

# NIRMAAN

Volume 10 | Issue 1 | Magazine



Dr. Akhilesh Das Gupta Institute of Professional Studies,  
FC-26, Panduk Shila Marg, Zero Pusta Rd, Shastri Park,  
Shahdara, New Delhi, Delhi- 110053

| August to December 2025 |

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**August- December 2025**

**ODD SEMESTER**

# PATRON



**Mrs. Alka Das Gupta**

*Hon'ble Chairperson  
BBD Group of Education*



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*Hon'ble President  
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*Dr. Kavita Verma*  
Head of Department  
Department of Civil Engineering

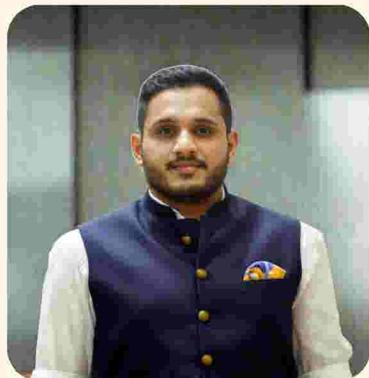


*Ms. Aarti Bhati*  
Assistant Professor  
Department of Civil Engineering



**Mrs. Alka Das Gupta**  
Hon'ble Chairperson  
BBD Group of Education

*The Department of Civil Engineering has always been a gem of Dr. Akhilesh Das Gupta Institute of Technology & Management. The perennial zeal of the Department has never left the achievements stagnant. The Department not only gives students exposure to the regular engineering curriculum but also to the aspirations of today's corporate World, thus inculcating a professional aptitude in them. The dedication of the faculty members has strengthened the learning process ensuring an environment of collaboration, experimentation, imagination, and creativity. It is such a prodigious delight in watching the student's cutting edge in technical exploration, enhancing their analytical skills, and brushing themselves up for the rapidly changing sector, and establishing themselves as entrepreneurs and engineers. The Department has always reached new heights and I am looking forward to more achievements. I wish the very best to the Department of Civil Engineering on the next edition of NIRMAAN the official magazine of the Department. The magazine beautifully provides an overview of academic programs, research activities, various laboratories, training, and the other fields explored by our faculty members and students.*



**Viraj Sagar Das**  
Hon'ble President  
BBD Group of Education

After the success of the previous sir volumes of NIRMAAN, I am extremely happy to witness the shaping up of the eighth volume. A special mention to the Editorial Board, who were able to capture the noteworthy proceedings of the Civil Department of Dr. Akhilesh Das Gupta Institute of Professional Studies and were also able to present it in an alluring manner. I thoroughly enjoyed myself going through the pages of this magazine. I hope students and faculty members find this edition as sound as. I congratulate the Department and the editorial board for this achievement.



## **Prof. Dr. Niranjan Bhattachryya**

Director, ADGIPS

A teacher is a person who mends the mindset of a student. nurtures and wings it. on the other hand a student believes his teacher and gives his future in of his mentor. NO responsibility is as big as moulding a life. As DIRECTOR Of Dr. Akhilesh Das Gupta Institute Of Professional Studies. I ensure at every step to strengthen this teacher-student relationship. Civil Engineering Department of Dr. Akhilesh Das Gupta Institute of Professional Studies. is another satisfying establishment I witness on a regular basis. There is nothing more gratifying than to see all the unstoppable avidity collected and preserved in book. The eighth volume of NIRMAAN is a commendable work done by the sedulous team of faculty members and students. They were able to present not only the achievements of the department but also the inspiring examples which will galvanize the amateurs to amateurs to achieve big than their dreams.

By Margarita Perez

Monographs by Francisco Merino



# **Dr. Kavita Verma**

Head of Department  
Department of Civil Engineering

Dear Readers, The story of progress of civilizations is intertwined with the story of progress of Civil Engineering. It is important to remember that our engineers have always been involved in the process building a new world with innovative materials into complex shapes to withstand forces of nature beyond their control. NIRMAAN is introducing its latest edition that showcases all the events of the even semester. It showcases the technical and creative writing skills of the students and a few articles by the faculty members. I congratulate the editorial team and hope that the readers will enjoy the insight into the world of Civil Engineering.

# DEPARTMENT FACULTY



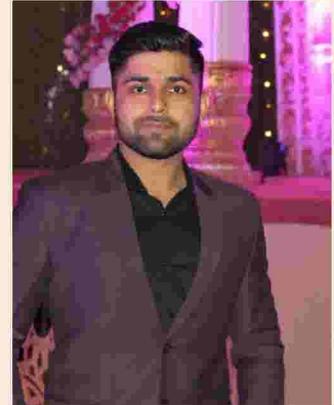
**Dr. kavita verma**  
Head of Civil Department  
Structural Engineering



**Ms.Aarti Bhati**  
Assistant Professor  
Structural Engineering



**Mr. Ashish Juneja**  
Assistant Professor  
Structural Engineering



**Mr.Akshay sharma**  
Assistant Professor  
Geomatics Engineering



**Mr. Akash Rana**  
Lab technician



**Mr. shahrukh khan**  
Lab technician

# ABOUT THE DEPARTMENT

The Department of Civil Engineering was established in the year 2010 with an intake of 60. The department offers UG Programme for B.Tech. in Civil Engineering. The Department consists of well-equipped laboratories, smart room with modern instruments. The Department regularly organizes guest lectures, seminars, International Conference, Webinar, Industrial visits, Survey Camp, Technical Events and Workshops by distinguished personalities from the field and industry. Technical training on various softwares like AUTOCAD, STAAD PRO and ETABS is arranged for students. Department has highly qualified faculties from IITs/NITs/Central/State Government Universities etc., who produce numerous publications in international/national journals, highlighting the emphasis on research and development. Department has well stocked

library and a computer lab having latest software such as AutoCAD, ARC-GIS & STAAD PRO.

The department participates in several faculty development programs, conferences, workshops and online MOOC courses to ensure quality education.

Civil Engineering Department is accredited by The National Board of Accreditation (NBA) in the year 2022.

