



Virtual Session on Various Aspects of Green Building Design

Date of Event: January 25, 2022

Organizers: IGBC Student Chapter, JUIT

Introduction

Jaypee University of Information and Technology's Student Chapter of Indian Green Building Council (IGBC) was inaugurated on 13th May 2021. In 2022, under 4th Edition of Harit-Prem Bharat Mahotsav, a Virtual Session on Various Aspects of Green Building Design was successfully organized on January 25, 2022. The primary focus of this event was to promote the knowledge for sustainable material which will help minimise the carbon footprint generated by construction of a building and utilize clean energy in construction work. The Virtual Session was organized via Google Meet platform by JUIT Student Chapter. Invitations to the Session were emailed by the host, JUIT IGBC Student Chapter Team, to their networks and students.

Various aspect of Green Building Design

Green building design aspects refers to both a structure and the application of processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition. This requires close cooperation of the contractor, the architects, the engineers, and the client at all project stages. This program allows participants to know the importance of Green Building and how to use sustainable materials in old and new structures to make them effective.

Event Schedule

- **Prof. Ashish Kumar**
Professor & Head CED, JUIT Wagnaghat -Welcome Remarks
- **Mr. Amit M C**
Associate Counsellor – Green Buildings CII-GBC Hyderabad -Technical Session
Topic: Glass as a sustainable Green Building Material
- **Col. Shailesh Pathak**
Co-Chair, IGBC - Chandigarh Chapter -Technical Session
CEO, Art - N - Glass Inc.
Topic: Glass as a sustainable Green Building Material.
- **Ar. Shelja Gupta**
Principal Architect, Design Earth -Technical Session
Topic: Urban Green Buildings: The new address of sustainability
- **Dr. Tanmay Gupta**
Chairman, IGBC Student Chapter, JUIT -Concluding Remarks
Program Convener
- **Ajay Singh Thakur**
PhD Student, JUIT
Student Coordinator

Overview and Topic of Discussion

- **Dr Tanmay Gupta** hosted the session on Google Meet and Live on JUIT YouTube Channel at 10:45 AM (IST). More than 100 participants on Google Meet and 256+ participants were connected through YouTube for this Virtual Session. **Prof. Ashish Kumar - HOD Civil Engineering Department** welcomed all speakers, dignitaries and participants in this session.
- **Mr. Amit M C** was the first speaker who gave an Introduction of IGBC and its functions. His talk focussed on apprising the participants about a Green Building, its features & benefits. Lastly, he discussed the IGBC Mission on Net Zero. The presentation was based on Indian Scenario showing Challenges and Opportunities, site selection and planning, etc. The topic also covers water conservation, building material, Resources and Energy efficiency, and tangible benefits for the use in green building. Towards the end Q & A session was conducted through Google Meet chat and YouTube Comment Section.
- **Col. Shailesh Pathak**, the second speaker of the event discussing the role of Glass as a Sustainable Green Building Material, where the importance was given to the use of glass for controlling solar energy to maintain optimum temperature and to let natural light enter the compound to reduce the need of artificial light during day time. As Green Glasses are recyclable, they can be used up to Six times more than the normal glass. The dynamic property of advance heat insulation and glare control are discussed. PV Sun Glass and Electro chromic Glass are also discussed.
- **Ar Shelja Gupta** was the final speaker of the event sharing Urban Green Buildings: The new address of sustainability in which a case study having Platinum rating were discussed with all the participants. The project was called **EXOTIC GRANDEUR** which has set a bench mark in Punjab by becoming the first ever Green Building. The difference between Regular Group Housing and Luxury Green Homes were shared excellently with the help of Site Layout, showing the importance of orientation to allow sunlight and air into the apartment. How to get credits and which are the main parameters were projected to all the participants. Computer Generated Analysis was shared to discuss the importance of Daylight analysis and support documentation of Project.
- At last Q&A Session were conducted with light moments between speakers, moderator, and participants.

Feedback from Students: The feedback was conducted through a form circulated among the participants and the webinar was ranked Excellent.

Thank You Remark: Dr. Tanmay Gupta concluded the Virtual Session by thanking all the Speakers, HOD and faculties of Civil Engineering Department, IGBC Members and Participants for making this event a memorable one.

