान की कोई भी सामग्री जो उसके आधिपत्य में हो तत्काल वापिस लौटा देगा/देगी, अन्यथा इस कारण से होने वाली हानि की वसूली उसे देय बकाया स्वत्वों के विरुद्ध अथवा भू-राजस्व की बकाया की भांति की जा सकेगी।
11. अभ्यर्थी नियमित रूप से पूर्ण समय संस्थान में उपलब्ध रहेगा/रहेगी तथा वह संस्थान के बाहर निदेशक की अनुमति के बिना पारिश्रमिक या बगैर पारिश्रमिक के कार्य नहीं कर सकेगा/सकेगी।
12. अभ्यर्थी को एक माह में एक दिन के आकस्मिक अवकाश की पात्रता संघयी सुविधा के साथ रहेगी।
13. अभ्यर्थी दिनांक 06.08.2020 से दिनांक 17.08.2020 (दोनों तिथियां सम्मिलित) के मध्य निश्चित रूप से पद का कार्यभार ग्रहण कर लेगा/लेगी।



निदेशक

निदेशक

श्री गो. से. प्रौद्योगिकी एवं
विज्ञान संस्थान, इन्दौर

Photo Identity Card of Institute for registration purpose

Anand Chaturvedi <anand.chaturvedi@knit.ac.in>

Fri, Oct 9, 2020 at 7:02 PM

To: TEQIP Office <teqipoffice@iiti.ac.in>

Dear Sir/ma'am

This is Anand Prakash Chaturvedi assistant Professor, Department of Civil Engg, KNIT SULTANPUR, UP. I am working Under TEQIP-III Project of MHRD. I am not provided any I-card from Institute. Following is my TEQIP identify number provided by NPIU-MHRD for your reference. It would be great if you consider the same.

Name: ANAND PRAKASH CHATURVEDI

TEQIP Id. : **TEQIP030470**

Thank You

Regards

Anand Prakash Chaturvedi
Assistant Professor
Department of civil engineering
KNIT- Sultanpur (U. P.)
Pin 228118
Mo. +91- 9575443074

[Quoted text hidden]

[Quoted text hidden]



Dumka Engineering College

(Estd. by Govt. of Jharkhand & run by Techno India under PPP)
(Approved by AICTE, New Delhi & affiliated to Jharkhand University of Technology / Sidhu Kanhu Murmu University, Dumka)

Corporate Office : EM 4/1, Sector - V, Salt Lake, Kolkata - 700 091
Phone : (91) 33-2357-6163/64/2658/1094, Fax : (91) 33-2357-1097

Ref: DEC/ADMIN/PO/SEP/2020/170

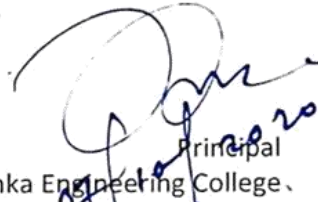
Date: 07.10.2020

TO WHOM IT MAY CONCERN

This is to certify that Mr. Debasis Panda S/o Shyamal Kumar Panda is working as an Assistant Professor (Temporary) under TEQIP-III in the Department of Civil Engineering at Dumka Engineering College (Estd. by Govt. of Jharkhand & Run by Techno India under PPP) since 29th September 2018.



E-mail: debasispanda77@gmail.com
Mob No: 6291868096


Principal
Dumka Engineering College,
Principal
Dumka Engineering College
(Estd. by Govt. of Jharkhand & Run by Techno India under PPP)
Near Govt. Polytechnic College, P.O.-Shivpahar
Dumka, Jharkhand, Pin.-814101



**SHRI G. S. INSTITUTE OF
TECHNOLOGY & SCIENCE, INDORE**

Govt. Aided Autonomous Institute, Estd.: 1952

Name : Devendra Dohare
Designation : Assistant Professor
Department : CIVIL ENGG. & APPL. MECH.
Employee ID : 0709261
Blood Group : B+



DIRECTOR

23, Sir M. Visvesvaraya Marg, Indore 452003 MP. +91 731 2511100



GOVT. ENGINEERING COLLEGE, AJMER

(An Autonomous Institute of Govt. of Rajasthan)

Barliya Choraha National Highway No. - 8, Ajmer

☎ 0145-2971024

www.ecajmer.ac.in

No. GECA/Estt./2018/ 2605

Date: 30.07.18

To Whosoever It May Concern

It is certify that Mr. Dhruv Saxena S/o Dr. Ravi Saxena is woking as Assistant Professor (On Contract Under TEQIP-III Project) in the Department of Civil Engineering of this college since 15.01.2018.


