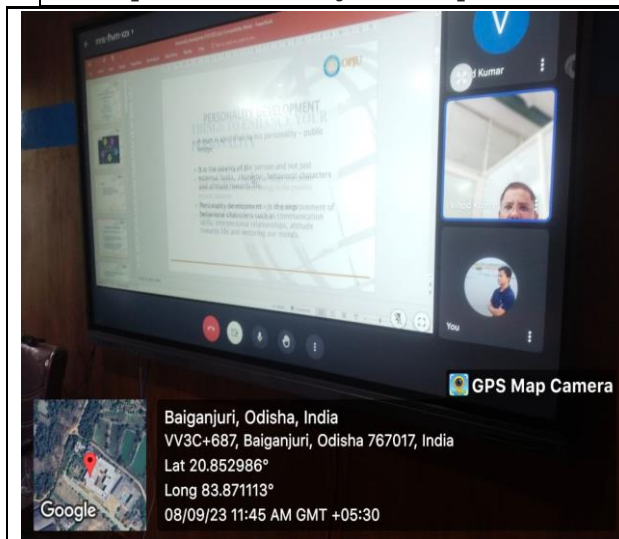


# QUARTERLY REPORT

## 1. GUEST LECTURE DELIVERED

1. **Prof. Vinod Nagpure**, Sr. Assistant Professor in Civil Engineering Department of OPJU Raigarh delivered a guest lecture in online mode on 8<sup>th</sup> September, 2023 on topic “Personality Development” for Government Polytechnic Sonapur (Odisha).



2. Prof. Vinod Nagpure, Sr. Assistant Professor in Civil Engineering Department of OPJU Raigarh delivered series of guest lectures during 11-13 August 2023 on “Training of Trainer (ToT): Civil and construction” at OPJCC Punjipathra, Raigarh.





3. Prof. Vinod Nagpure, Sr. Assistant Professor in Civil Engineering Department of OPJU Raigarh delivered series of guest lectures during 25-28th July 2023 on “Training of Trainer (ToT): Civil and construction” at OPJCC Punjipathra, Raigarh








**4.Prof. Tulika Gupta**, Sr. Assistant Professor in Civil Engineering Department of OPJU Raigarh “Delivered a Guest lecture in Training of Trainer (ToT) Civil and construction at OPJCC” on Date- 27<sup>th</sup> July, 2023





## 2. Guest lecture Conducted

The **Department of Civil Engineering**, in association with the Centre for Industry-Academia Collaboration (CIAC) of O P Jindal University, Raigarh, has organised a guest lecture on “Role of the blended cement in durability of concrete” on August 29, 2023, from 3.00 pm to 04.30 pm. The guest lecture was organised in online mode through the Google Meet platform. The speaker for the event was Mr Dhiraj Bansal, DGM Technical Services (Shree Cement, Raipur, CG).



The poster features logos at the top for OPJU (University of Steel Technology and Management), G20 India 2023, OPJU's Innovation Council, and CIAC. The main text reads: "Department of Civil Engineering In Association with Centre for Industry Academia Collaboration (CIAC) OP Jindal University, Raigarh Presents Guest Lecture on Role of the Blended Cement in Durability of Concrete". It includes a photo of the speaker, Mr. Dhiraj Bansal, and lists the moderator, Prof. Vinod Nagpure, and the coordinator, Dr. Swapnasarit Kar. A link to join the session is provided: [meet.google.com/ybq-rkih-zdw](https://meet.google.com/ybq-rkih-zdw). The date and time are 29 August, 2023, at 3:00 PM.

**Department of Civil Engineering**  
In Association with  
**Centre for Industry Academia Collaboration (CIAC)**  
**OP Jindal University, Raigarh**  
Presents  
**Guest Lecture on**  
**Role of the Blended Cement**  
**in Durability of Concrete**

