





#### Shri Shivaji Education Society Amravati's

# Shri Shivaji Science And Arts College, Chikhli

In collaboration with

Vlabs Regional Center RCID03 (IIT Bombay)
Maharashtra Institute of Technology, Aurangabad

One day online workshop on

# Virtual Labs: The New World of Experimentation

Virtual Labs is an initiative of the Ministry of Human Resource and Development, Govt. of India under the National Mission on Education through Information and Communications Technology (NME-ICT). This initiative provides an opportunity for all students to use virtual labs free of cost.

The aim to provide high quality remote laboratory access in Science and Engineering disciplines for students and teachers of the country and is applicable to undergraduate (B.Sc., B.Tech, B.E.) and post-graduate (M.Sc., M.Tech, M.E.) students including Physical Sciences, Biological Sciences, Chemical Sciences, Computer Science and Electronics and Mechanical Engineering.

Virtual Labs are being developed by consortia of 12 institutes which include Amrita Vishwa Vidyapeetham, IIT Delhi, IIT Bombay, IIT Kanpur, IIT Kharagpur, IIT Madras, IIT Roorkee, IIT Guwahati, IIIT Hyderabad, Dayalbagh Educational Institute, NIT Surathkal and College of Engineering, Pune.

Website: https://www.vlab.co.in/

# **Activity**: One day online workshop on Virtual Labs: The New World of Experimentation **Aim**:

- 1. To creates a virtual learning space that enables students to conduct experiments individually or in groups interactively via the internet.
- 2. The teaching and learning experience is enriched through simulations, additional web resources, video lectures, animated demonstrations, and tools for self-evaluation quizzes.

#### **Objective**

1. Creating awareness about Virtual Lab project.

2. Using Virtual Labs for performing laboratory experimentations

3. Integrating Virtual labs into teaching and learning practices

Notice : Brochure is attached with this action taken report.

Patron : Hon'ble Harshvardhan P. Deshmukh

Organizer : Dr. Omraj S. Deshmukh

Workshop Coordinator : Dr. Vijayshree Hemke

Number of participants : 79

**Methodology:** Shri Shivaji Science And Arts College organized a workshop on "Virtual Labs: The New World of Experimentation". The workshop was conducted online through the virtual platform Google Meet App. The methodology used was live demonstration of Virtual Lab experiments from university website (vlab.amrita.edu) and main virtual lab website (vlab.co.in) followed by hands-on practice by participants using the assignment questions provided by the resource person.

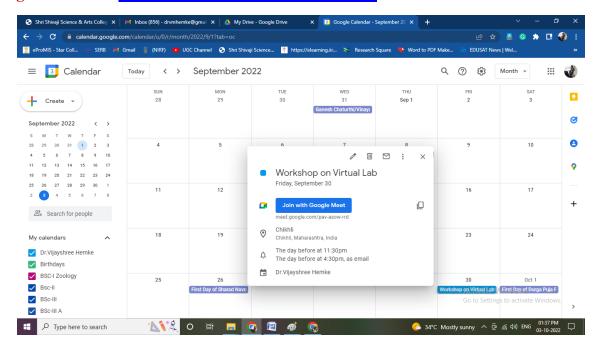
**Date:** 30/09/2022

#### Registration Link: https://forms.gle/NYML1ciJViU1gEXn6

The organizing team shared a WhatsApp group to interact asynchronously, share information, answer queries and submit feedback.

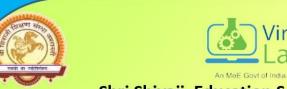
Whats App Group Link: <a href="https://chat.whatsapp.com/FaUzmL1ZF4d7TjNqT0SEht">https://chat.whatsapp.com/FaUzmL1ZF4d7TjNqT0SEht</a>

Google Meet link: https://meet.google.com/pav-asow-rrd



The workshop offered an opportunity for all faculty members involved in the education of physics, chemistry, biological sciences, computer science and mechanical engineering to learn more about Virtual Labs.

Students notified regarding workshop through a brochure.





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Shri Shivaji Science And Arts College, Chikhli In Collaboration with

Vlabs Regional Center RCID03 (IIT Bombay) Maharashtra Institute of Technology, Aurangabad

One Day online workshop on

**Virtual Labs: The New World of Experimentation** 

**Organizer** 



Dr. Omraj S. Deshmukh **Principal** Shri Shivaji Science And Arts College,

Resource Person



Dr. Abhilasha Mishra Associate Professor, E & T Engineering, Regional Coordinator Virtual Labs Certified Mentor/Lab Reviewer, VLabs IIT Bombay MIT, Aurangabad Resource Person

Resource Person



Mr. Trishul Kulkarni Assistant Professor, Department of Mechanical Engineering, Nodal Co-ordinator, Virtual Labs Certified Mentor/LabReviewer, VLabs IIT Bombay MIT, Aurangabad