Registrar
Registrar

Govt. Engineering College, Ajmer



VISHWAVIDYALAYA ENGINEERING COLLEGE LAKHANPUR SURGUJA

(A constituent college of CSVTU Bhilai, Chhattisgarh)



ID Number : TEQIP005649
Name : Mr. HARI OM TAMRAKAR
Designation : Assistant Professor (NPIU)
Department : Civil Engineering
Date of Joining : 04-09-2018
Blood Group : A+ (Positive)
Mobile No : 8096806460
Email ID : hariom.npiu@gmail.com
Address : House No 16, Block No 1,
Vasundhara Park Residency, Sati Para
Near Sati Mandir, Ambikapur, CG



Principal

Vishwavidyalaya Engineering College Lakhanpur, Ambikapur, Distt: Surguja
(A constituent college of Chhattisgarh Swami Vivekanand Technical University Bhilai, (C.G.))

Ph: 07774-261223

Fax: 07774-261224

Email: Vecprincipallakhanpur@gmail.com

Web: <https://veclakhanpur.in>

Web: <https://www.csvtu.ac.in/>



VEER SURENDRA SAI
UNIVERSITY OF TECHNOLOGY
वीर सुरेन्द्र साए प्रौद्योगिक विश्वविद्यालय
BURLA, SAMBALPUR - 768018, ODISHA

IDENTITY CARD

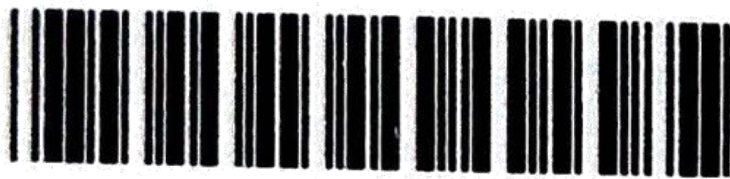
V
S
S
U
T



Leena Sinha

Employee Code: 121665

Valid Till: 30-Jun-2042



Leena Sinha
Registrar

www.vssut.ac.in



DEPARTMENT OF CIVIL ENGINEERING
KAMLA NEHRU INSTITUTE OF TECHNOLOGY
SULTANPUR - 228 118 (U.P.)

DR. N. K. SAXENA
Professor & Head

Ph. (M) 9415056932

TO WHOM IT MAY CONCERN

This is to certify that Mr. Jitendra Pratap Singh, is working as Assistant professor in the Department of Civil Engineering, KNIT Sultanpur.

*Photograph & signature attached
below
Dr. N. K. Saxena
20.12.2017*

*Dr. N. K. Saxena
20.12.2017*
(Dr. N. K. Saxena)

Professor & Head

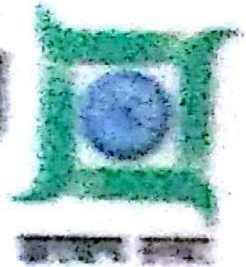
Civil Engineering Department

Professor & Head
Civil Engg Deptt.
K.N.I.T., Sultanpur.





B.I.T. SINDRI



Deptt. of Higher
& Tech. Education

Govt. of Jharkhand

P.O. - Sindri Institute, Dhanbad - 828123

Identity Card

BIT/SDRI/322

GPF -BHR/SC & T/
410



PROF. (Dr.) GIRIJESH KUMAR

F/H Name LT. NARSINHA PD ROY

Desig.: PROFESSOR

D.O.B.: 06.01.1957

O+

Add.: QR. 0/5, BIT, SINDRI, DHANBAD,
JHARKHAND-828123

Prof. (Dr.) U.K. Dey
Director

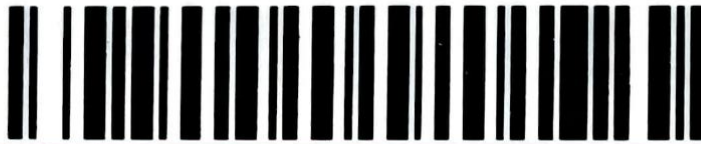


SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

Govt. Aided Autonomous Institute, Estd.: 1952

S Name : Rakesh Purviya
T Designation : Assistant Professor
I Department : CIVIL ENGG. & APPL. MECH.
S Employee ID : 719989
G Blood Group : O-

