A T M E

College of Engineering

A detailed report on

Webinar on VIRTUAL LABS

held on 20 JUNE 2020

Virtual Labs

An MHRD Govt of India Initiative

in Association with

NIT-Karnataka, Surathkal

ABOUT VIRTUAL LAB

Virtual Lab is an initiative of Ministry of Human Recourse Development (MHRD) initiative under the National Mission on Education through ICT.

It started with the vision of **"*To enrich the learning experience through experiential learning of science, engineering and technology in a virtual learning environment at preferred pace, place and period (time).*"**

The Objectives of Virtual Labs are:

- Setup state of art virtual experimentation facilities (simulation) in selected areas of engineering & science
- Setup state of art experimentation facility in selected areas of Engineering and Science education which can be used both through remote access and on site experimental work
- Make these facilities available to all the educational institutions and students 24 X 7

Salient features

- Virtual Labs will provide the students to understand the Modelling process of a real-world system into an approximate version.
- Virtual labs will allow the students to Remotely trigger an experiment in an actual lab and get the result of the experiment through the computer interface.
- Virtual Labs are more realistic way of learning the subjects as it provides the technical input through audio and video streaming of an actual lab experiment and equipment.

About ATME

ATMECE, an ISO 9001-2015 certified Institute, is founded by a group of likeminded technocrats in 2010. The Campus is spread over 20 acres of green area with state of the art laboratories, a cluster of seminar halls & auditorium with all modern gadgets, Library, central computing facility etc. ATME Mysuru, not only offers facilities for the students to have overall growth, vision for the development and accountability for the future, also it provides highly excellent and dedicated faculties to cater the needs of the students.

Today, ATME is considered as one of the best Engineering Colleges in Mysuru, which remains on the top by the academic performance and also by the significant achievements of the students at the University level.

ATME College of Engineering is accredited by NBA for Civil Engineering, Electronics & Communication Engineering, Electrical and Electronics Engineering & Mechanical Engineering Courses for the academic year 2019-20 to 2021-22.

ATME a Nodal Centre of Virtual Lab NITK Surathkal.

ATME College of Engineering is recognised as a nodal centre of Virtual Lab NIT-Karnataka, Surathkal. Being a Nodal Centre under the guidance of NIT-K, Surathkal, ATME College of Engineering can organise training sessions for students and faculty members on Virtual labs.

Also by being a Nodal Center, ATME College of Engineering can organize workshops as an outreach activity of Virtual Labs. Faculty members and students from nearby institutes may also be invited to attend the workshop or training programme.

Report of Webinar on VIRTUAL LAB

Background:

In the time of pandemic, COVID-19 outbreak, the educational institutions also kept closed in order to avoid the spread of COVID-19. However, the online platforms are used to conduct theory subject but conduction of laboratory experiments were difficult as the setup is not available and students can't do the experiments as in the case of regular laboratories at the college. In order to engage the students in the academics and make them learn to conduct online experiments Virtual Labs is an excellent platform.

Objective:

- ✓ **To engage the students in the academics and bringing awareness about the Virtual labs.**
- ✓ **To educate the students about the virtual labs platform and guide them in conducting online experiments by using V-labs.**

Paln:

The webinar is organised in association with NITK-Surathkal. The work shop is exclusive for ATME College of Engineering Students. Students from 4th semester and 6th semester are allowed to take part in the webinar. The webinar is conducted on Microsoft Team platform.

Session-I: 11.00 a.m. to 11.30 p.m. for Students of CSE, ECE, EEE disciplines.
Session-II: 2.00 p.m. to 3.30 p.m. for Students of ME & CV Engineering Disciplines.

Session –I:

- The session is started with welcoming the guest from NITK. Mr. Beryl Thomas and Mrs. Shresta to the webinar. Also, the internal resource persons Mr. Abhilash from ECE, Mrs. Impana Appaji from CSE, Mr. Rajesh from EEE, Mr. Srivatsa from CV were also welcomed.
- More than 110 students were participated during the session.
- Mr. Berly Thomas started the session by giving introduction about the virtual lab and V-lab platforms. Later the session was taken by Mr. Abhilash from ECE department and conducted various experiments in the Electronics & communication domain. After Mrs Impana Appaji from CSE department conducted experiments related to Computer

Science and Engineering. Also Mr. Rajesh from EEE department also conducted few more experiments related to electrical & electronics domain.

- Over all 10 experiments were conducted during the session. The session last about more two hours.
- Mr. Thejkumar J, Nodal Centre Coordinator, co-ordinated the entire session.

