

Rajarshee Shahu Science College, Chandur Rly

Department of Physics

Report on

State Level Online Workshop for Faculty Members on ‘Use of
Virtual Laboratory in Teaching & Learning’

Session 21-22

Name of Activity	State Level Online Workshop for Faculty Members on ‘Use of Virtual Laboratory in Teaching & Learning’
Day & Date	Wednesday, 15 September 2021
Time & Venue	12.30 PM to 2.20 PM, Mode: Online, Prog. Conducted through Google Meet
Targeted Audience	Principal, Faculty Members from different college of Maharashtra State.
Objective of the Activity	<p>Virtual labs are excellent digital resources that help to save costs and enhance student productivity manifolds. Moreover, they allow students to take part in college practical work from any location and seamlessly combine the convenience and ease of use offered by contemporary technology and hence organized this workshop which quite help to</p> <ul style="list-style-type: none">• Set up state of art virtual experimentation facilities (simulation) in selected areas of science• Set up state of art experimentation facility in selected areas of and Science education which can be used both through remote access and on site experimental work• Make these facilities available to students.
Guest/ Speaker/ Resource Person	<ul style="list-style-type: none">• Chief Guest: Dr. Alka A. Bhise, Principal, <i>Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar</i>• President:- Dr. S. S. Thakare, <i>Principal, RSSC, Chandur Rly</i>• IQAC Co-Ordinator: Dr. M.J. Keche, <i>IQAC Co-Ordinator & Head of Botany Department, RSSC Chandur Rly</i>• Resources Person :- Dr. Pankaj Nagpure <i>Associate Professor, Dept. of Physics, Shri Shivaji Science College, Amt.</i> <p>Dr. Shrikant Patil <i>Assistant Professor, Dept. of Botany</i> <i>Adarsh Science College, Dhamangaon Rly.</i></p>

Briefing of activity

BRIEF REPORT ON

STATE LEVEL ONLINE WORKSHOP FOR FACULTY MEMBERS ON 'USE OF VIRTUAL LABORATORY IN TEACHING & LEARNING'

The workshop was conducted online through the virtual platform GOOGLE MEET on dated 15 Sept. 21 (Wednesday) during 12.30 pm to 2.30 pm. The methodology used was live demonstration of Virtual Lab experiments from university website (vlab.amrita.edu). The organizing team shared an information on What's App group to interact asynchronously, share information, registration link, answer queries and feedback link. The objective to take this workshop is set up state of art virtual experimentation facilities (simulation) in selected areas of science, Set up state of art experimentation facility in selected areas of and Science education which can be used both through remote access and on site experimental work and also make these facilities available to students and hence Department of Physics, RSSC, Chandur Rly in collaboration with IQAC, Chandur Rly and Department of Physics, VVM, Nandgaon Khandeshwar jointly organized State Level Online Workshop for Faculty Members on 'Use of Virtual Laboratory in Teaching & Learning'.

Organizing Committee, 101 Faculty Members of Maharashtra State, Resource Person, Chief Guest and President sharply joined the workshop programme link: meet.google.com/kzx-nkmp-xmd. The Programme was graced by the presence of Chief Guest **Dr. Alka Bhise**, *Principal, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar*, President of Programme **Dr. Suresh Thakare**, *Principal, Rajarshee Shahu Science College, Chandur Rly*, **Dr. M.J. Keche**, *IQAC Co-Ordinator & Head of Botany Department, RSSC Chandur Rly*, Resources Person :- **Dr. Pankaj Nagpure**, *Associate Professor, Dept. of Physics, Shri Shivaji Science College, Amt.*, Resources Person-**Dr. Shrikant Patil**, *Assistant Professor, Dept. of Botany, Adarsh Science College, Dhamangaon Rly.*, **Dr. A.P. Pachkawade** (*Head, Dept. of Physics, RSSC Chandur Rly*), **Dr. A.A. Wadatkar** (*Convener and Head, Dept of Physics, VVM, Nandgaon Khandeshwar*), **Mr. S.A. Wani** (*Naac Co-ordinator, Asst. Prof of Physics, RSSC, Chandur Rly*), **Dr. Roshani Bhagat**, *Convener and Asst. Prof. of Physics, RSSC Chandur Rly*, **Dr. Prashant Kharat**, *Asst. Prof of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar*, **Mr. Ajajy Ambhore**, *Asst. Prof. of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar*, All respected heads of the dept. and Faculty Member of the Maharashtra state.