S



Rakesh Purviya
DIRECTOR

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Govt. of Bihar
Department of Science & Technology

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IDENTITY CARD

Employee ID : TEQIP007572



RAUSHAN RANJAN

Designation : Assistant Professor
Department : Deptt. of Civil Engg.
Contact No. : 8299259913
Comm. Address : Deptt. of Civil Engg.,
Gaya Engineering College,
Dist. Gaya-823003, Bihar
Date of joining : 15.10.2018
Blood Group : A + ve

(Raushan)
Card Holder's Sign.

(Signature)
Principal

Father's Name : Naval Kishor Singh
Address : At-Rasulpur, PO-Abgila,
PS-Paras Bigha,
Dist.-Jehanabad-804423, Bihar
Date of Birth : 10 January 1990
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Address of correspondence
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Jabalpur Engineering College, Jabalpur

(Declared Autonomous by Govt. of M.P.)

Estd. in 1947 as Govt. Engg. College, Jabalpur

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Designation : **ASST PROFESSOR**
Department : **Civil Engineeing**
DOB : **25/07/1989**
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JABALPUR M.P. ,
Valid Upto : **06/30/2020**



Handwritten signature

BG :A+



TEQIP024345

Handwritten signature in blue ink

Principal

IDENTITY CARD

Jabalpur Engineering College, Jabalpur

(Declared Autonomous by Govt. of M.P.)

Estd. in 1947 as Govt. Engg. College, Jabalpur

Name

VIVEK VISHWAKARMA

Designation

ASST. PROFESSOR

Department

Civil Engineering

DOB

25/08/1989

**C 221 SHUBHAM RESIDENCY, TILHARI
JABALPUR M.P.,**



Valid Upto

06/30/2019



TEQIP011565

BG: O+

Principal



B.I.T. SINDRI



भारत सरकार

Deptt. of Higher Tech. Education & Skill Development

Govt. of Jharkhand

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Identity Card

BIT/SDR/1819

P.F. No.-

TEQIP004447



ABHIJIT ANAND

F/H Name NAND KISHORE SINGH

Desig.: ASST. PROFESSOR.

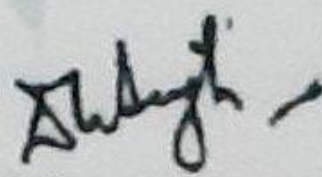
CIVIL

D.O.B.: 16.12.1987

O+

Add.: QR.NO. R-20/2, HARMU HOUSING COLONY, RANCHI

9078673607


Director

Govt. of Bihar

Dept. of Science & Technology

**MOTIHARI COLLEGE
OF ENGINEERING**

Bairiya, Fursatpur, Motihari-845401

Mobile: 9431811171

IDENTITY CARD



9631052383



AB+

ID NO.-

ABHISHEK KUMAR

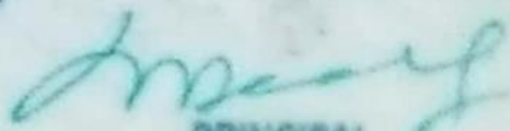
FATHER'S NAME : MR. RAJ KUMAR RAI

DESIGNATION : ASST. PROFF.

D.O.B. : 10/31/1991

BRANCH : CIVIL

RES. ADDRESS : BARARI,
FERI ROAD,
BHAGALPUR,
BIHAR


PRINCIPAL



**SHRI G. S. INSTITUTE OF
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Govt. Aided Autonomous Institute, Estd.: 1952

S Name : Abhishek Shrivastava

- Designation : Assistant Professor

- Department : CIVIL ENGG. & APPL. MECH.