# **VISSION & MISSION**

## **VISION**

To produce civil engineers equipped with excellent technical research and leadership skills for globally competent environment.

## **MISSION**

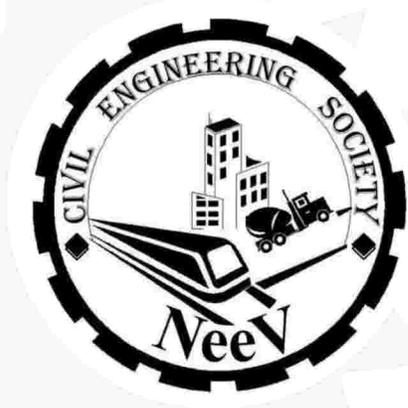
- M1. To impart quality education through veracity of academics and practical applications.
- M2. To develop research attitude in students to solve civil engineering problems.
- M3. To create a conducive environment that promote project based learning and industry based skillsets.

# PEO'S & PO'S

**PEO1: Graduate shall have strong fundamentals in Civil Engineering to deliver sustainable and economical solutions to real life problems.**

**PEO2: Graduate shall develop excellent communication, technical and leadership skills in interdisciplinary environment as a team player and responsible citizen.**

**PEO3: Graduate shall, apart from excelling in Civil Engineering, exhibit high human values and professional competence.**



# NEEV

## THE OFFICIAL SOCIETY OF CIVIL ENGINEERING DEPARTMENT

NEEV is the official civil engineering society of the institute, established on 11th March, 2014. NEEV is formed and governed by the students of ADGIPS itself under the supervision of the faculties of civil engineering department.

NEEV, a Hindi word meaning FOUNDATION, portraying civil engineers as the foundation of the society aims at expanding the sphere of learning beyond books and classrooms. It lays emphasis over the requirements of field and the changing trends in construction.

### MISSION OF NEEV

- To assist the department in improving the quality of education.
- To provide empirical knowledge through events.
- To promote professionalism.



**TEAM NEEV 2025 - 2026**

# DEPARTMENT MILESTONES



Ms. Himani Tomar Gold Medalist, presented by the Hon'ble LG & CM of Delhi, this achievement marks a shining chapter in our journey! She also received ₹ 51,000 cheque for being the All-Branch Topper of GGSIPU!

**GOLD WALL OF FAME**

 Mr. Sachin Singh (2019-23)	 Mr. Vibhanshu kumar (2018-22)	 Mr. Prashant kumar (2017-21)	 Mr. Abhishek kumar (2016-20)
 Mr. Shikhar Mittal (2015-19)	 Mr. Prayag Jain (2013-17)	 Mr. Rahul Upadhyay (2012-16)	 Mr. Nitish Kumar (2011-15)

**9 GOLD MEDALIST**

## RISING STARS OF DEPARTMENT

**RISING STARS**

 Divyam Kumar (2019-22) AIR 147 UPSC Engineering Services exam'2023.	 Tushar Gupta (2013-17) AIR 10 UPSC Engineering Services exam'2019.	 Vijay Sharma (2012-16) AIR 52 UPSC Engineering Services exam'2019.	 Sachin Kumar (2012-16) AIR 38 GATE-2017 Manager(Technical) NHA	 Disha Saikia (2015-19) Assam Police serve Jr. grade Rank-12 DSP
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**Diwakar Kumar**  
B.Tech Civil  
Batch: 2019-2023

**On**  
**Clearing UPSC**  
**Examination**  
**with**  
**AIR 891**

# PLACEMENT RECORD 2025



S. No.	Student Name	Company Name
1	Diamond Longjam	Atkins Realis
2	ASHU BHARDWAJ	L&T Technologies
3	SAKSHI SINI ULA AKRAM	L&T Technologies
4	Namira Iram	L&T Technologies
5	AMBIKA HANS	Intelligent Consulting Engineers
6	Abhay Verma	Intelligent Consulting Engineers
7	PRINCE KUMAR	Intelligent Consulting Engineers
8	ANIKUDH NARGOTRA	VRC Constructions
9	KUNAL	VRC Constructions
10	HARSH SAHU	VRC Constructions
11	ANURAG AERI	VRC Constructions
12	NATASHA BARUAH	VRC Constructions

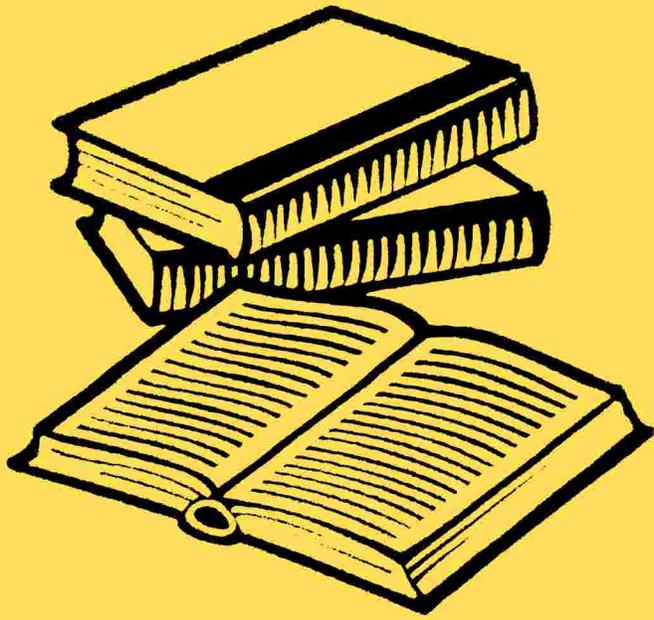
14	VINAY DWIVEDI	Leighton India Contractors Private Limited
15	LUCKY ANSARI	Leighton India Contractors Private Limited
16	SHIVANI	Leighton India Contractors Private Limited
17	NATASHA BARUAH	Leighton India Contractors Private Limited
18	USMAN SAIFI	Leighton India Contractors Private Limited
19	VINAY DWIVEDI / LUCKY ANSARI	Generic Engineering Construction and Projects Ltd
20	SYED MOHD AKRAM	Generic Engineering Construction and Projects Ltd
21	KUNAL	Generic Engineering Construction and Projects Ltd
22	KARSH PRASAD	Generic Engineering Construction and Projects Ltd

