

MZN

2-DAY WORKSHOP

ON VIRTUAL LABS

9-10 Nov., 2020

Uttarakhand Open University, Haldwani

The focus of this workshop is on creating awareness about Virtual Labs for internet-based remote experimentation and enabling faculty to use Virtual Labs and to integrate them effectively in teaching practice.

Registration Link: <u>https://forms.gle/zyyU1yBwS4uHGVsF6</u>

Organized by

School of Computer Science & IT In collaboration with Commonwealth Educational Media Centre for Asia, New Delhi

Key Persons for the Workshop



CHIEF PATRON

Prof. O.P.S. Negi Hon'ble Vice Chancellor, Uttarakhand Open University



CONVENER Prof. Durgesh Pant Director- School of CS & IT, UOU



ORGANIZING SECRETARY Dr. Jeetendra Pande Assistant Professor- Comp. Sc, Uttarakhand Open University



KEYNOTE ADDRESS Dr. Krishnashree Achuthan Principal Investigator VALUE Virtual Labs Amrita Vishwa Vidyapeetham



RESOURCE PERSON Mr. Saneesh P F Project Manager, VALUE Virtual Labs Amrita Vishwa Vidyapeetham, Kollam



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ORGANIZING SECRETARY Dr. Shiffon Chatterjee S r. Program Officer, CEMCA



2-Day Workshop on Virtual Labs



ANCHOR AND HOST BY Dr. Shiffon Chatterjee, CEMCA, New Delhi. ADDRESS BY Professor Madhu Prahar, Director, CEMCA, New Delhi. ADDRESS BY Professor Durgesh Pant, Director School of CS & IT, UOU. KEYNOTE ADDRESS BY Dr. Krishnashree Achuthan, Amrita Vishwa Vidyapeetham PRESIDENTIAL ADDRESS Professor Om Prakash Singh Negi, Hon'ble Vice Chancellor, Uttarakhand Open University, Haldwani, Nainital.

Dr. Jeetendra Pande, Uttarakhand Open University, Haldwani, Nainital.

PROGRAM DETAILS	
DAY/TIME (IST)	TOPICS
November 9, 2020 [11: 00 AM - 11:40 AM]	Inaugural Session and Overview of Virtual Labs
November 9, 2020 [11:40 AM - 12:45 PM]	Demonstration of experiments
November 9, 2020 [12:45 PM - 01:00 PM]	Question & Answer session
November 10, 2020 [11:00 AM - 12:15 PM]	Demonstration of experiments
November 10, 2020 [12:15 PM - 12:40 PM]	Teaching and learning with Virtual Labs: Sharing of insights
November 10, 2020 [12:40 PM - 01:00 PM]	Concluding session

Workshop Modality:

This workshop will be held on 9th and 10th November 2020. The live sessions will be conducted from 11.00 am to 1.00 pm using videoconferencing technology. In addition to the synchronous online sessions, participants would be encouraged to explore virtual labs and share comments and queries in the asynchronous mode through WhatsApp. CONTACT PERSONS

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Background and Need

Virtual Labs is an initiative of the Ministry of Human Resource Development (MHRD) now Ministry of Education) under the National Mission on Education through ICT (NMEICT). This initiative provides remote access to labs in various science and engineering disciplines at the undergraduate, post graduate level and research scholar levels.

One of the challenges in science and engineering education in our country is that access to costly lab equipment is constrained by lack of resources and geographical distances. Virtual Labs can provide an alternative to traditional hands-on labs where labs are not present or augment existing access to labs and experiments. Thus, Virtual Labs can extend the use of scarce or costly equipment.

Another challenge is how to improve the quality of the teaching and learning experience. Virtual Labs can play an important role in this regard as they allow students to engage with interactive simulators to perform experiments remotely. The aim is to provide a complete Learning Management System where the teaching and learning experience is enriched through simulations, additional web resources, video lectures, animated demonstrations, and tools for self-evaluation. Through sharing of knowledge, data, tools, and many other resources, Virtual Labs provide an environment to enhance the teaching and learning of many subjects in science and engineering.

There is, therefore, an urgent need for effective deployment, use, and integration of Virtual Labs into curricula. Further, during this time of educational disruption, it is critical that students continue to learn through laboratory experiments online through virtual labs. Recognizing this need, CEMCA is organizing a two-day workshop on Virtual Labs for faculty of Uttarakhand Open University.

The focus of this workshop is on creating awareness about Virtual Labs for internet-based remote experimentation and enabling faculty to use Virtual Labs and to integrate them effectively in teaching practice.

Objectives

The workshop participants will be able to

- i. Demonstrate awareness about Virtual Labs
- ii. Use Virtual Labs for performing experiments
- iii. Integrate Virtual Labs into teaching and learning practices