S Employee ID : 0075072

G Blood Group : A+



Prasanna

DIRECTOR



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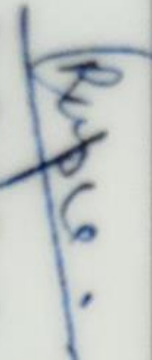
GOVERNMENT ENGINEERING COLLEGE BHARATPUR (RAJASTHAN)

(An Autonomous Institution of Govt. of Rajasthan)



IDENTITY CARD

Faculty Name : ANKIT BHARDWAJ
Faculty ID : 1-3626179669
DOB : 07-09-1984
Designation : ASSISTANT PROFESSOR
Department : CIVIL ENGINEERING
E-mail : ank.bhardwaj@gmail.com


Dr. Ravi Gupta
PRINCIPAL



SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

Govt. Aided Autonomous Institute, Estd.: 1952



S Name : Ashish Giri
 - Designation : Assistant Professor
 - Department : CIVIL ENGG. & APPL. MECH.
 S Employee ID : 0705062
 S Blood Group : O+



ASHISH GIRI
28-02-2019

DIRECTOR



07662-233478, 233669



NDE Report

+ Dr. DK Singh

+ Dr. Rajendra Prasad Tiwari

+ Dr. D K Jain

+ Dr. Jitendra Gurjar

- Bicky Agarwal



Designation: : Assistant Professor

Qualification : M Tech

Area of Interest : Transportation

Engineering

Phone No. : 9537739488

Email : bickycivil@gmail.com

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA
(Formerly University College of Engineering, Burla)
Technical Education Quality Improvement Programme (TEQIP-III)

P.O. Engineering College Burla,
Dist: Sambalpur, (Odisha, (India)
PIN : 768018



Ph : 0663-2432021
Fax : 0663-2430204
www : vssut.ac.in
E-mail : vcvssut@gmail.com

No.VSSUT/TEQIP/ 190/2020

Dated : 04/06/2020

OFFICE ORDER

In supersession to the office order vide No. VSSUT/TEQIP/97/2018 dated 26.07.2018, various committees of TEQIP-III have been reconstituted consisting of the following members to look after the activities of TEQIP-III.

1. **Institutional Project Director(IPD)** : Vice-Chancellor
2. **Institutional Project Coordinator(IPC)**: Prof. Amar Nath Nayak, Professor in Civil Engg. Dept.
3. **Committee for Financial Management** :
Nodal Officer : Dr. P. Mohapatra, Associate Professor in Chemistry Dept.
Members:
 - i) Dr. Debabrata Giri, Associate Prof. in Civil Engg. Dept.
 - ii) Dr. Ganeswar Nath, Associate Prof. in Physics Dept.
 - iii) Mr. Suvendu Narayan Mishra, Assistant Prof. Electronics and TCE
 - iv) Dr. D.C. Rao, Assistant Prof. in IT Dept.
 - v) Dr. Dinesh Kumar Mishra, Assistant Prof. MME Dept.
4. **Committee for Procurement Activities**
Nodal Officer : Dr. Punyapriya Mishra, Associate Professor in Mechanical Engg. Dept.
Members :
 - i) Dr. Ravindra Behera, Workshop Superintendent.
 - ii) Dr. Pradeep Kumar Sahu, Associate Professor in IT Dept.
 - iii) Dr. B.D. Rout, Assistant Professor in Electrical Engg. Dept.
 - iv) Dr. Saroj Pradhan, Assistant Professor in Mathematics Dept.
 - v) Mr. R.L. Sahu, Asst. Prof. in Civil Engg.
 - vi) Mr. B.K. Bhoi, Asst. Prof. in Electronics & TC Engg
5. **Committee for Academic Activities**
Nodal Officer : Prof P.K. Hota, Professor in Electrical Engg.
Members:
 - i) Dr. Padmanav Dash, Associate Professor, Mechanical Engg. Dept.
 - ii) Dr. Arunanshu Mahapatro, Associate Prof. in ETC Dept.
 - iii) Dr. Mihir Sutar, Associate Prof. in Mechanical Engg. Dept.
 - iv) Mr. Pratap Kumar Pradhan, Assistant Prof. in Civil Engg. Dept.
 - v) Mr. Anil Kumar Murmu, Assistant Professor in Chemical Engg. Dept.