# PLACEMENT RECORD 2025

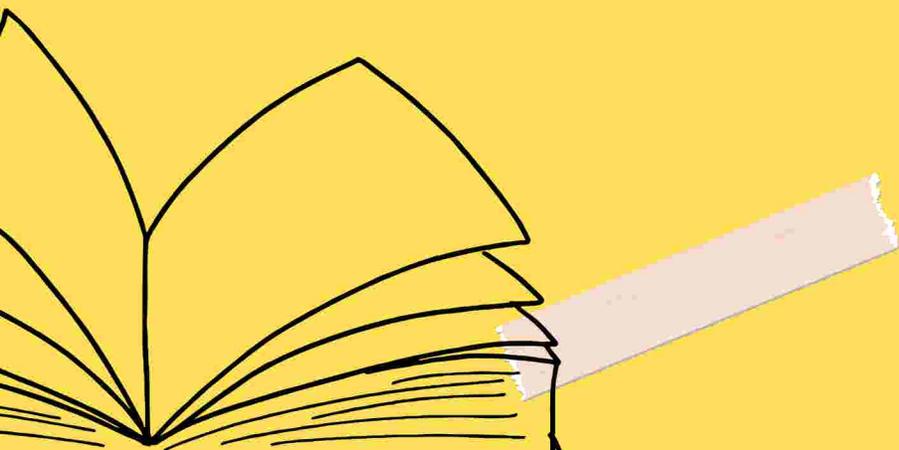


23	Mohd Asraf	Generic Engineering Construction and Projects Ltd
24	USMAN SAIFI	Generic Engineering Construction and Projects Ltd
25	NATASHA BARUAH	Nuvoco Vistas Corporation Limited
26	Abhay Verma	Nuvoco Vistas Corporation Limited
27	Mohd Asheqeen	Express Roadways Private Limited
28	CHETAN HN	Express Roadways Private Limited
29	RAGHAV CHETAN	Sobha Limited

30	AMBIKA HANS	Sobha Limited
31	SAYED MOHD ARHAM	GAINWELL COMMONSALES
32	Siddharth Singh	GAINWELL COMMONSALES
33	ROHIT KUMAR MAHTO	Structures Online
34	SYED MOHD AKRAM	Structures Online
35	Mohd Asheqeen	Structures Online
36	MOHIT KUMAR	Structures Online
37	ANKUR RAJ	Structures Online



# Articles



# Optimizing energy performance using VIG in building envelope

Dr. Kavita Verma

Assistant Professor, Dept. of Civil Engineering



## ABSTRACT

Improving building energy efficiency is vital for sustainable urban development, particularly in cities with high cooling demands such as New Delhi. This study examines the effectiveness of Vacuum Insulated Glazing (VIG) in enhancing the thermal performance of building envelopes under composite climatic conditions. Using DesignBuilder simulations, various VIG configurations were analysed based on their optical and thermal properties to assess their impact on overall energy performance. Results indicate that VIG systems substantially reduce cooling loads and total energy consumption compared to conventional glazing. The study highlights the role of glazing parameters—U-factor, SHGC, and visible transmittance—in optimizing energy efficiency, confirming VIG as a viable solution for sustainable and low-energy building design in metropolitan environments.

**Keywords** Vacuum insulated glazing (VIG), Energy efficiency, Sustainable buildings, Cooling load, Building simulation

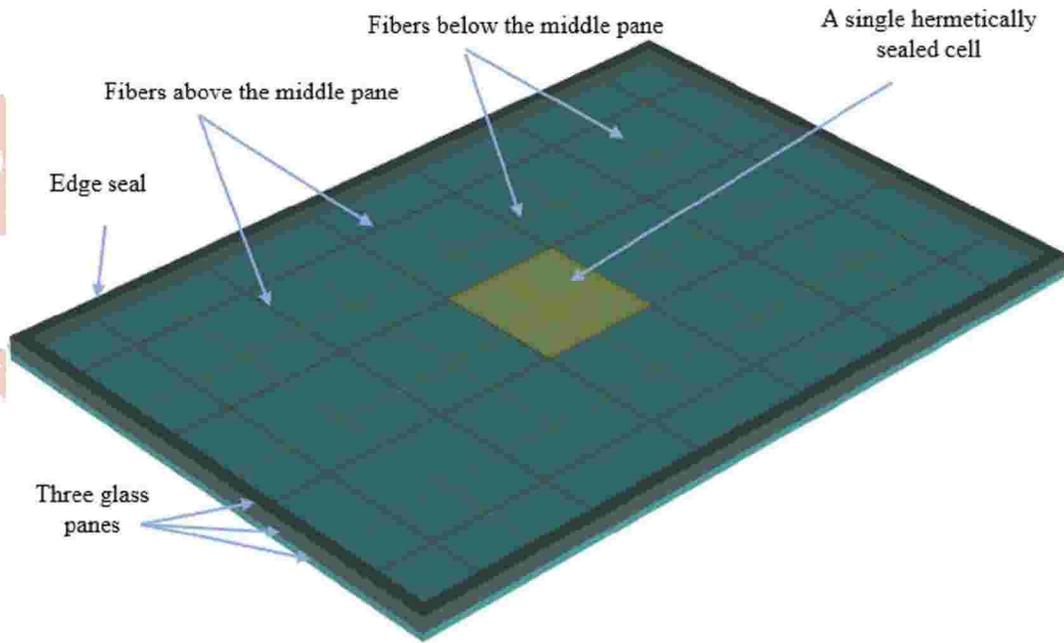
## 1. Introduction

The building sector accounts for a significant share of global energy consumption, with cooling energy dominating in Indian metropolitan cities such as Delhi. Conventional glazing systems allow excessive solar heat gain, increasing indoor temperatures and air-conditioning demand. Improving window performance is therefore a key strategy for reducing building energy use.