Dr. Roshani Bhagat Welcomed all the delegates and participants and gave an overview of the program. She mentioned the need for virtual labs so that all students have equal access to quality practical and hands on experiment-based leaning. She also mentioned how even before the current pandemic situation students faced difficulties in conducting experiments due to lack of equipment. During the pandemic, study centers were closed, and students were not able to conduct the experiments.

A warm welcome address presented by Dr. M.J. Keche (*Head & IQAC Co-Ordinator, Department of Botany, RSSC, Chandur Rly.*). After that Introductory Speech was given by Mr. S. A. Wani (*NAAC Co-Ordinator, Asst. Prof of Physics, RSSC Chandur Rly.*). In his introduction he gave brief idea regarding need of Virtual Lab i.e. Virtual labs enable students to perform many experiments that are difficult to perform in real laboratories because of the risks. Virtual labs help teachers and students save time and effort because they don't need to adhere to certain times to enter the lab, or to move from one place to another.

The one-day workshop was spilt into two sessions.

Session-I: 12.30 pm- 1.30 pm for faculties of Various Science Disciplines

(Practical's on Physics and Chemistry Subjects.)

Session-II: 1.30 pm-2.30 pm for faculties of Various Science Disciplines

(Practical's on Life Science Subjects.)

Session I

- Registration for the participants started during 11 Sept. 21 to 15 Sept. 21 through online mode. Total 101 faculties from various colleges were registered for the workshop.
- After Introductory speech Dr. Anant Wadatkar (*Convener & Head of Physics Department, VVM, Nandgaon Khandeshwar*) given brief introduction of Resource Person Dr. Pankaj Nagpure, (*Associate Professor, Dept. of Physics, Shri Shivaji Science College, Amt.*)
- Later the session was taken over by the resource persons. At the beginning the resource persons briefed about the virtual labs and the advantage of virtual lab.
- Later in the session circuit branches like Electrical and Electronics labs were discussed. The doubt upon the using of Virtual Labs were clarified by the resource person.
- At the end of the first session, few experiment of physics subject was demonstrated.
- Session I concluded by Dr. Anant Wadatkar by presenting the vote of thanks.

Session II

- Session-II is resumed after session-I and started sharply at 1.30 pm.
- The second session was meant for the staffs of life sciences streams.
- Dr. Roshani Bhagat (*Convener & Asst. Prof. of Physics Department, RSSC, Chandur Rly*) given brief introduction of Resource Person Dr. Shrikant Patil, *Asst. Professor, Dept. of Botany, Shivaji Science College, Amt.*
- The resource person, briefed about the importance and advantages of virtual lab and benefit the students can get by using virtual labs.
- By using animation tool, how experiments of life science subject was run, he explained very nicely.
- Dr. Shrikant Patil solved each and every query asked by faculty members of their domain specialization.
- Session II concluded by Dr. Roshani Bhagat by presenting vote of thanks.

After both the session, valuable guidance about virtual lab and their uses given by Chief Guest Dr. Alka A. Bhise, *Principal, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar*. She also discussed safety measures we need to practice when we conduct virtual laboratory, which quite beneficial for all the attendees. After the chief guest speech, presidential speech given by Dr. S.S. Thakare, *Principal, Rajarshee Shahu Science College, Chandur Rly*, in his speech he specially mentioned advantages and disadvantages of virtual lab. He was also appreciated and congratulate for successful conduction of such a great activity to IQAC of RSSC, Chandur Rly, Department of Physics, RSSC Chandur Rly and Department of Physics, VVM, Nandgaon Khandeshwar. Lastly workshop concluded by Dr. R. N. Bhagat by presenting vote of thanks.