Contd...

IDENTITY CARD

Jabalpur Engineering College, Jabalpur

(Declared Autonomous by Govt. of M.P.)

Estd. in 1947 as Govt. Engg. College, Jabalpur

Name : Prof. Deepak Kumar Pathak

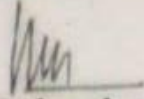
Designation : Reader

Department : Civil Engineering

DOB : 10/10/1963

Address : F-1 Govt. Engg. College
JBP, MP

Valid Upto : 31/10/2025


Principal



BG: B+VE

BHILAI INSTITUTE OF TECHNOLOGY

DURG (C.G.)

(Seth Balkishan Memorial)



Deepti Hazari
Assistant Professor

P. No. 10332

Department of Civil Engineering





**SHRI G. S. INSTITUTE OF
TECHNOLOGY & SCIENCE, INDORE**
Govt. Aided Autonomous Institute, Estd.: 1952

Name : Deepti Surana

Designation : Assistant Professor

Department : CIVIL ENGG. & APPL. MECH.

Employee ID : 0705030

Blood Group : O+



Deepti Surana



DIRECTOR

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Dayalbagh Educational Institute
Dayalbagh, Agra

Faculty of Engineering

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Sh. Devesh Jaysawal

Dept. of Civil Engineering





TECH. EDUCATION DEPARTMENT GOVT. ENGINEERING COLLEGE REWA

(Declared Autonomous by the govt.)

Telephone . 07662-233478

Adhar No. 677122301623

Name : Jitendra Gurjar
Father's Name : Hari Karan Gurjar
Date of Birth : 20.09.1984
Designation : Assistant Professor (Civil)
Mobile No. : 8989716185
Blood Group : B⁺
EmPLY. Sing :



Principal

Madhav Institute of Technology & Science
Race Course Road, Gola ka Mandir Gwalior-05



Name: Rakesh Kumar Dubey

Valid Upto: 30/06/2022

CE



TEQIP025516



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RAMGARH

Emp. Code - 82103

SANDEEP THAKUR

CE

+9893295621

A+



Authorized Signatory

** If found please return to : Ramgarh Engineering College,
Murbanda, P.O. - Barkipona, P.S. - Rajarajappa Project
Dist. - Ramgarh, Jharkhand, Pin - 825101

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Dept. of Higher Tech. Education & Skill Development

Govt. of Jharkhand

P.O. - Sindri Institute, Dhanbad - 828123

Identity Card

BIT/SDR/1895

TEQIP015661



IQBAL SHEIKH

F/H Name RASED SHEIKH

Desig.: Assistant Professor

CIVIL ENGG.

D.O.B.: 12.11.1990

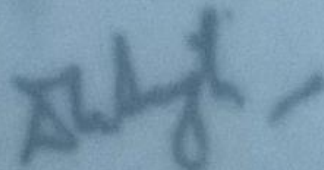
B+

Add.: C-13, CIVIL ENGINEERING

DEPARTMENT, B.I.T

SINDRI, DHANBAD

8709770434


Director



**SHRI G. S. INSTITUTE OF
TECHNOLOGY & SCIENCE, INDORE**
Govt. Aided Autonomous Institute, Estd. : 1952

S Name : **Kanhaiya Kumar Yadav**

— Designation : **Assistant Professor**

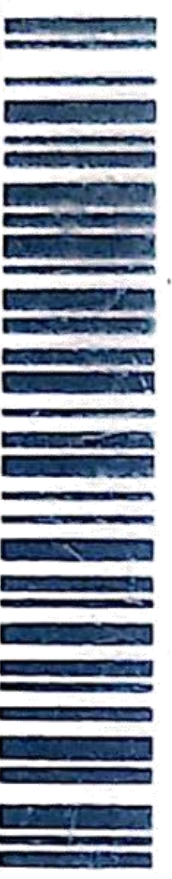
— Department : **CIVIL ENGG. & APPL. MECH.**