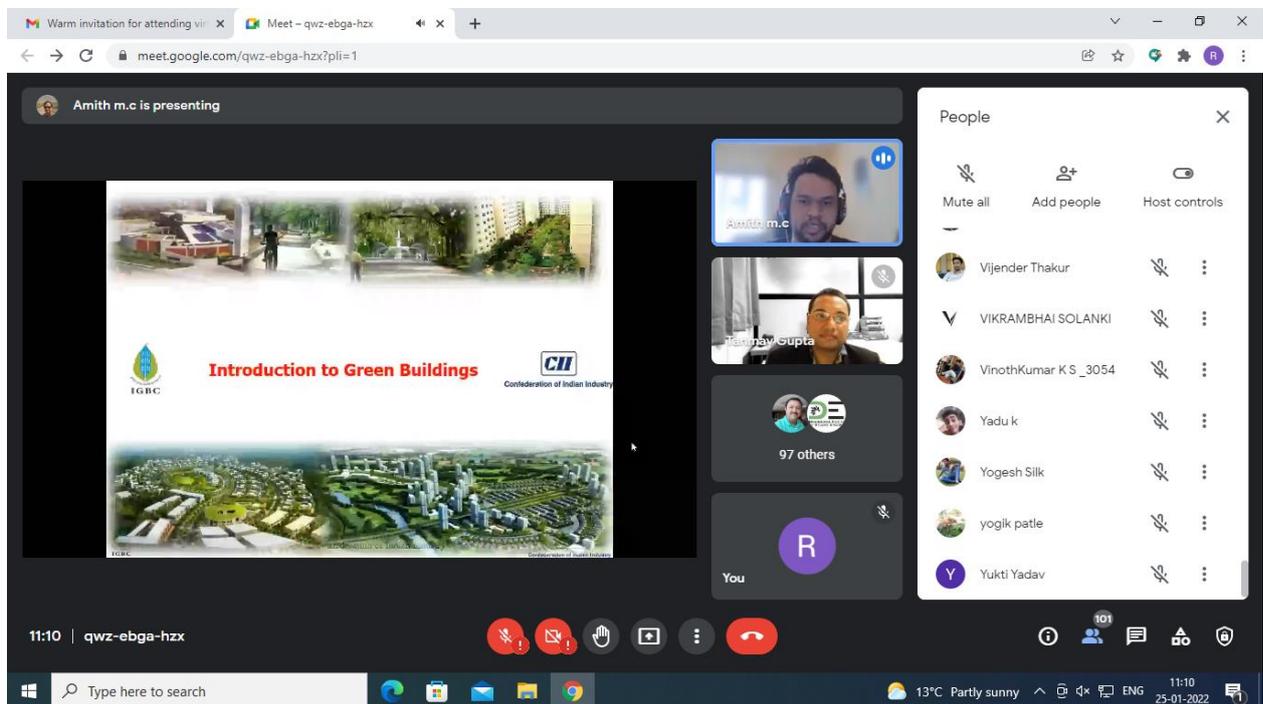
Key Points from Registration View

- A total of 411 registrations were received for this event.
- More than 200+ feedbacks were received from the participants.
- National as well as International Doctorate participant were present during the Virtual Session contributing 30% of the participation count.

Certificates Distribution

- Certificates were distributed on the basis of feedback form floated at the end of event in Google Meet and YouTube
- 201 Certificates were distributed
- All the queries regarding meeting, forms, and certificate were successfully handled and resolved by Dr. Tanmay Gupta and Ajay Singh Thakur

Screenshots of the Session



The screenshot shows a Google Meet interface. The main content area displays a presentation slide with the following text and images:

- Top left: IGBC logo
- Top center: **Introduction to Green Buildings**
- Top right: CII logo (Confederation of Indian Industry)
- Bottom: Aerial view of a green building complex.

The meeting controls at the bottom show the time as 11:10 and the meeting ID as qwz-ebga-hzx. The 'People' panel on the right lists participants: Amith m.c (presenting), Vijender Thakur, VIKRAMBHAI SOLANKI, VinothKumar K.S._3054, Yadu k, Yogesh Silk, yogik patle, and Yukti Yadav. The bottom status bar shows the system tray with a search bar, taskbar icons, and system information: 13°C Partly sunny, ENG, 11:10, 25-01-2022.