Expenditure	Nil
Committee Member	Department of Physics, RSSC Chandur Railway IQAC, Chandur Rly, Department of Physics, VVM, Nandgaon Khandeshwar
Brochure	



Department of Physics, Rajarshee Shahu Science College, Chandur Rly
In Collaboration with IQAC, RSSC, Chandur Rly &
Department of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar
Jointly Organised



State Level Online Workshop for Faculty Members on 'Use of Virtual Laboratory in Teaching & Learning'

		SCHEDULE OF WORKSHOP		
President	Chief Guest	12. 30 pm	Welcome Address	Dr. M. J. Keche , Head & IQAC Co-ordinator, Department of Botany, RSSC Chandur Rly
		12.33 pm	Introductory Speech	Mr. S.A. Wani , NAAC Co-ordinator, Asst. Prof, Dept. of Physics, RSSC, Chandur Rly
Dr. Suresh S. Thakare Principal Rajarshee Shahu Science College, Chandur Rly, Amt	Dr. Alka A. Bhise Principal Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar, Amt.	12.38 pm	Introduction of Resource Person Dr. Pankaj Nagpure	Dr. Anant Wadkar , Convener , Head & Asst. Prof., Dept. of Physics, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khand.
Resource Person		12.42 pm 1.10 Pm	Guest Talk Question-Answer Session	Dr. Pankaj Nagpure , Asst. Prof., Dept. of Physics Shri Shivaji Science College, Amt.
		1.15pm	Introduction of Resource Person Dr. Shrikant Patil	Dr. Roshani Bhagat , Convener, & Asst. Prof., Department of Physics, RSSC, Chandur Rly
Dr. Pankaj Nagpure Assistant Professor, Dept. of Physics Shri Shivaji Science College, Amt	Dr. Shrikant Patil Assistant Professor, Dept. of Botany Adarsh Science College, Dhamangaon Rly	1.20 pm 1.50 pm	Guest Talk Question-Answer Session	Dr. Shrikant Patil , Assistant Professor, Dept. of Botany Adarsh Science College, Dhamangaon Rly
On dated 15 Sept. 21		2.00 pm	Valuable Guidance by Chief Guest	Dr. Alka A. Bhise , Principal, Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar,
		2.15 pm	Presidential Speech	Dr. Suresh S. Thakare , Principal, Rajarshee Shahu Science College, Chandur Rly
		2.28 pm to 2.30 pm	Vote of Thanks	Dr. Roshani Bhagat , Convener, & Asst. Prof., Department of Physics, RSSC, Chandur Rly

Registration Link-
<https://forms.gle/jAGWqApnV6Z37veR9>



Dr. A. P. Pachkawade
Head, & Asst. Prof., Department of Physics,
Rajarshee Shahu Science College,
Chandur Rly, Amt

Organizing Committee



Mr. S.A. Wani
NAAC Co-ordinator, Asst. Prof, Dept. of Physics, RSSC, Chandur Rly



Dr. M. J. Keehe
Head & IQAC Co-ordinator, Department of Botany, RSSC Chandur Rly



Dr. Anant Wadatar
Convener, Head & Asst. Prof., Dept. of Physics,
Vinayak Vidyan Mahavidyalaya, Nandgaon Khandeshwar



Dr. Prashant Kharat
Asst. Prof., Dept. of Physics,
Vinayak Vidyan Mahavidyalaya, Nandgaon Khandeshwar



Dr. Roshani Bhagat
Convener, & Asst. Prof., Department of Physics,
Rajarshee Shahu Science College,
Chandur Rly, Amt



Mr. Ajay Ambhore
Asst. Prof., Dept. of Physics,
Vinayak Vidyan Mahavidyalaya, Nandgaon Khandeshwar

News

युज ऑफ वच्युअल लॅबोरेटरी संदर्भात राज्यस्तरीय कार्यशाळा संपन्न



अमरावती दि. २० : भौतिकशास्त्र विभाग व आय क्यू एस सी, राजर्षी शाहू सायन्स कॉलेज चांदूर रेल्वे तसेच भौतिकशास्त्र विभाग विनायक विज्ञान महाविद्यालय नांदगाव खंडेश्वर यांच्या संयुक्त विद्यमाने 'राज्यस्तरीय युज ऑफ वच्युअल लॅबोरेटरी' या विषयावर शिक्षकांसाठी कार्यशाळा १५ जून २०२१ रोजी ऑनलाइन माध्यमातून घेण्यात आली. या कार्यक्रमाला प्रमुख पाहुण्या विनायक विज्ञान महाविद्यालयाच्या

प्राचार्य डॉ. अलका भिसे तर अध्यक्षस्थानी राजर्षी शाहू सायन्स कॉलेज चे प्राचार्य डॉ. एस एस टाकरे हे होते.