S Employee ID : **9705511**

G Blood Group : **A+**



S



K. Yadav

DIRECTOR

23, Sir M. Visvesvaraya Marg, Indore 452003 MP. +91 731 2582 100



VEER SURENDRA SAI
UNIVERSITY OF TECHNOLOGY
वीर सुरेन्द्र साए प्रौद्योगिक विश्वविद्यालय
BURLA, SAMBALPUR - 768018, ODISHA

IDENTITY CARD

V
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U
T



Laxmipriya Mohanty

Employee Code: 141736

Valid Till: 31-Mar-2047



Laxmipriya Mohanty
Registrar

www.vssut.ac.in



SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

Govt. Aided Autonomous Institute, Estd.: 1952

S Name : Mahesh Chandra
T Designation : Assistant Professor
- Department : CIVIL ENGG. & APPL. MECH.
S Employee ID : 0075073
G Blood Group : B+



DIRECTOR



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Identity Card



Name : MOHIT AGGARWAL
Designation : Assistant Professor
Work Place : MITS, Gwalior, CED
Mobile No. : 8815923230
Father's Name : V.K. AGGARWAL
Address : Flat No. 101, ~~Suppose~~ *Residency, Bank Colony, Gwalior*

Administrative Officer



Jabalpur Engineering College


(Established as Government
Engineering College, Jabalpur in 1947)
Gokalpur, Jabalpur - 482011 (M. P.)
Ph. : 0761-2331953, 2431355

ID Card No.: JEC021



Mohit Verma

Assistant Professor
Deptt. of Civil Engineering


Signature Holder


Signature





**BABA GHULAM SHAH
BADSHAH UNIVERSITY
RAJOURI, J&K**



Najim Ali

Assistant Professor

ID : TEQIP-AP-022
Department : Civil Engineering
Contact No. : 9717001305
Valid upto : 31-03-2020

Jalalpur Khas Distt. Moradabad U.P - 244411

Najim Ali

Sign. Card Holder

[Signature]

Registrar

IDENTITY CARD



**GOVT. COLLEGE OF ENGINEERING
KALAHANDI, BHAWANIPATNA**
(A Constituent College of BPUT)
GOVT. OF ODISHA



NAREESH KUMAR GUPTA

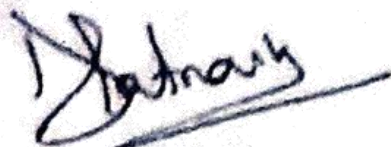
Designation : Assistant Professor

Department : Civil Engg.

Employee ID : 218005

Blood Group : B +ve

Nareesh Kumar
Signature


Principal



SHRI G. S. INSTITUTE OF
TECHNOLOGY & SCIENCE, INDORE

Govt. Aided Autonomous Institute, Estd.: 1952

Name : Nikunj Binnani

Designation : Assistant Professor

Department : CIVIL ENGG. & APPL. MECH.

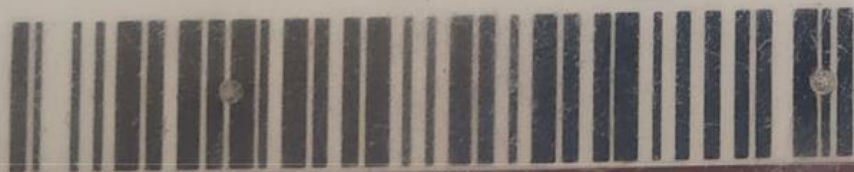
Employee ID : 0705005

Blood Group : O+



R. Sanyal

DIRECTOR



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Govt. of Bihar
Department of Science & Technology

GAYA COLLEGE OF ENGINEERING

Sri Krishna Nagar, Via-Buniyadganj, Khizarsarai, Gaya, Bihar 823003

IDENTITY CARD

Employee ID : TEL



NPIU

National Project Implementation Unit

PRABHAKAR KUMAR

Designation : Assistant Professor (Contract)

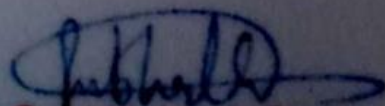
Department : Civil Engg.