REC Amith m.c is presenting

Amith m.c

Agenda

1. About IGBC
2. What is a Green Building
3. Features & Benefits of Green Buildings
4. IGBC Member On-Net Zone

Amith m.c (Presenting)

Tanmay Gupta

97 others

You

People

- Mute all
- Add people
- Host controls
- Vijender Thakur
- VIKRAMBHAI SOLANKI
- VinothKumar K S_3054
- Yadu k
- Yogesh Silk
- yogik patle
- Yukti Yadav

11:11 | qwz-ebga-hzx

Type here to search

13°C Partly sunny

11:11 25-01-2022

REC Amith m.c is presenting

Tanmay Gupta

Indian Green Building Council (IGBC)

- Formed in 2001, by CII
- Vision of IGBC
- Pushing technological frontiers
- Pushed to be one of the global leaders in sustainable built environment by 2025
- First Green building certified in India

Amith m.c

97 others

You

People

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11:11 25-01-2022

REC Amith m.c is presenting

WorldGBC - IGBC

- ❖ World Green Building Council is a global network of GBC's from over 70 Countries
- IGBC part of the WorldGBC as 'Founding Member' since 2004
- ☐ Only Council from India representing at WorldGBC

© Confederation of Indian Industry

People

Mute all Add people Host controls

- Vijender Thakur
- VIKRAMBHAI SOLANKI
- VinothKumar K S_3054
- Yadu k
- Yogesh Silk
- yogik patle
- Yukti Yadav

11:12 | qwz-ebga-hzx

REC Amith m.c is presenting

Site Selection & Planning

Present challenges

- Compliance to Local Building Regulations
- Top Soil Erosion
- Decreased Green Cover
- Heat Island Effect
- Disturbance to Nocturnal life
- Social Aspects
 - ☐ Access to differently abled
 - ☐ Facilities for construction workforce

Efforts to address the challenges through the IGBC rating systems

Local Building Regulations	Top Soil covered with temporary Covering	Sedimentation trap
Minimal Footprint GRI - Gooding GBC, 2003	Blending in with Nature GRI - Gooding GBC, 2019	Enhanced Bio-diversity GRI - Gooding GBC, 2020
Heat Island Effect	High SRI Tiles on Roof GRI - Gooding GBC, 2019	Temperature on Roof GRI - Gooding GBC, 2019
Outdoor Light Pollution	Differently abled design	

People

Amith m.c

Ashish Kumar

Dr. Sameer Vyas

Shubam Sharma

92 others

qwz-ebga-hzx



Indian Green Building Council



REC Amith m.c is presenting

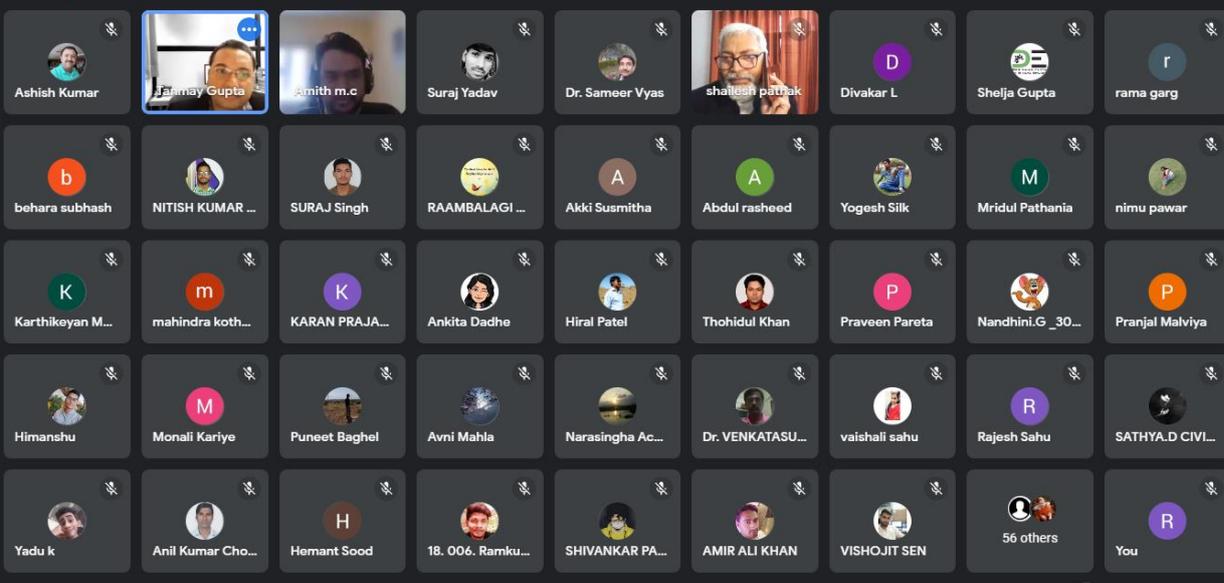


Ashish Kumar

11:37 | qwz-ebga-hzx

Amith m.c, Tanmay Gupta, Shejla Gupta, Dr. Sameer Vyas, Divakar L, rama garg, 92 others, You