Resource Person



Dr. Prashant Gupta **Assistant Professor** MIT, Aurangabad



Dr. Bhagwan Toksha Assistant Professor, Polymer & Plastic Chemistry Department of Basic Sci. & Humanities, Regional Technical Coordinator Virtual Labs Certified Mentor. VLabs IIT Bombay MIT, Aurangabad

Date: 30/09/22 Time: 1 pm to 5 pm

Google Meet Link: https://meet.google.com/pav-asow-rrd Coordinator: Dr. Vijayshree Hemke -9421732680



# One Day online workshop on Virtual Labs: The New World of Experimentation



Date:30/09/2022

### Schedule of Workshop

Time	Program/Topic	Resource Persons		
2:30 PM	Wel-Come	Dr. Sonali S. Gaikwad Assistant Professor Department of Computer Science		
2:35 PM	Principal's Address	Dr. Omraj S. Deshmukh Principal Shri Shivaji Science and Arts College, Chikhli, Dist. Buldana		
2:40 PM	Resource person-I	Dr. Abhilasha Mishra Regional Coordinator Aurangabad		
3:30 PM	Resource person-II	Dr. Trishul Kulkarni Nodal Co-ordinator		
4:00 PM	Resource person-III	Dr. Bhagwan Toksha Regional Technical Coordinator		
4:30 PM	Resource person-IV	Dr. Prashant Gupta Virtual Labs Certified Mentor.		
5:00 PM	Vote of Thanks	Dr. Vijayshree Hemke Assistant Professor Department of Zoology		

### ■ The lecture will be conduct on Google Meet.

Registration Link: <a href="https://forms.gle/NYML1ciJViU1gEXn6">https://forms.gle/NYML1ciJViU1gEXn6</a>

Whats App Group Link: <a href="https://chat.whatsapp.com/FaUzmL1ZF4d7TjNqT0SEht">https://chat.whatsapp.com/FaUzmL1ZF4d7TjNqT0SEht</a>

Google Meet-Video call link: : https://meet.google.com/pav-asow-rrd

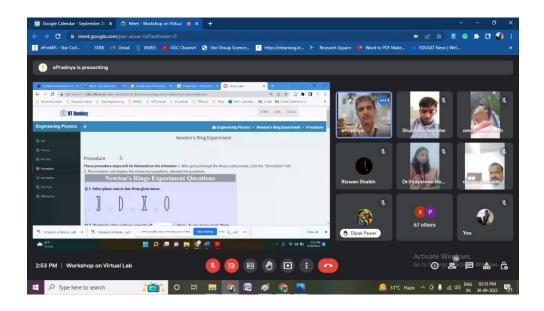
Contact: Dr. Vijayshree Hemke: 9421732680

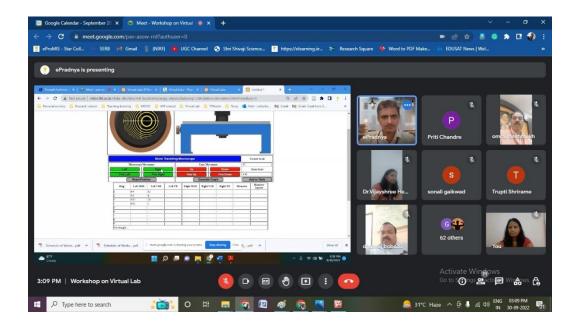
Dr. Sonali S. Gaikwad welcomed all the participants and gave an overview of the program. She mentioned the need for virtual labs so that all students have equal access to quality practical and hands on experiment-based leaning. The need to bring virtual labs to Open University students was emphasized.

Inauguration was done by the hands of Principal of the college, Dr. Omraj S. Deshmukh. He referred to how the National Education Policy 2020 recommends Virtual Labs as one of the key initiatives, given the emerging importance of using technology at all levels of teaching and learning. He appealed to the students that enjoy this opportunity of learning how to handle Virtual Lab. He stressed that laboratories are very important part of learning, so learners need to be supported in this regard.

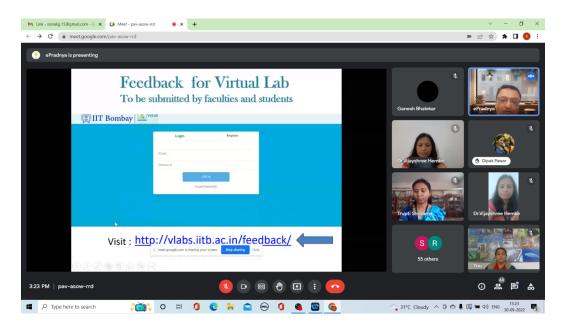
Dr. Abhilasha Mishra was served as a resource person for Ist session. Ms. Trupti Shrirame Assistant Professor in Chemistry, introduced her to the participants. Dr. Mishra talks about new Horizons of Virtual Lab.

Dr. Bhagwan Toksha was served as a resource person for IInd session. Ms. Trupti Shrirame, introduced him to the participants. In his session, he introduced virtual lab to the participants. He explained how to start use of virtual lab, right from searching of different website addresses of virtual lab. Then he explained the Newton's Ring Experiment in details.