कार्यशाळेस संसाधन स्वरूपात श्री शिवाजी सायन्स कॉलेज अमरावती येथील भौतिकशास्त्र विभागाचे सहयोगी प्राध्यापक डॉ.पंकज नागपुरे व आदर्श सायन्स कॉलेज धामणगाव रेल्वे येथील वनस्पतिशास्त्र विभागाचे सहाय्यक प्राध्यापक डॉ. श्रीकांत पाटील लाभले. राज्यस्तरीय कार्यशाळेला

मोठ्या संख्येने सहाय्यक प्राध्यापक सहभागी झालेले. बीएससी भाग १, भाग २, भाग ३ चे प्रात्यक्षिक डॉ. पंकज नागपुरे सरांनी वच्युअल लॅबोरेटरी द्वारे करून दाखविले व त्यासंदर्भात मार्गदर्शनही केले. लाइफ सायन्स या विषयातील प्रात्यक्षिका करिता निमेशन टूल चा वापर करून विद्यार्थ्यांपर्यंत माहिती कशी पोहोचू शकतो याचे प्रात्यक्षिक डॉ. श्रीकांत पाटील सरांनी करून दाखविले. कार्यक्रमाचे संयोजक डॉ. अनंत वडतकर तर संयोजिका डॉ. रोशनी भगत हे होते. त्याप्रमाणे कार्यशाळेला विभाग प्रमुख डॉ. ए पी पाचकवडे, राजर्षी शाहू सायन्स कॉलेज च्या खट-उ समन्वयक डॉ.एम जे. केचे, विनायक विज्ञान महाविद्यालयाच्या खट-उ समन्वयक डॉ. सुचिता खोडके, छ-उ समन्वयक प्रा.एस. ए. वाणी, आणि डॉ. प्रशांत खरात व प्रा. अजय अंभोरे यांचे सहकार्य लाभले.

News at Hindustan (20 Sept 21)

‘युज ऑफ व्हर्च्युअल लॅबॉरेटरी’ संदर्भात राज्यस्तरीय कार्यशाळा

पुण्य नगरी / तालुका प्रतिनिधी

चांदूर रेल्वे : भौतिकशास्त्र विभाग व आयक्यूएससी, राजश्री शाहू सायन्स कॉलेज चांदूर रेल्वे तसेच भौतिकशास्त्र विभाग विनायक विज्ञान महाविद्यालय नांदगाव खंडेश्वर यांच्या संयुक्त विद्यमाने ‘राज्यस्तरीय युज ऑफ व्हर्च्युअल लॅबोरेटरी’ या विषयावर शिक्षकांसाठी कार्यशाळा ऑनलाइन माध्यमातून नुकताच पार पडली.

कार्यक्रमाला प्रमुख पाहुण्या विनायक विज्ञान महाविद्यालयाच्या प्राचार्य डॉ. अलका भिसे, तर अध्यक्षस्थानी राजश्री शाहू सायन्स कॉलेज चे प्राचार्य डॉ. एस एस ठाकरे हे होते. कार्यशाळेस संसाधन स्वरूपात श्री शिवाजी सायन्स कॉलेज अमरावती येथील भौतिकशास्त्र विभागाचे सहाय्यक

प्रा.डॉ.पंकज नागपुरे व आदर्श सायन्स कॉलेज धामणगाव रेल्वे येथील वनस्पतिशास्त्र विभागाचे सहाय्यक प्राध्यापक डॉ. श्रीकांत पाटील लाभले. बीएससी भाग १, भाग २, भाग ३ चे प्रात्यक्षिक डॉ. पंकज नागपुरे यांनी करून दाखविले.