Vacuum Insulated Glazing (VIG) is an advanced glazing technology that offers superior thermal insulation within a thin profile. This study investigates the application of VIG in an institutional building located in New Delhi to assess its impact on energy performance under composite climatic conditions.

## 2. Vacuum Insulated Glazing (VIG)

Vacuum Insulated Glazing consists of two glass panes separated by a hermetically sealed vacuum layer, which minimises heat transfer through conduction and convection. Compared to conventional single or double glazing, VIG provides significantly lower U-values and reduced solar heat gain while maintaining daylight availability.



**Figure 1: Cross-sectional schematic of Vacuum Insulated Glazing (VIG)**

### 3. Methodology and Building Model

Energy performance was evaluated using DesignBuilder software integrated with the EnergyPlus simulation engine. A three-storey institutional building in Palam, New Delhi, was modelled to represent typical urban construction practices. A baseline case with single glazing was created and subsequently replaced with multiple VIG systems.

Performance indicators included total site energy, cooling energy, and Energy Performance Index (EPI).



**Figure 2: 3D simulation model of the institutional building**

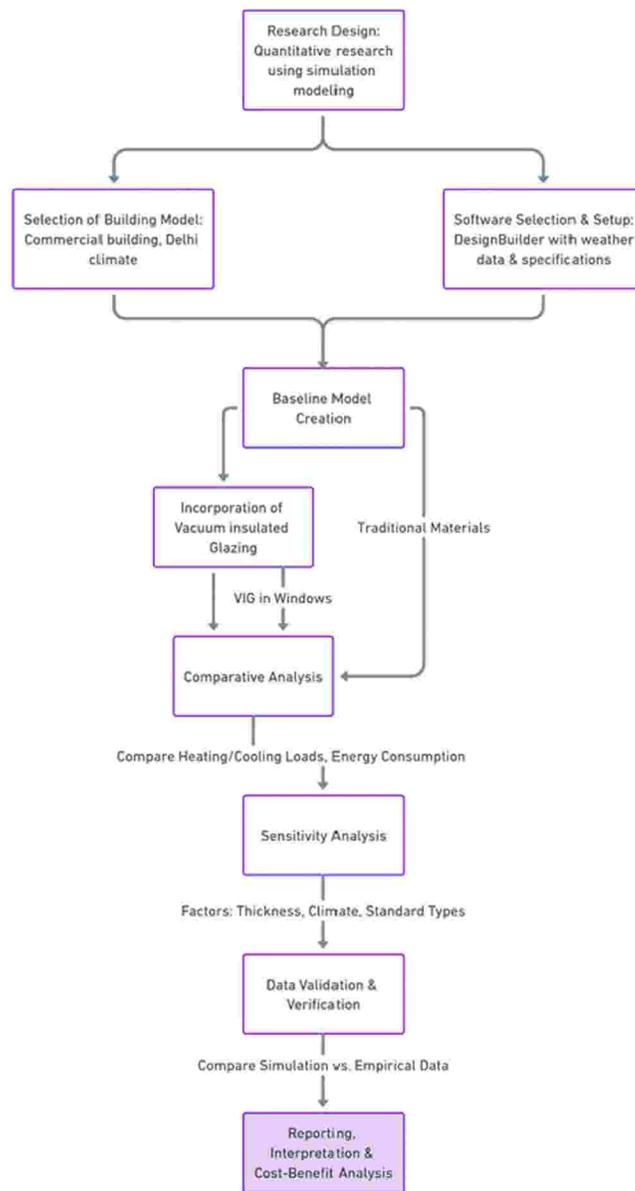


Figure 3: Flowchart of simulation methodology

## 4. Results and Discussion

Simulation results show a clear improvement in energy performance with the adoption of VIG. The best-performing VIG systems achieved nearly 20% reduction in total site energy compared to the base case. Cooling energy demand, the dominant energy component, showed the most significant reduction due to lower Solar Heat Gain Coefficient (SHGC) and U-values.

Among all configurations, VacuMax and Entthermal VIG demonstrated the most balanced performance in terms of energy savings and thermal efficiency.

Figure 4: Comparison of total site energy for single glazing and VIG systems

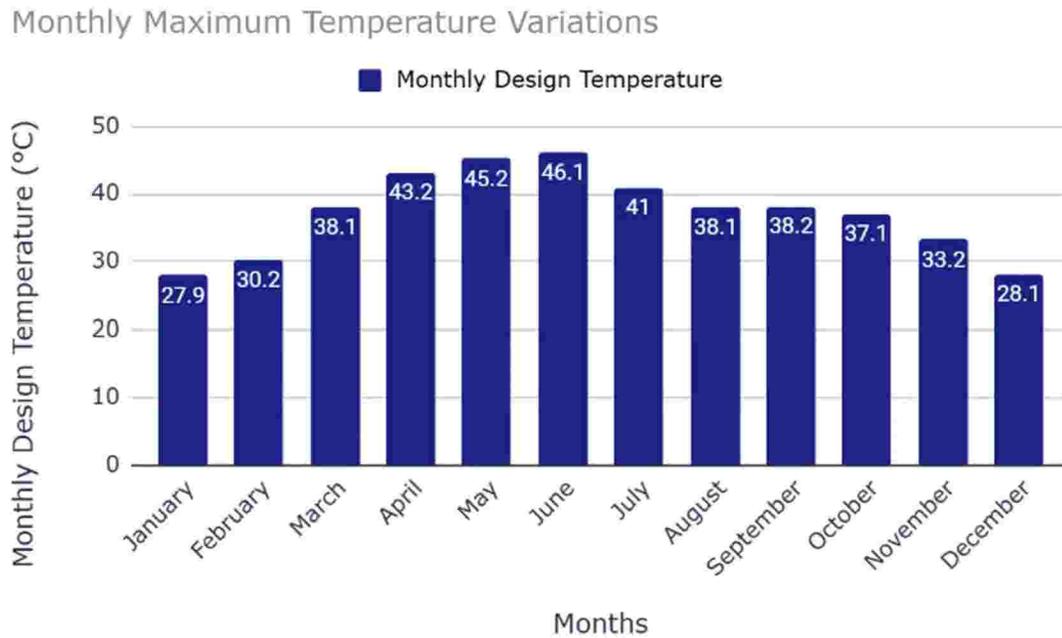
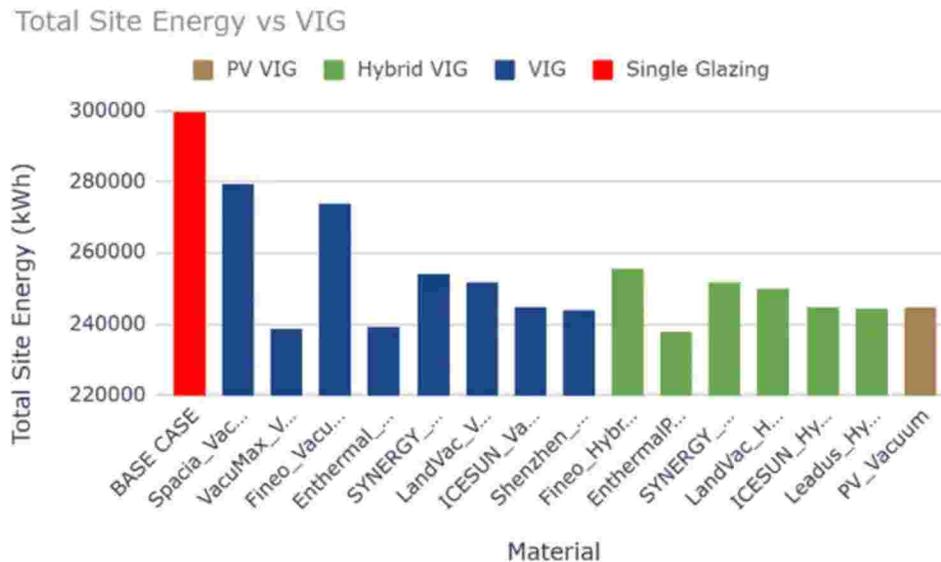