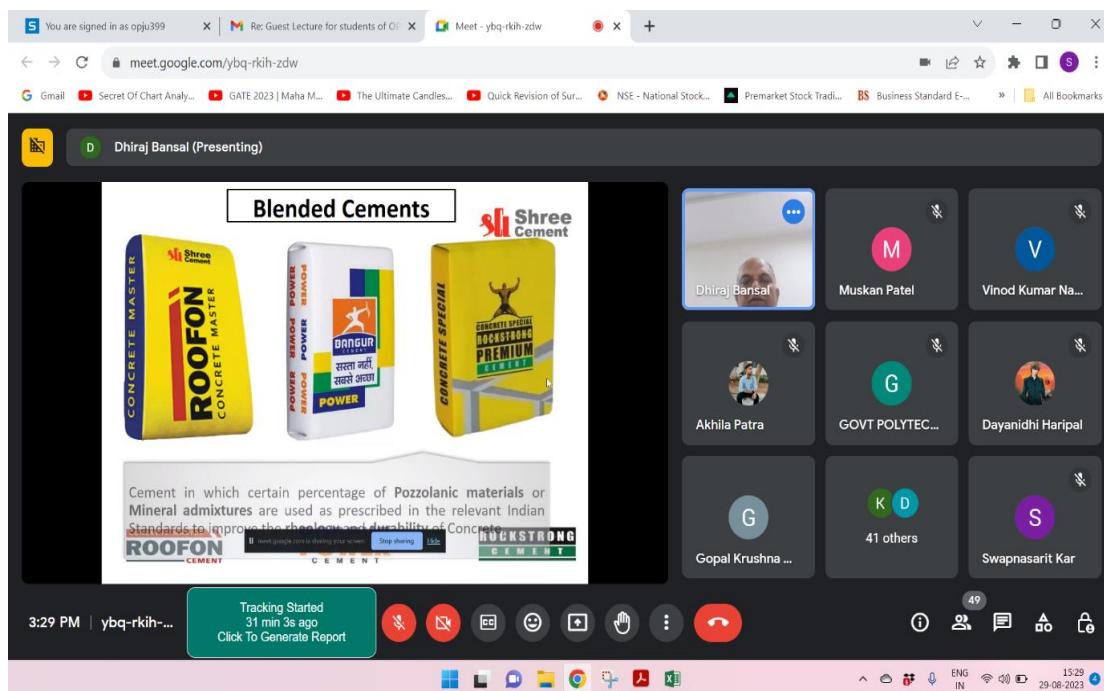
**Speaker**  
**Mr. Dhiraj Bansal**  
DGM Technical Services  
Shree Cement, Raipur, CG

**Link to join the session:**  
[meet.google.com/ybq-rkih-zdw](https://meet.google.com/ybq-rkih-zdw)

**29 August, 2023**  
**3:00 PM**

**Moderator**  
**Prof. Vinod Nagpure**  
Sr. Assistant Professor,  
Dept. of Civil Engg., OPJU

**Coordinator**  
**Dr. Swapnasarit Kar**  
Assistant Professor,  
Dept. of Civil Engg., OPJU



The screenshot shows a Google Meet interface during the lecture. The main window displays a presentation slide titled "Blended Cements" by Shree Cement, featuring images of Roofon, Bangur, and Mustang cement bags. A definition of blended cement is provided: "Cement in which certain percentage of Pozzolanic materials or Mineral admixtures are used as prescribed in the relevant Indian Standards to improve the strength and durability of concrete." The right sidebar shows a grid of participants, including Dhiraj Bansal, Muskan Patel, Vinod Kumar Na..., Akhila Patra, GOVT POLYTEC..., Dayanidhi Haripal, Gopal Krushna..., 41 others, and Swapnasarit Kar. The bottom status bar indicates the time is 3:29 PM and the meeting ID is ybq-rkih-...

**Blended Cements**  
Shree Cement

Concrete Master  
Roofon  
CONCRETE MASTER

Power  
Bangur  
POWER

Concrete Special  
Mustang  
CONCRETE SPECIAL

Cement in which certain percentage of Pozzolanic materials or Mineral admixtures are used as prescribed in the relevant Indian Standards to improve the strength and durability of concrete.

Tracking Started  
31 min 3s ago  
Click To Generate Report

3:29 PM | ybq-rkih-...

### 3. Workshop Conducted

The Department of Civil Engineering, in association with UltraTech Cement, which is the largest manufacturer of cement in India and the Centre for Industry-Academia Collaboration (CIAC) of O P Jindal University, Raigarh, organized a two-day workshop on “Professional Practices in the Cement and Construction Industry” from 21 to 22 September 2023.

The speaker for the event, Mr. Suraj Kumar, Territory Manager, UltraTech Cements Ltd., Raigarh (CG).

The poster is for a two-day workshop organized by the Department of Civil Engineering at O.P.J.S. University in association with UltraTech Cement, Raigarh (CG). It features logos for O.P.J.S. University, Institutions Innovation Council, UltraTech, CIAC, and G20. The title of the workshop is 'Professional Practices in the Cement and Construction Industry'. The speakers and organizers listed are: Mr. Santosh Kumar (Territory Sales Head, UltraTech Cement Ltd., Raigarh (CG)), Mr. Suraj Kumar (Territory Manager, UltraTech Cement Ltd., Raigarh (CG)), Dr. R. D. Patidar (Vice-Chancellor), Dr. Mahasakti Mahantya (HOD, Dept. Civil Engg.), Dr. Swapnasarit Kar (Coordinator), and Mr. Gopal Krishna Gouda (Co-Coordinator). The event dates are 21 & 22 September 2023, the venue is EE seminar Hall, and the time is 11.00 am onwards.