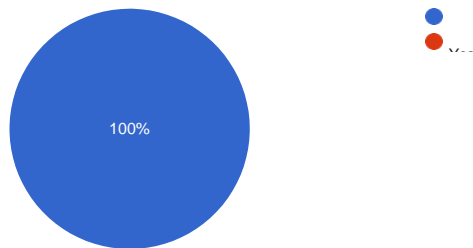
लाइफ सायन्स या विषयातील प्रात्यक्षिकाकरिता ऑनिमेशन टूलचा वापर करून विद्यार्थ्यांपर्यंत माहिती कशी पोहोचू शकतो, याचे प्रात्यक्षिक डॉ. श्रीकांत पाटील यांनी करून दाखविले. कार्यक्रमाचे संयोजक डॉ. अनंत वडतकर, तर संयोजिका डॉ. रोशनी भगत होते. त्याप्रमाणे कार्यशाळेला विभाग प्रमुख डॉ. ए.पी. पाचकवडे, डॉ.एम.जे. केचे, प्रा.एस.ए. वाणी, डॉ. प्रशांत खरात व प्रा. अजय अंभोरे यांचे सहकार्य लाभले.

Feedback Analysis	Total 104 responses received. Details and Analysis of Received Feedback
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Feedback Form of Workshop on Use of Vifual Laboratory in Teaching & Learning

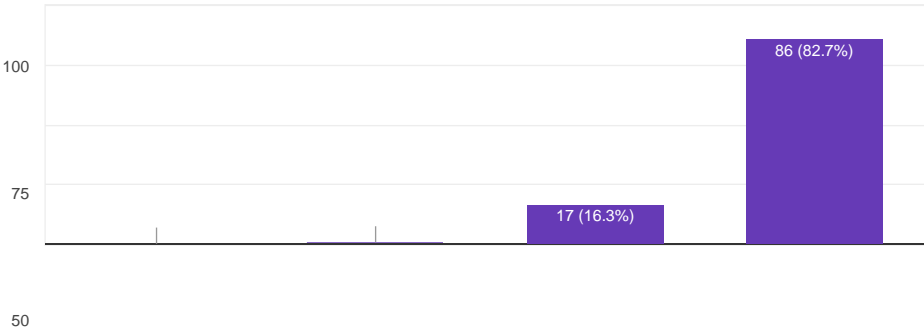
1. Are you satisfied with the time and online mode to conduct the Workshop ?

104 responses

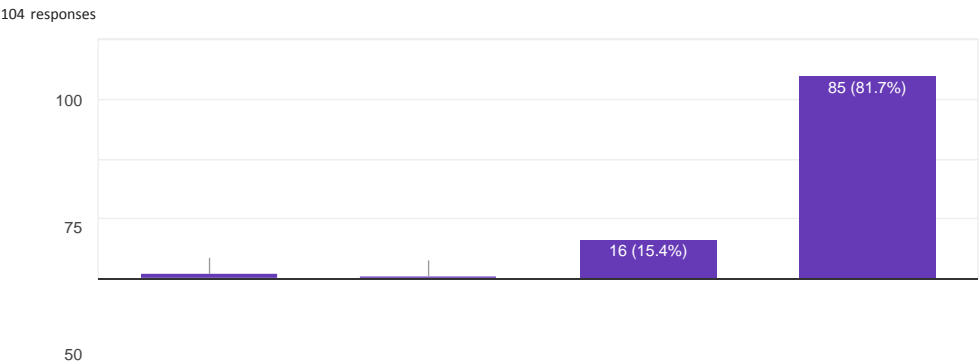


2. How much this session was useful from the knowledge and information point of view? {4 being the highest & 1 being the lowest.}