Session –II:

- Session-II is resumed after the lunch break and started at 2.00 p.m.
- The second session was meant for the students of Mechanical Engg., and Civil Engg., departments.
- Mrs. Shresta, senior research fellow from NITK Started the afternoon Session and gave overview of the Virtual labs, centre for system design.
- Later, Mr. Thejkumar, Nodal centre coordinator took over the session. Experiments related to mechanical Engineering were explained and few experiments were conducted on live through V-lab platforms.
- Then, the session is took over by Mr. Srivathsa from Civil Engg. Department. Few more experiments related to civil engineering were conducted during the session.
- Over all 8 Experiments were conducted during the session.
- More than 50 students were presented during the afternoon session.
- All the students were presented with participation certificates upon successful participation in the webinar.

Video link of the webinar (Microsoft Stream):

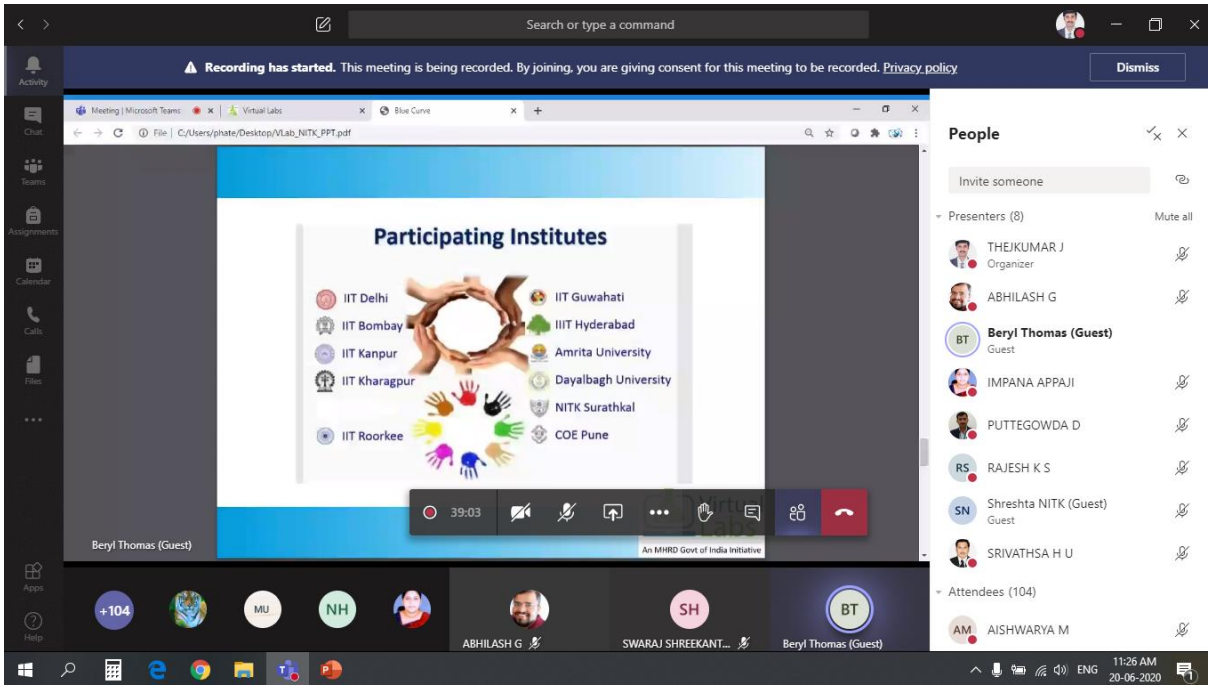
Session 1 Link: https://web.microsoftstream.com/video/1e4ce896-85bd-4e1d-9167-547a762e3645