**Department of Civil Engineering**  
*in association with*  
**UltraTech Cement, Raigarh (CG)**  
*Presents*  
**A Two-day workshop on**  
**Professional Practices in the Cement and Construction Industry**

**Speaker**

**Mr. Santosh Kumar**  
Territory Sales Head,  
UltraTech Cement Ltd., Raigarh (CG)

**Mr. Suraj Kumar**  
Territory Manager,  
UltraTech Cement Ltd., Raigarh (CG)

**Patron**

**Dr. R. D. Patidar**  
Vice-Chancellor

**Convenor**

**Dr. Mahasakti Mahantya**  
HOD, Dept. Civil Engg.

**Coordinator**  
**Dr. Swapnasarit Kar**  
Er. Pranaba Behera

**Co-Coordinator**  
**Mr. Gopal Krishna Gouda**

**Date: 21 & 22 September 2023**  
**Venue: EE seminar Hall**  
**Time: 11.00 am onwards**





#### 4. Expert Talk Attended

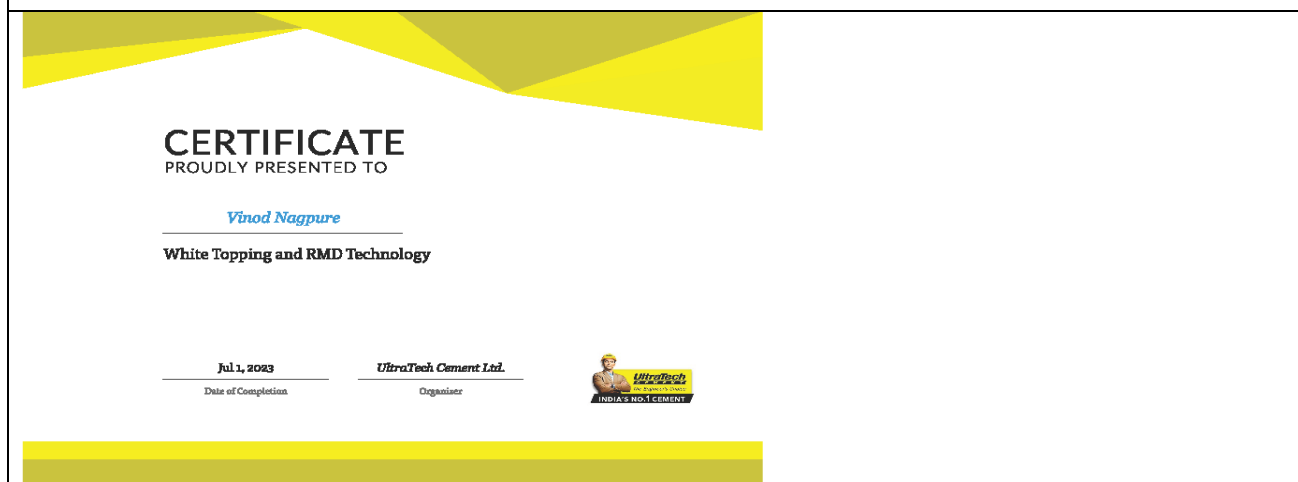
1. Vinod Nagpure: Attended webinar on "Sustainability and Practices – A timeline Requirement of the Construction Industry" on Wed, Sep 7, 2023 7:00 PM - 8:00 PM jointly organised by Indian Concrete Institute Kochi Centre and QCRETE Readymix India Pvt. Ltd.