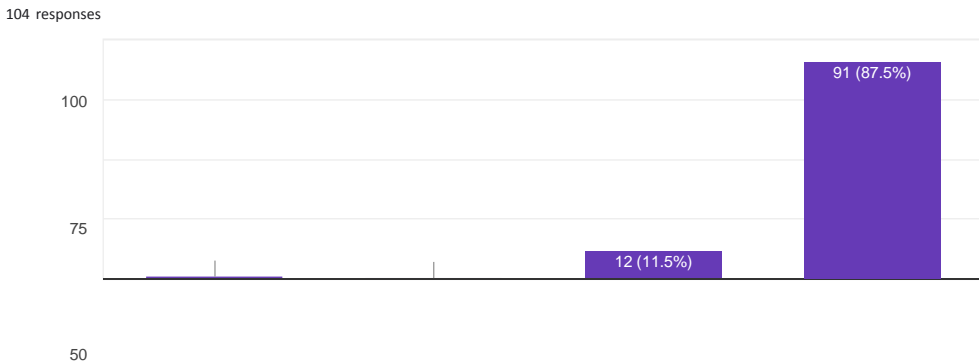
104 responses



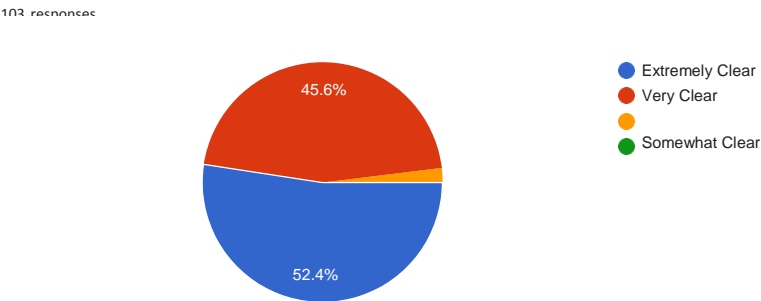
3. How relevant was the content discussed by the guest speaker Dr. Pankaj Nagpure? {{4 being the highest & 1 being the lowest.}}