Figure 5: Cooling energy comparison between base case and selected VIG systems



## 5. Conclusion

The study confirms that Vacuum Insulated Glazing is an effective solution for improving building energy performance in composite climates like Delhi. Key outcomes include reduced cooling demand, improved Energy Performance Index, and lower HVAC loads. Despite higher initial costs, VIG systems offer favourable payback periods through energy savings.

The integration of VIG in institutional and commercial buildings can significantly contribute to sustainable and energy-efficient urban development.



# INTRODUCTION TO SELF-HEALING CONCRETE

Mr. Ashish Juneja

Assistant Professor, Civil Engineering Department, ADGIPS

Self-healing concrete is an advanced construction material designed to automatically repair cracks that develop over time, improving durability, sustainability, and service life of structures. Traditional concrete is prone to cracking due to shrinkage, thermal stresses, and mechanical loads. These cracks allow ingress of water and harmful chemicals, leading to corrosion and structural deterioration. Self-healing concrete addresses this issue by activating healing mechanisms without external intervention. To overcome cracking, researchers have developed self-healing concrete, inspired by natural healing processes found in biological systems. Reduces maintenance and repair costs, Extends the service life of structures, prevents reinforcement corrosion, enhances structural safety, Promotes sustainable construction practices.

## Mechanisms of Self-Healing Concrete

**Autogenous Healing:** It occurs due to continued hydration of unhydrated cement particles, formation of calcium carbonate ( $\text{CaCO}_3$ ) when calcium hydroxide reacts with carbon dioxide.

**Bacteria Based Self- Healing Concrete**  
Special bacteria (e.g., *Bacillus subtilis*) are embedded in concrete along with nutrients. When cracks form and water enters, bacteria become active and produce limestone ( $\text{CaCO}_3$ ), sealing the cracks.

## Capsule-Based Self-Healing Concrete:

Microcapsules filled with healing agents (epoxy, polymers) are mixed into concrete

## Vascular Self-Healing Systems:

Networks of hollow tubes embedded in concrete, healing agents flow into cracks when damage occurs, Similar to blood vessels in the human body.

## Advantages of Self-Healing Concrete

- Increased durability and lifespan
- Reduced maintenance and repair costs
- Improved resistance to water and chemical attack
- Environmentally friendly (lower  $\text{CO}_2$  emissions over lifecycle)

## Limitations

- It is more expensive than traditional concrete (around 10-30% higher)
- The expertise required to use this concrete is limited since it's newer.
- There's no standardised method of using and purchasing this type of concrete.
- Not all bacterial concrete is suitable for every environment.

## **Applications**

Self-healing concrete is used to automatically repair cracks, enhancing the durability and lifespan of infrastructure while reducing maintenance costs. Key applications include bridges, tunnels, marine structures, water retaining tanks, sewage systems, underground structures, and high-performance, crack-resistant pavements.

## **Conclusion**

Self-healing concrete represents a revolutionary step in construction technology. By addressing one of the most critical weaknesses of conventional concrete is cracking, it enhances structural durability, sustainability, and safety. Although challenges remain, its potential benefits make it a promising material for future infrastructure development.

# STRUCTURAL APPLICATIONS OF BAMBOO: VERSATILITY BEYOND HOUSING

**Mr. Akshya Sharma**

Assistant Professor, Civil Engineering Department, ADGIPS

Bamboo is one of the world's fastest-growing, most renewable natural materials, long used in traditional construction across Asia, Africa, and Latin America. While its role in housing is well-established, bamboo's structural applications extend far beyond shelters. Today, engineers, designers, and builders are rediscovering and innovating with bamboo for scaffolding, bridges, and even reinforcement in concrete. These uses not only highlight bamboo's mechanical potential but also support sustainable, low-carbon solutions in infrastructure.

Bamboo's structural promise a unique combination of mechanical strength, rapid renewability, and light weight, high tensile strength, high strength-to-weight ratio, sustainability, cost-effectiveness.

**Bamboo Scaffolding:** Perhaps the most widespread modern structural use of bamboo is in scaffolding as it remains ubiquitous on construction and renovation sites despite the availability of metal alternatives due to its flexibility and resilience, ease of assembly and adaptability.