REC



Ashish Kumar, Tanmay Gupta, Amith m.c, Suraj Yadav, Dr. Sameer Vyas, shalish patilak, Divakar L, Shejla Gupta, rama garg, behara subhash, NITISH KUMAR..., SURAJ Singh, RAAMBALAGI..., Akki Susmitha, Abdul rasheed, Yogesh Silk, Mridul Pathania, nimu pawar, Karthikeyan M..., mahindra koth..., KARAN PRAJA..., Ankita Dadhe, Hiral Patel, Thohidul Khan, Praveen Pareta, Nandhini.G_30..., Pranjal Malviya, Himanshu, Monali Kariye, Puneet Baghel, Avni Mahla, Narasingha Ac..., Dr. VENKATASU..., vaishali sahu, Rajesh Sahu, SATHYA.D CIVI..., Yadu k, Anil Kumar Cho..., Hemant Sood, 18. 006. Ramku..., SHIVANKAR PA..., AMIR ALI KHAN, VISHOJIT SEN, 56 others, You

qwz-ebga-hzx

REC Tanmay Gupta is presenting



Speaker -2
Col Shailesh Pathak
Co - Chairman,
IGBC Chandigarh
Chapter
Past Chairman ,
CII Himachal
State Council
CEO of ART-N-
GLASS INC.

Topic : Glass as a sustainable Green Building Material

11:55 | qwz-ebga-hzx

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14°C Cloudy 11:55 25-01-2022

REC Tanmay Gupta is presenting



Vijender Thakur has left the meeting
shailesh pathak

11:55 | qwz-ebga-hzx

Type here to search

14°C Cloudy 11:55 25-01-2022

REC shailesh pathak is presenting

GLASS
as
Sustainable Green Building Material

Col Shailesh Pathak
CEO
ART-N-GLASS INC.



meet.google.com is sharing your screen. Stop sharing

11:58 | qwz-ebga-hzx

Dr. Sameer Vyas, Divakar L, Suraj Yadav, Ashish Kumar, Shelja Gupta, rama garg, behara subhash, 89 others, You

Type here to search 14°C Cloudy 11:58 25-01-2022

REC shailesh pathak is presenting

GLASS
as
Sustainable Green Building Material

Col Shailesh Pathak
CEO
ART-N-GLASS INC.



Impressions that last...

11:59 | qwz-ebga-hzx

Dr. Sameer Vyas, Divakar L, Suraj Yadav, Ashish Kumar, Shelja Gupta, rama garg, behara subhash, 88 others, You

Type here to search 14°C Cloudy 11:59 25-01-2022

REC shailesh pathak is presenting

Solar Factor / Solar Heat Gain Coefficient

Energy properties of glass

Solar Radiation

External glass Internal glass

Direct Energy Reflection R_e

Absorption

Direct Energy Transmission T_e

External radiated Energy q_e

Internal radiated Energy q_i

Solar Factor $g = T_e + q_i$

Art-N-Glass
Impressions that last...

Factors:-

1. Solar & non solar Heat
2. Orientation.
3. Area of Glazing.
4. Choice of Glass(SF & U).
5. Colour of Glass.
6. Internal or External Glazing.
7. Environmental factors.
8. Temp. diff. Inside & out.

12:10 | qwz-ebga-hzx

REC

Shelja Gupta

12:37 | qwz-ebga-hzx

REC | Shelja Gupta is presenting

12:38 | qwz-ebga-hzx

Type here to search | 13°C Light rain | 25-01-2022

Participants: Sneha Gupta, Jaimay Gupta, Dr. Sameer Vyas, Divakar L, rama garg, NITISH KUMAR ..., SURAJ Singh, RAAMBALAGI ..., Akki Susmitha, Abdul rasheed, 85 others, You

REC | Shelja Gupta is presenting

12:39 | qwz-ebga-hzx

Type here to search | 13°C Mostly cloudy | 25-01-2022

Participants: Sneha Gupta, Jaimay Gupta, Dr. Sameer Vyas, Divakar L, rama garg, NITISH KUMAR ..., SURAJ Singh, RAAMBALAGI ..., Akki Susmitha, Vignesh.M_3052, 86 others, You



Indian Green Building Council



REC Shelja Gupta is presenting

13:06 | qwz-ebga-hzx

97 participants: Shelja Gupta, Janmay Gupta, KARTHICK, rama garg, Pawan raj singh, Dr. VENKATASU..., JAVAID AALAM, SURAJ Singh, Janani Thamizh, RAAMBALAGI ..., 85 others, You

Type here to search | 13°C Light rain | 13:06 25-01-2022