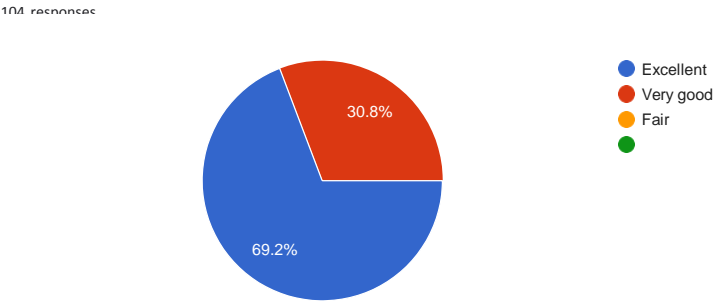
4. How relevant was the content discussed by the speaker Dr. Shrikant Patil? {4 being the highest & 1 being the lowest.}

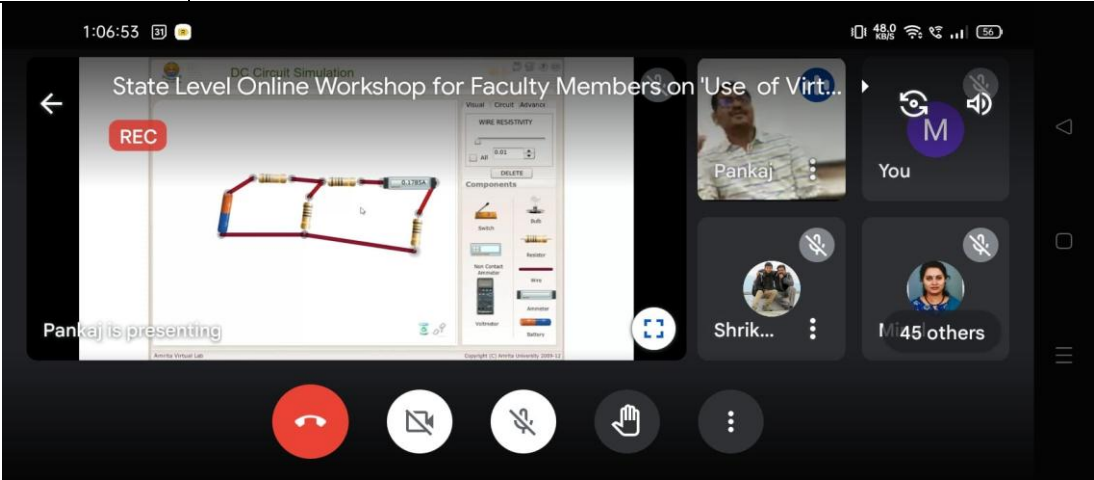
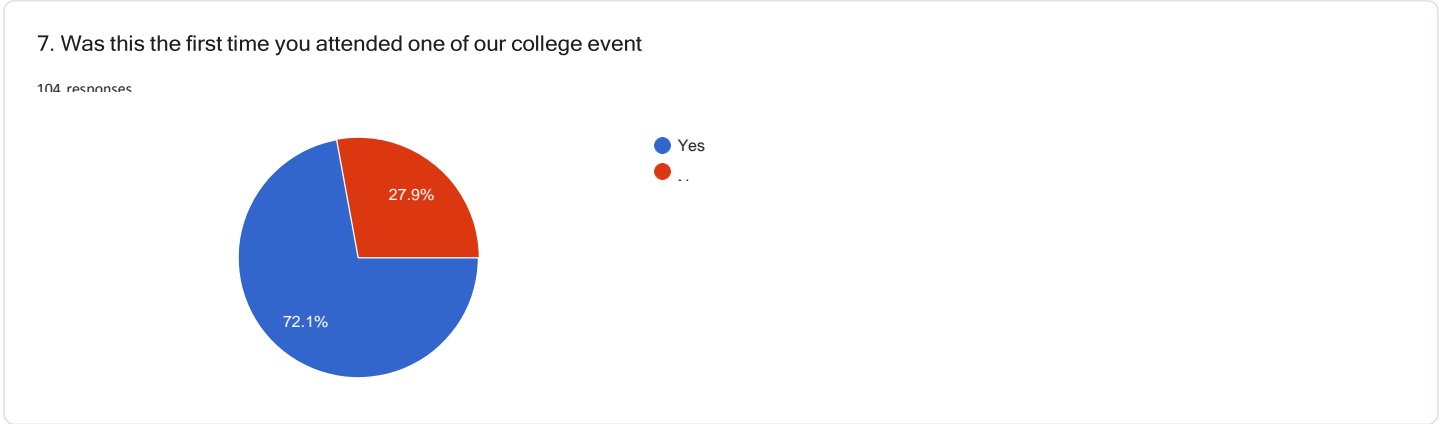