**Bamboo Bridges:** Beyond temporary construction support, bamboo is also used to create permanent or semi-permanent bridges—spanning small rivers, canals, and ravines in rural areas.

# STRUCTURAL APPLICATIONS OF BAMBOO: VERSATILITY BEYOND HOUSING

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**Bamboo Bridges:** Beyond temporary construction support, bamboo is also used to create permanent or semi-permanent bridges—spanning small rivers, canals, and ravines in rural areas.

**Lower embodied energy:** Growing and processing bamboo consumes far less energy than producing steel or fired bricks.

**Bamboo as Reinforcement in Concrete:** Perhaps the most technically intriguing structural application of bamboo is its use as a reinforcing material in concrete. Bamboo's high tensile strength prompts research into its viability as a bio-reinforcement, especially for low-cost housing and rural infrastructure.

## **Challenges and Solutions**

Using bamboo in concrete presents challenges primarily related to durability and bonding, water absorption, degradation and bonding performance. To address these, engineers have developed treatment and modification techniques like chemical treatments, surface roughening, coating systems.

## **Sustainability and Climate Impact**

**Carbon sequestration:** As a fast-growing grass, bamboo sequesters carbon rapidly.

**Circular economy potential:** Bamboo can be regrown annually, harvested sustainably, and reused or recycled at end of life.

## **Conclusion: A Material for the Future**

Bamboo's structural applications reach far beyond simple housing. Its combination of strength, sustainability, and accessibility makes it a compelling choice for builders, engineers, and policymakers seeking resilient and low-carbon infrastructure solutions. As global interest in sustainable engineering accelerates, bamboo stands poised, not just as a traditional material of the past, but as a structural material of the future that bridges ecology and engineering in innovative ways.

# Lime-Based Mortar Reviving the Soul of Historic Buildings

Ms. Aarti Bhati

Assistant Professor, Civil Engineering Department, ADGIPS

Historic buildings are more than bricks and stones; they are storytellers of culture, craftsmanship, and collective memory. From ancient temples and forts to colonial-era structures, these buildings have survived centuries not because of modern cement, but due to traditional materials—one of the most important being lime-based mortar. Today, as the focus on heritage conservation grows, lime mortar is reclaiming its rightful place in the renovation and restoration of historical buildings.

## What is Lime-Based Mortar?

Lime-based mortar is a traditional binding material made primarily from lime, sand, and water. Unlike modern cement mortar, lime mortar sets slowly through a process called carbonation, where lime reacts with carbon dioxide in the air to form calcium carbonate. This slow and natural process gives lime mortar unique properties that are especially suitable for historic structures.

## Why Historic Buildings Need Lime Mortar

Most heritage buildings were originally constructed using lime mortar. Introducing cement mortar during repairs may seem stronger, but it often causes long-term damage. Lime mortar, on the other hand, works in harmony with old masonry.

Key reasons lime mortar is ideal for historic renovations include:

- **Compatibility with old materials** Traditional bricks and stones are softer and more porous. Lime mortar matches their strength and flexibility, preventing cracks and stress.
- **Breathability** Lime mortar allows moisture to evaporate naturally. This reduces dampness, salt crystallisation, and decay—common problems in heritage structures.
- **Flexibility and self-healing** Lime mortar can accommodate minor movements in buildings. Micro-cracks often heal naturally due to ongoing carbonation.
- **Reversibility** Conservation principles stress that repair materials should be removable without harming the original structure. Lime mortar satisfies this requirement.

## Problems Caused by Cement in Heritage Renovation

In many past renovation projects, cement mortar was used due to its easy availability and fast setting time. However, this has led to serious issues such as:

- Trapped moisture causing damp walls
- Cracking of bricks and stones
- Accelerated deterioration of masonry
- Loss of original character and texture

These problems highlight the importance of choosing appropriate materials, not just stronger ones.

## Lime Mortar in Indian Heritage Conservation

India has a rich tradition of lime usage. Ancient structures like forts, temples, mosques, and stepwells were built using lime mortar mixed with organic additives such as **jaggery, bael fruit, curd, and plant extracts**. These indigenous techniques enhanced durability and performance.

Today, organisations like ASI (**Archaeological Survey of India**) and heritage conservation professionals are reviving these traditional practices. Lime mortar is being used in the restoration of monuments such as forts, havelis, and colonial buildings across the country.

## **Sustainability and Environmental Benefits**

Beyond conservation, lime mortar also supports sustainable construction:

- Lower carbon footprint compared to cement
- Reabsorbs CO<sub>2</sub> during carbonation
- Uses natural and locally available materials
- Encourages traditional craftsmanship and skills

Thus, lime mortar aligns well with modern goals of eco-friendly and sustainable development.

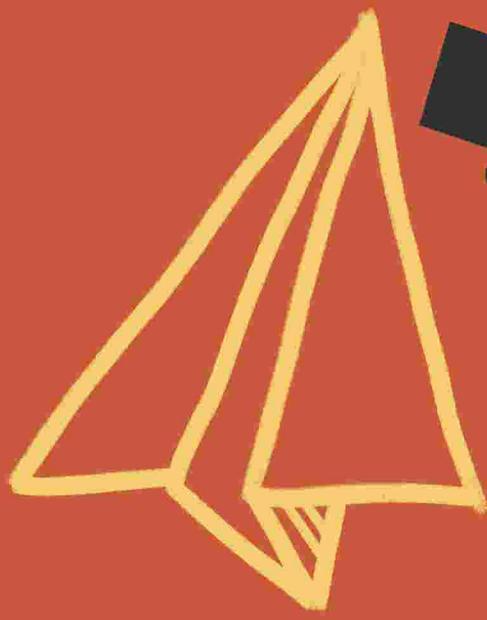
## **Challenges and the Way Forward**

Despite its advantages, lime mortar faces challenges such as longer setting time, lack of skilled labour, and limited awareness. Addressing these requires:

- Training programs for engineers and masons
- Inclusion of lime technology in engineering curricula
- Awareness through academic and departmental platforms
- Research and documentation of traditional practices

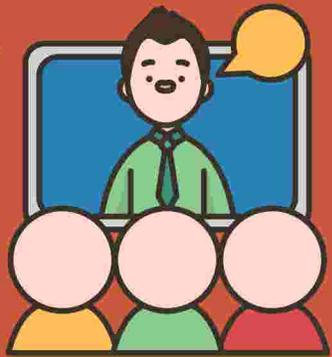
## **Conclusion**

Lime-based mortar is not just a construction material—it is a bridge between the past and the future. In the renovation of historic buildings, it preserves authenticity, ensures structural health, and respects traditional wisdom. By embracing lime mortar, we do not merely repair old buildings; we revive heritage, culture, and sustainable construction practices for generations to come.