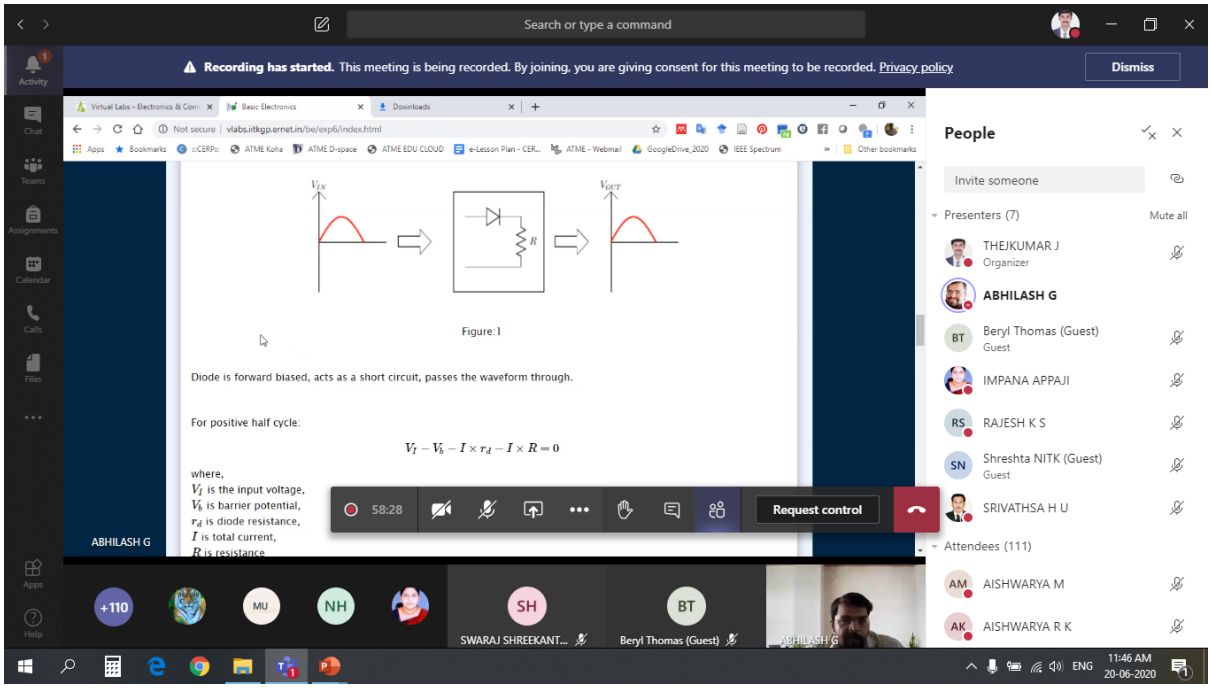
Session 2 Link: https://web.microsoftstream.com/video/f53c81ec-44d3-48f0-b592-954f216a5009

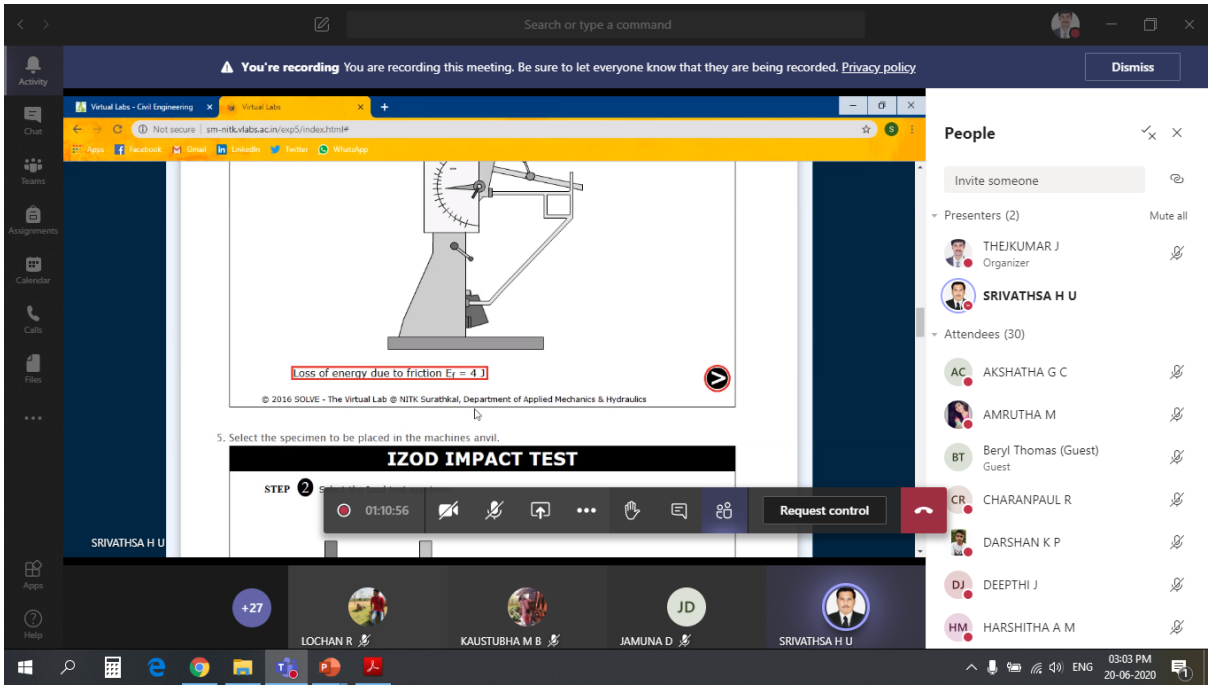
Webinar flyer:

Flyers from: NIYK-Surathkal (Left), ATMECE (Right)

Pics of the webinar:







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