5. How clear were the objective of this workshop?

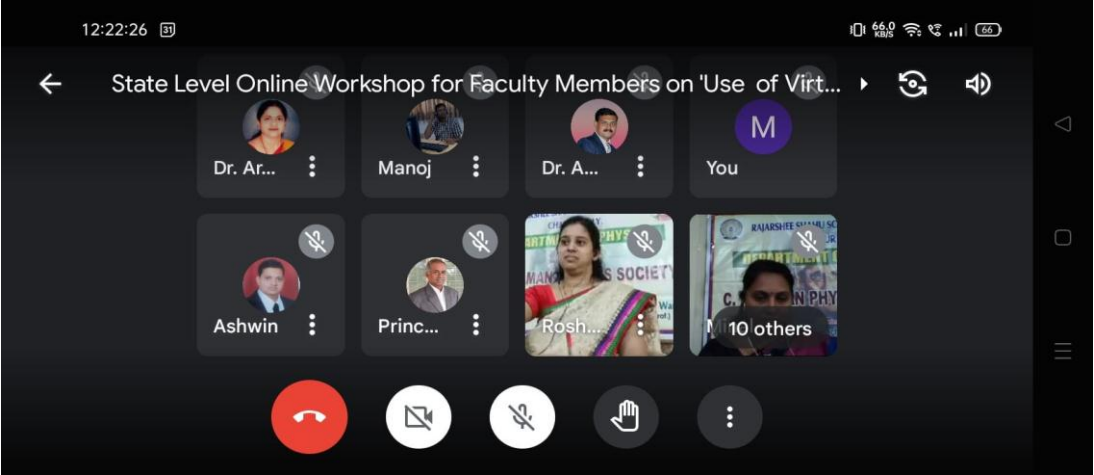


6. How was overall organization of the Workshop?

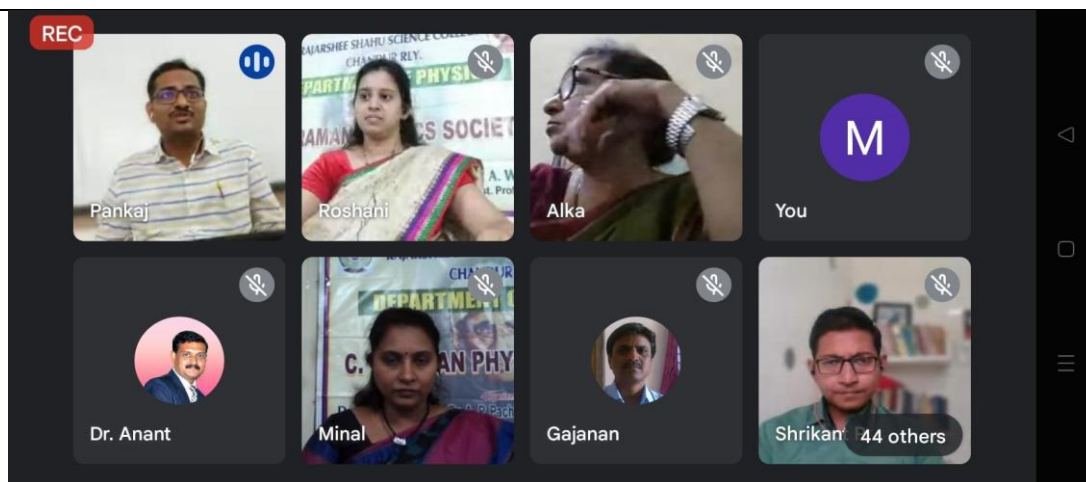




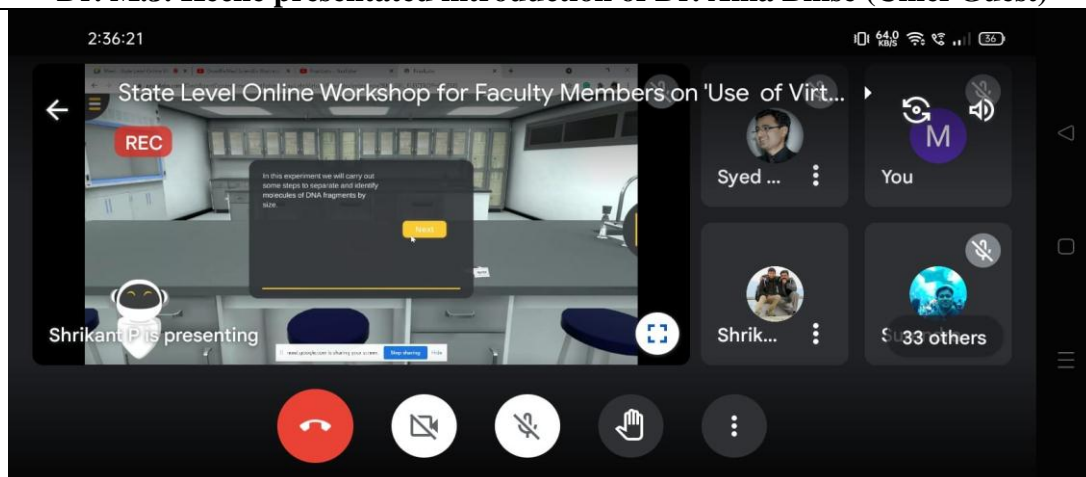
Dr. Pankaj Nagpure (Resource Person) Performed experiment virtually D.C. Circuit Simulation



Dr. Roshani Bhagat (Convener) Welcomed to Resource person and participants.



Dr. M.J. Keche presented introduction of Dr. Alka Bhise (Chief Guest)



Dr. Shikant Patil gave information about animation tools.

<p style="text-align: center;"><i>A.P. Pachkawade</i></p> <p>Dr. A. P. Pachkawade Head Department of Physics Rajarshee Shahu Science College Chandur Rly., Dist. Amravati.</p>	<p style="text-align: center;"><i>R. Bhagat</i></p> <p>Convener Dr. Roshani Bhagat Asst. Prof of Physics Rajarshee Shahu Science College, Chandur Rly</p>
<p style="text-align: center;"><i>[Signature]</i></p> <p>IQAC Co-ordinator Rajarshee Shahu Science College Chandur Rly., Dist. Amravati</p>	<p style="text-align: center;"><i>[Signature]</i></p> <p>Principal Rajarshee Shahu Science College Chandur Rly Dist. Amravati</p>