# Events

organized



# “Workshop & Skill Development on Soil Testing using Standard penetration Test” on : 6<sup>th</sup> November 2025



**Resource Persons:** Prof. Dr. Niranjana Bhattacharyya (Director, ADGIPS), Dr. Kavita Verma (HOD), Mr. Ashish Juneja (Event coordinator)

# Technical session on Strength of Concrete by Ultratech Cement Ltd on 22<sup>nd</sup> September 2025

Poster of the Event



Glimpse of the Event



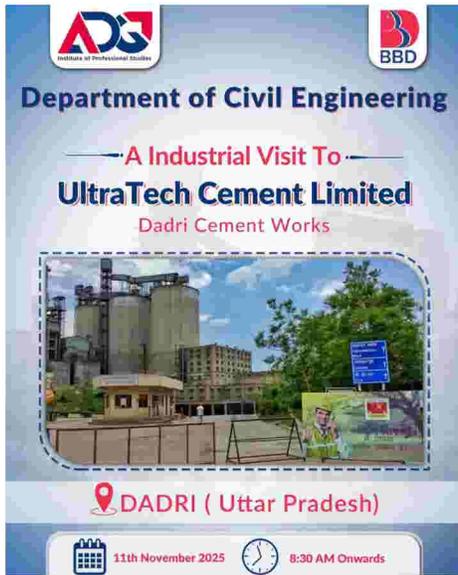
“The Civil Engineering Department organized a technical seminar hosted by UltraTech on Insight into Structural Properties, aimed at enhancing students’ practical understanding of construction materials. The session covered key properties such as compressive strength, stress–strain behavior, elasticity, durability, and load-bearing capacity of concrete and cement-based materials. Real-time examples were discussed, including the effect of water–cement ratio on concrete strength, the role of curing in improving durability, and practical applications of M20 and M30 grade concrete in residential and high-rise structures. The seminar helped students relate classroom theory to site practices and industry standards, making learning more application-oriented and industry-relevant.”

**Resource Persons:** Prof. Dr. Niranjan Bhattacharyya (Director, ADGIPS), Dr. Kavita Verma (HOD), Mr. Ashish Juneja (Event coordinator )

# Industrial Visit to Cement Manufacturing Plant Dadri

## 11<sup>th</sup> November 2025

Poster



Glimpse of the visit



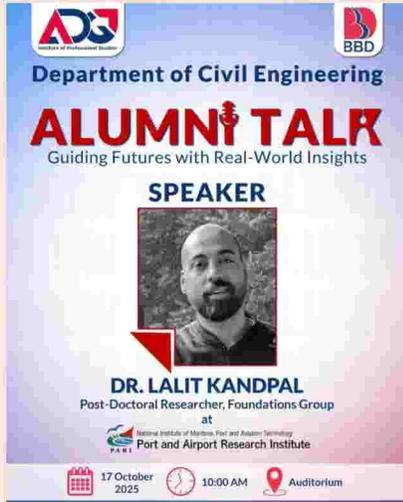
“The Civil Engineering Department organized an industrial visit to the UltraTech Cement Plant, Dadri, with the objective of providing students practical exposure and industrial knowledge. During the visit, students gained insights into the cement manufacturing process, including raw material handling, clinker production, grinding, quality control, and storage. The interaction with industry professionals helped students understand plant operations, safety practices, and quality standards adopted in large-scale cement production. The visit effectively bridged the gap between theoretical concepts and real-world industrial applications, enriching students’ learning experience.”

**Resource Person:** Prof.(Dr.) NiranjanBhattacharya (Director) Dr. Kavita Verma (HOD),  
Mr. Ashish Juneja ( Event coordinator)

# Alumni Talk by Dr. Lalit Kandpal

Port and Airport research Institute (Japan). on 17<sup>th</sup> october 2025

Poster of the Event



Glimpse of Event



“The Civil Engineering Department organized an alumni talk by Dr. Lalit Kandpal with the objective of motivating students and providing clarity on academic and professional pathways in civil engineering. During the session, Dr. Kandpal shared his academic journey, industry and research experiences, and emphasized the importance of strong fundamentals in subjects such as structural analysis, geotechnical engineering, and construction materials. He highlighted the role of emerging technologies, sustainable construction practices, and adherence to IS codes in modern civil engineering projects. The talk also guided students on higher studies, competitive examinations, research opportunities, and skill development, making the session highly informative, interactive, and inspiring for aspiring civil engineers.”

**Resource Person: Prof.(Dr.) NiranjanBhattacharya (Director), Dr. Lalit Kandpal, Dr. Kavita Verma (HOD), Mr. Ashish Juneja ( Event coordinator)**

# HANDS-ON WORKSHOP by Dr. Lalit Kandpal on 17<sup>th</sup> october 2025

Poster of the Event



Glimpse of Event



“The Civil Engineering Department organized a hands-on workshop conducted by Dr. Lalit Kandpal on SPAM Software: Techniques & Applications, aimed at enhancing students’ practical skills in structural analysis and design. The workshop introduced students to the fundamentals of SPAM software, including modeling of structural elements, assignment of material properties, load combinations, and boundary conditions. Dr. Kandpal demonstrated the analysis of beams, frames, and simple building models, explaining the interpretation of results such as bending moments, shear forces, deflections, and stress distribution. Practical applications were discussed through real-time examples, highlighting the use of SPAM software in structural design, optimization, and compliance with IS codes. The interactive and application-oriented nature of the workshop enabled students to bridge the gap between theoretical concepts and software-based structural analysis, significantly enhancing their technical competence.”