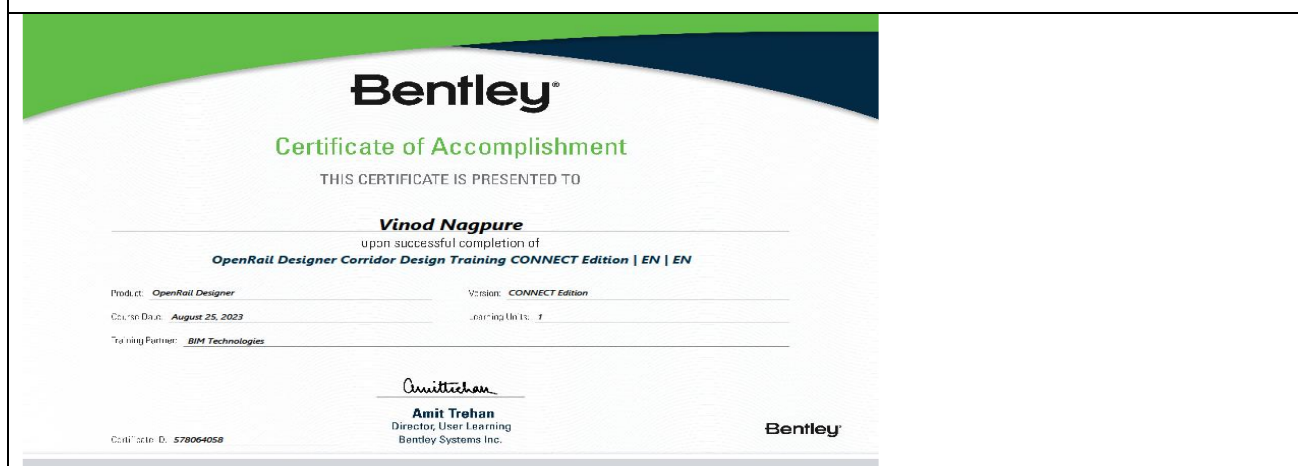
2. Vinod Nagpure: Attended webinar on "MAKING CONCRETE SUSTAINABLE AND MOVING TOWARDS NET ZERO" on Wed, Sep 27, 2023 7:00 PM - 8:00 PM jointly organised by Indian Concrete Institute Kochi Centre and QCRETE Readymix India Pvt. Ltd.



3. Vinod Nagpure: Attended webinar on “White Topping and RMD Technology” on 01.07.2023 organised by Ultra Tech Cement.



4. Vinod Nagpure: Attended webinar on “Open Rail Designer Corridor Design Training CONNECT Edition ” on 25.08.2023 organised by Bentley Systems Inc..



## 5. Research Publications:

- 1.) Dr. Anurag Sharma published a research article "**Influence of glass powder silica fume and scrapped ceramic waste on the mechanical properties of concrete**" in Materials Today: Proceedings, an Scopus Journal.
- 2.) Dr. Anurag Sharma published a research article "**Tribological Performance Evaluation of Greases on a Four-Ball Tester with Graphene Oxide Nanoparticles** " in ACS Omega, an SCI Journal.

## 6. Proposed Project

Prof. Tulika Gupta and Dr. Mahasakti Mahamaya got approval for a research-cum-consultancy project :



“An Eco-Friendly Approach Towards the Sustainable Development of Construction Materials Using Sponge Iron Fines and Fly Ash Waste.” from JSP, Raigarh.

## 7. Ph.D Progress Seminar

Prof. Tulika Gupta presented her progress presentation on the topic "Design and Characterization of Controlled Low Strength Material (CLSM) Using Industrial Waste- A Sustainable Solution for Infrastructure Development" under the guidance of Dr. Mahasakti Mahamaya in the presence of external expert Dr. Laxmikant Yadu, Professor NIT Raipur.

The screenshot shows a Google Meet interface during a research progress presentation. The main window displays a slide titled "Objective of the project" with the following content:

- ✓ To **develop** Controlled Low Strength material using industrial wastes and alkali activated cement less CLSM.
- ✓ To **characterize** developed material.
- ✓ **Conservation** of natural resources and utilization of industrial wastes.
- ✓ **Utilization of sustainable cement** with low energy and low CO<sub>2</sub> emission as an alternation of traditional cement

**Gap Analysis:**

1. The research on **alkali activated CLSM** is very limited.
2. Utilization of **coal reject** in the development of CLSM is not previously investigated.
3. The work regarding CLSM in **India** is very limited

The slide also features the OPJU logo (University of Steel Technology and Management) and a background image of a globe. On the right side of the screen, a grid of participant video feeds is visible, including Tulika Gupta, Siddharth Chakrabarti, Mahasakti Mahamaya, Vinod Kumar Nagpure, Swapnasmit Kar, and Laxmikant Yadu. At the bottom of the screen, a "GPS Map Camera" overlay shows a satellite map of Tumidih, Chhattisgarh, India, with the following details:

- Tumidih, Chhattisgarh, India
- Research Progress Presentation, OP Jindal University, O P Jindal Industrial Park,
- Tumidih, Chhattisgarh 496107, India
- Lat 22.062429°
- Long 83.34982°
- 04/09/23 03:16 PM GMT +05:30