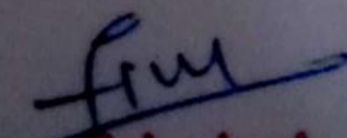
Contact No. : 9512460712

Address : S/o Dashrath Prasad Barnwal
At-Sikandra, Darji Muhlla,
Nabab Tola, Dist.-Jamui-811315

Date of Birth : 06.09.1989

Blood Group : B +ve


Card Holder's Sign.


Principal

NATIONAL INSTITUTE OF SCIENCE
AND TECHNOLOGY



Palur Hills, Berhampur, ORISSA - 761008



Ramakanta Choudhury

Employee Num : 201502143

Ramakanta Choudhury

Sangram Mudali

DIRECTOR

Madhav Institute of Technology & Science
Race Course Road, Gola ka Mandir Gwalior-05



Name: Sachin Ramesh Rao Geed
Valid Upto: 30/06/2021



TEQIP006406




TECH. EDUCATION DEPARTMENT GOVT. ENGINEERING COLLEGE REWA

(Declared Autonomous by the govt.)

Telephone . 07662-233478

Adhar No. 47595444482

Name : Dr. Sandeep Choudhary
Father's Name : Awadhesh Choudhary
Date of Birth : 25.11.1987
Designation : Assistant Professor (Civil)
Mobile No. : 7693042169
Blood Group : O⁺
EmPLY. Sing : 




Principal



**BABA GHULAM SHAH
BADSHAH UNIVERSITY
RAJOURI, J&K**



Satyam Vishwakarma
Assistant Professor

Card No. : TEQIP-AP-32
Department : Civil Engg.
Contact No. : 8899261369
Issued On : 12-10-2018

**JUDAPUR BEEHAR POST DAHIYAWAH TEHSIL
SORANW DISTT. PRAYAGRAJ U.P – 212503**

Sign. Card Holder

Registrar

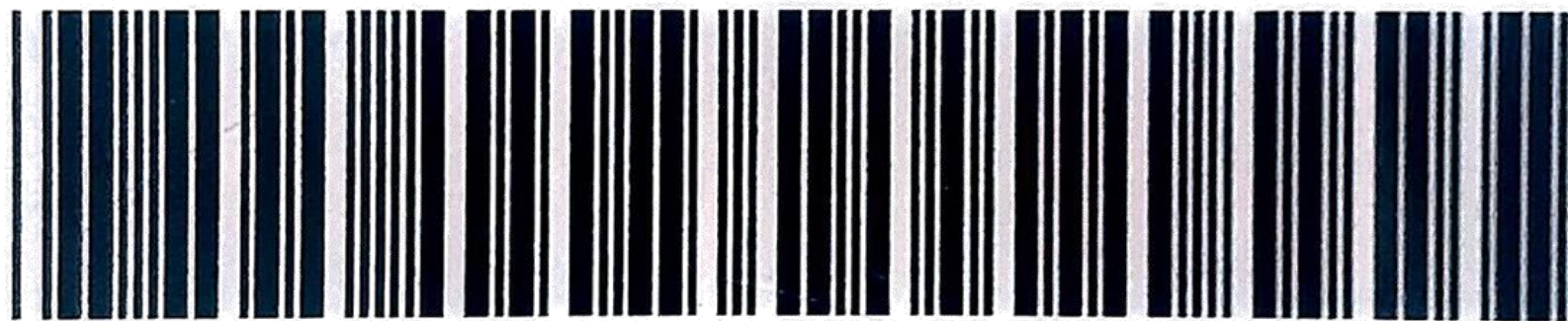
IDENTITY CARD

Madhav Institute of Technology & Science
Race Course Road, Gola ka Mandir, Gwalior 05



Name: Shivam Gupta
Valid Upto: 30/06/2021

DSW



TEQIP024640



BIRLA INSTITUTE OF TECHNOLOGY

MESRA, RANCHI - 835 215

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ID No. : 103



नाम

Name

SIDDHARTHA SENGUPTA

पदनाम

Designation

ASSOCIATE PROFESSOR

जन्म तिथि

Date of Birth

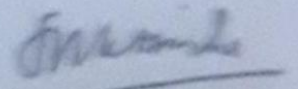
29.02.1976

कार्यकारी संख्या

Employee Code

02795

Card Holder's Sign.


