

# Online hands-on Workshop On "Virtual Lab"

Organized by  
Guru Ghasidas Vishwavidyalaya  
(A Central University), Bilaspur  
In Association with Virtual Lab

Indian Institute of Technology, Kharagpur,  
West Bengal, India

**1<sup>st</sup> March 2023**



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Prof. Alok Kumar Chakrawal,  
Vice Chancellor, GGV

## Patron

Prof Manish Shrivastava,  
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## Convener

Prof Sharad Chandra Srivastava,  
Dean (SoS (E&T)), GGV

## Coordinator

Dr. Nipun Kumar Mishra, GGV

## Co-Coordinator

Mr. Pushpendra Kumar Chandra, GGV

## ORGANIZING COMMITTEE

1. Dr. Sandeep Dharmadhikari, Assistant Professor,  
Dept. of Chemical Engineering, GGV
2. Mr. Anurag Singh, Assistant Professor,  
Dept of IPE, GGV
3. Dr. Amit Kumar Dewangan, Assistant Professor,  
Dept. of IT, GGV
4. Dr. Vinod Kumar, Assistant Professor,  
Dept. of Civil Engg., GGV
5. Dr. Jitendra Bhardwaj, Assistant Professor,  
Dept. of ECE, GGV
6. Dr. Anoop Kumar Sahu, Assistant Professor,  
Dept. of Mechanical Engg., GGV

## ABOUT GGV BILASPUR

Guru Ghasidas Vishwavidyalaya, is a Central University of India, located in Bilaspur C.G. State, established under Central Universities Act 2009, No. 25 of 2009. Formerly called Guru Ghasidas University (GGU), established by an Act of the State Legislative Assembly, was formally inaugurated on June 16, 1983. GGU is an active member of the Association of Indian Universities and Association of Commonwealth Universities. Situated in a socially and economically challenged area, the university is appropriately named to honor the great Satnami Saint Guru Ghasidas (born in 17th century), who championed the cause of the downtrodden and waged a relentless struggle against all forms of social evils and injustice prevailing in the society. The campus is lush green, calm and quiet and free from urban noise and pollution, an ideal temple for education and research.

## ABOUT IIT KHARAGPUR

Indian Institute of Technology Kharagpur (IIT KGP) is the first and largest of 26 members IIT family was established in the year 1951 at Hijli detention camp at Kharagpur in West Bengal, India. This is probably one of the very few Institutions in the World which started its journey in a prison house. Since its inception in May 1951, this Institute has been transformed into a breeding ground for the dissemination of knowledge in the field of engineering and technology to reach the frame of a world class Institute. The Institute takes pride in its relentless effort to provide the best platform for both education as well as research in the areas of science and technology, infrastructure designs, entrepreneurship, law, management, and medical science and technology.

## OBJECTIVES OF THE WORKSHOP

1. Introduction to Virtual Lab and its difficult possibilities
2. Department specific hands-on training on Virtual Lab for students and faculty



## ABOUT VIRTUAL LAB

Physical distances and the limited availability of resources often put restrictions on conducting experiments especially when they involve sophisticated instruments. Virtual Labs have been designed to provide remote access to labs in various disciplines of Science and Engineering. These Virtual Labs cater to students at the undergraduate level, post graduate level as well as to research scholars. Virtual Labs enable the students to learn at their own pace and enthuse them to conduct experiments. Virtual Labs also provide a complete learning management system where the students can avail various tools for learning, including additional web-resources, video-lectures, animated-demonstrations and self-evaluation. Virtual Labs enable the users to perform the experiments remotely as an on-demand service over the web. The Virtual Labs are being jointly developed by IIT Delhi, IIT Bombay, IIT Madras, IIT Guwahati, IIT Roorkee, IIT Kanpur, IIT Kharagpur, IIT Hyderabad, Amrita Vishwa Vidhyapeetham Coimbatore, College of Engineering Pune, Dayalbagh Educational Institute Agra and NITK Surathkal.

Virtual Lab does not require any additional infrastructural setup for conducting experiments at user premises. One computer terminal with broadband internet connectivity is all that is needed to perform the experiments remotely. More than 100 Virtual Labs are currently ready for use.

## BROAD AREAS OF VIRTUAL LABS

1. Electronics and Communication Engineering
2. Computer Science and Engineering
3. Electrical Engineering
4. Mechanical Engineering
5. Chemical Engineering
6. Biomedical Engineering and Biotechnology
7. Civil Engineering
8. Physical Sciences

## WEBSITE

The official website of Virtual Labs is [www.vlab.co.in](http://www.vlab.co.in). This is a single platform to access the Virtual Labs of all major disciplines of Science and Technology. It acts as one - stop platform for additional web-resources, video-lectures, animated-demonstrations and self-evaluation.

## RESOURCE PERSONS

Dr. Nirmalya Ghosh, Associate Professor, Electrical Engineering and Dr Atul Jain, Assistant Professor, Mechanical Engineering, IIT Kharagpur and virtual lab team member.

## WHO CAN PARTICIPATE

Faculty members and students of School of Studies, Engineering & Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur.

## REGISTRATION PROCESS

1. No registration fee will be charged to faculties and students.
2. Registrations can be done by online using link : <https://forms.gle/tH8k1s9ZV3ceGc4L6>
3. Last date of registration is **27th February 2023**
4. Joining link for the online session will be shared to the registered participant on their Email.
5. Online session will be conducted through google meet.

## WORKSHOP TIMING

General introduction - 2:00 PM to 2:30 PM

BRANCH	TIMING
CSE, IT	02:30 PM - 05:00 PM
ECE	02:30 PM - 05:00 PM
MECH, IPE, CIVIL	02:30 PM - 05:00 PM

## CONTACT ADDRESS

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