**Resource Person:** Prof.(Dr.) NiranjanBhattacharya (Director), Dr. Lalit Kandpal, Dr. Kavita Verma (HOD), Mr. Ashish Juneja ( Event coordinator)

# Infra mind quiz Event on 12<sup>th</sup> November 2025

## Poster of Event



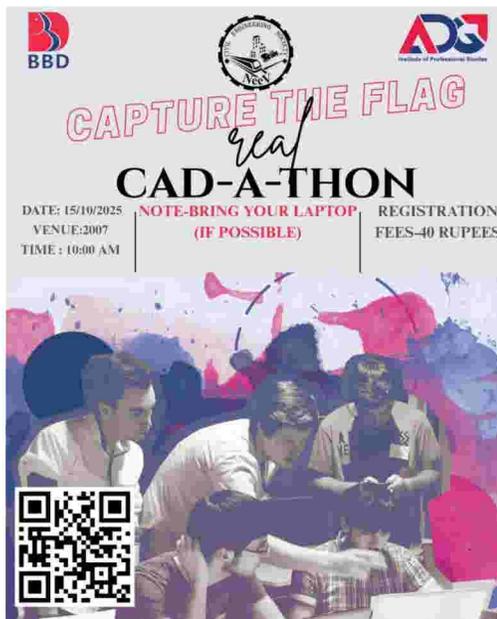
## Glimpse of Event



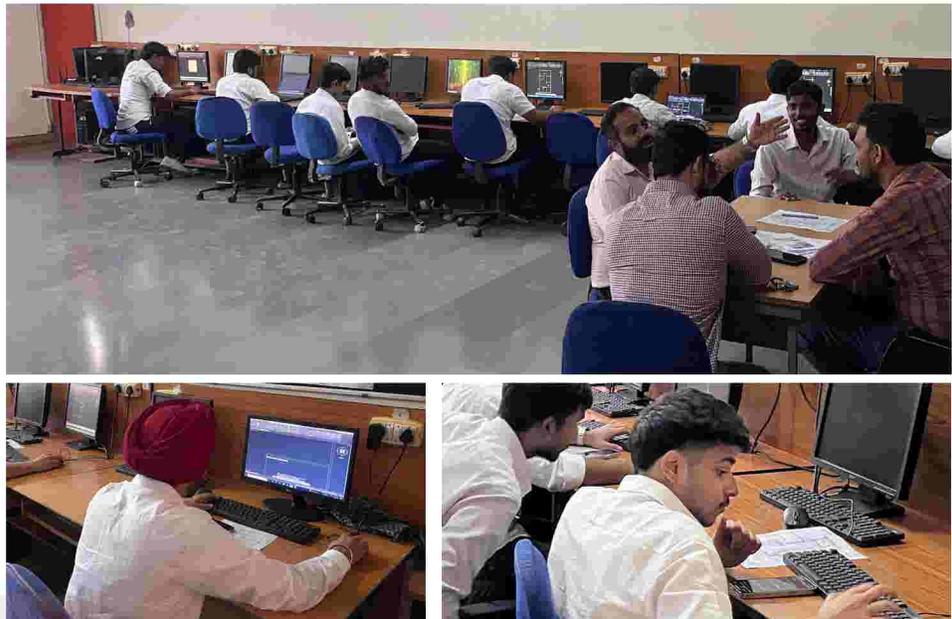
**Resource Person: Prof.(Dr.) Niranjan Bhattacharya (Director) Dr. Kavita Verma (HOD), Mr. Ashish Juneja , Akshya Sharma, Aarti Bhati (Assistant professor)**

# Cadathon Event on 15<sup>th</sup> october 2025

## Poster of Event



## Glimpse of Event



**Resource Person: Prof.(Dr.) Niranjan Bhattacharya (Director) ,Dr. Kavita Verma (HOD), Mr. Ashish Juneja ( Event coordinator )**

# PROJECT EXHIBITION on 15<sup>th</sup> october 2025

## Glimpse of Event



**Resource Person: Prof.(Dr.) Niranjan Bhattacharya (Director) , Dr. Kavita Verma (HOD), Mr. Ashish Juneja , Akshya Sharma, Aarti Bhati (Assistant professor)**

# Initiative of Ultra Tech Cement Ltd Pratibha Nirman 13<sup>th</sup> october 2025

## Glimpse of Event



Objective: To inform students and their parents about the MOU between Ultra Tech and ADGIPS under centre of excellence, highlighting how this collaboration bridges academic learning with industrial exposure. Ultratech will facilitate the children of their contractors who passed 10th & 12th exam with commendable marks and will also facilitate the top 5 students of ADGIPS as a token of appreciation for their academic excellence and dedication.

**Resource Person:** Prof.(Dr.) NiranjanBhattacharya (Director), Mr. Nilesh, Dr. Kavita Verma  
(HOD) ,Event coordinator- Mr. Ashish Juneja

# Initiative of Ultra Tech Cement Ltd Pratibha Nirman on Date - Glimpse of Event



**Resource Person:** Prof.(Dr.) NiranjanBhattachary(Director) ,Mr. Nilesh, Dr. Kavita Verma (HOD) , Ashish Juneja (event coordinator)



Institute of Professional Studies



## About the Institution

***“ADGIPS is chartering new frontiers in knowledge, excellence, efficiency and blazing new trails in innovation, creativity and development. It is developing a sustainable, competitive edge through profession insight”***

Dr. Akhilesh Das Gupta Institute of Professional Studies, formerly known as ADGITM, New Delhi was established by BBDES, LUCKNOW in the year 2003. ADGIPS has an aesthetically designed campus spread over approximately 8.08 acres of lush green environment at Shastri Park. The Campus comprises of five interconnected blocks covering a built up area of approx. 23,636.67 square meters. ADGIPS offers following Under Graduate and Post Graduate level full time Professional programs approved by AICTE and BCI in affiliation with Guru Gobind Singh Indraprastha University (GGSIPU), Delhi.