(Vice-Chancellor)
Issuing Authority



Temporary ID card

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Rajasthan 324010

Name : Sohil Sisodiya

Designation: Assistant Professor (NPIU Faculty)

Department: Civil Engineering

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Valid Up to: Till Permanent ID card Issued






Dean, NPIU Affairs



SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

Govt. Aided Autonomous Institute, Estd.: 1952

S Name : Sunil Kumar Ahirwar
T Designation : Assistant Professor
- Department : CIVIL ENGG. & APPL. MECH.
S Employee ID : 0700302
G Blood Group : O+



DIRECTOR



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PARALA MAHARAJA ENGINEERING COLLEGE

(A constituent college of Biju Patnaik University of Technology, Odisha, Rourkela)
SITALAPALLI: BERHAMPUR: DIST.: -GANJAM: PIN - 761003

Engagement Offer

Date:- 03/01/2018

No. PMEC/Estt./ 10

Sub:- Engagement as Assistant Professor on contract for TEQIP-III.

Ref:- 1) NPIU advertisement dated 27th October 2017
2) Your online application No. TEQIP004755
3) NPIU letter dtd. 27th December, 2017.

I am pleased to inform you that your candidature has been recommended by NPIU / MHRD for engagement of your services on contract basis as "Assistant Professor, Civil Engineering" in this college. Your engagement shall be subject to the terms and conditions given as below:

Terms and Conditions:

1. The Contract faculty shall serve the College on temporary basis for TEQIP-III, World Bank assisted project being implemented by the college from 1st April 2017 to 31st March 2020. This engagement shall stand terminated by efflux of time on stipulated date and / or shall be conterminous to the project whichever occurs first.
2. The candidate shall have to submit the Undertaking and Affidavit as per the prescribed format attached herewith, each on Rs.100/- stamp paper for the initial period of one year from his/her date of joining.
3. The continuation of candidates' service for another year during the project period, shall depend on his/her annual performance appraisal by head of the institution as per the format in Annexure-1. If continued, the candidate has to submit Undertaking and Affidavit again for another term of one year.
4. The selected candidates shall be project staff of TEQIP-III engaged on purely temporary basis subject to his/her satisfactory performance in academic and administrative assignments given during the engagement period.
5. In case the performance is found unsatisfactory, the contractual engagement shall be discontinued immediately without giving any notice. Therefore, the candidate shall not have, in any case, claim for his/her continuation of his engagement/ regular service after project period.
6. The contract faculty shall be entitled only for the consolidated amount of Rs.70,000/- (Rupees Seventy Thousand only) per month towards remuneration for the period. The said remuneration is a consolidated remuneration per month and does not attract any dearness allowance or any other allowances or perks over and above such specified remuneration.



**ISLAMIC UNIVERSITY OF
SCIENCE & TECHNOLOGY, KASHMIR**

Vaqas Hussain Sheikh

Assistant Professor



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Issuing Authority
Registrar

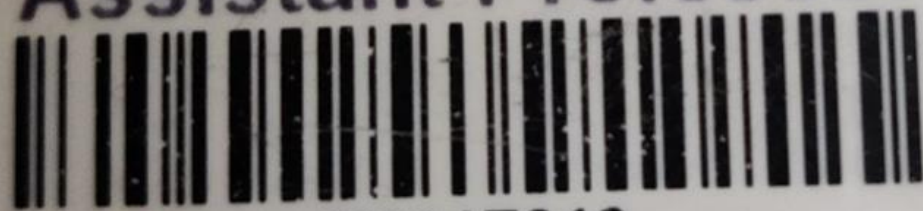


RKGIT



Vikas Tyagi

Assistant Professor



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Director



**SHRI G. S. INSTITUTE OF
TECHNOLOGY & SCIENCE, INDORE**
Govt. Aided Autonomous Institute, Estd. : 1952

S Name : Yusuf Sultan

H Designation : Assistant Professor

— Department : CIVIL ENGG. & APPL. MECH.

S Employee ID : 9705525

G Blood Group : A+



Yusuf Sultan



DIRECTOR