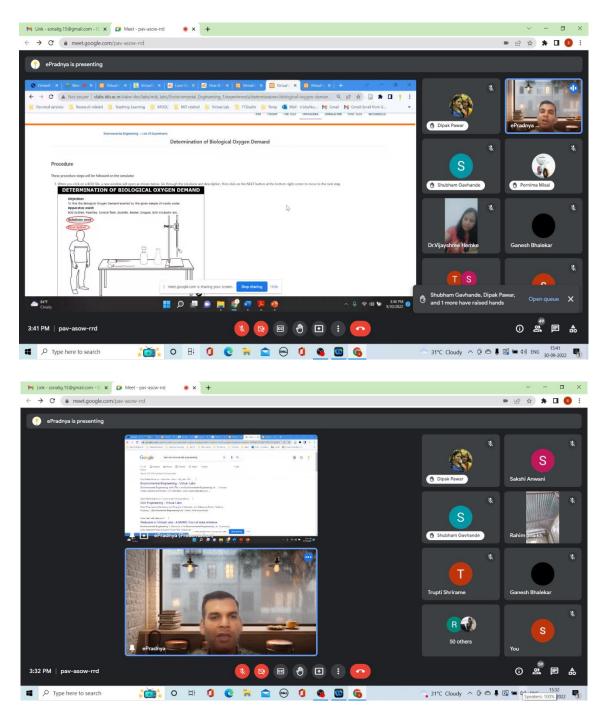


Dr. Trishul Kulkarni was served as a resource person for IIIrd session. He explained in details the feedback system for virtual lab. Participants actually filled feedback during the session.



Dr. Prashant Gupta was served as a resource person for IVth session. Ms. Trupti Shrirame introduces him to participanrs. Dr. Prashant Gupta Explained the Experiment on Biological Oxygen Demand which is useful for the faculties and students of Chemical Sciences And Life Sciences.

Dr. Vijayshree Hemke expressed vote of thanks.



## List of participants those who were attended the workshop







#### Shri Shivaji Education Society Amravati's

## Shri Shivaji Science And Arts College, Chikhli Department of Zoology

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One day online workshop on
Virtual Labs: The New World of Experimentation

### Participants' Attendance Sheet

Sr. No	Name of Participants	Ist Session	II <sup>nd</sup> Session	III <sup>rd</sup> Session	IV <sup>th</sup> Session
1	Dr. Omraj S. Deshmukh	Jexte	Osole	Osple	desele
2	Prof. Dr. D. B. Bobde	Trops	Dans	Son	Jan /
3	Prof. Dr. Meena Nikam	to kous!	Missis	Takou	Jokan.
4.	Mr. S. L. Kumbhare	Ch.	(his)	R	fres
5.	Dr. Vishnu Padwal	PHO!	1901-14:	191 q:	19 g
6.	Dr. A. B. Kadam	on.	gort.	erej.	dy:
7.	Mr. S. N. Mendhe	Walle	Stalle	Malle	Walle
8.	Mr. S. A. Salve	-SASyre	2024	South	308h
9.	Dr. S. S Gaikwad	_Conali2_	Conali	Conali.	Lonali
10.	Ms. Trupti Shrirame	Arine	Trive	Thome	Strome
11.	Ms. Priti Ramesh Jadhav	PPS	PPS	PPS	ble2
12.	Dr. P. B. Nalle	The state of the s	-	The state of the s	-1000
13.	Dr. P. P Padghan	July	aut -	(land	Bel.
14.	Dr. S. R. Patil	Servi	182m	188 Jets	Sejes
15.	Dr. Sandip Dautpure	300	(8/00	9/10	3
16.	Mr. Kishor S. Golait	KSE	KSBI	KSG	VSC.
17.	Dr. V. B Huse	1860	- 184	- ME	· VK
`18.	Mr. Rahim Shaikh	SEPL	SiPL	SIL	SPL
18	Mr. Suhas Khedekar	Sakhede	Cokhak	catholic	s. thek

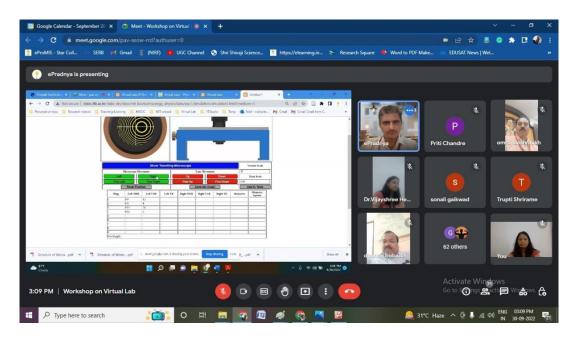
19	Ms. Suvarna Jadhao	र्जाध्य	न्युंगिधर	- जाराव	स्ट.जाहीव
20	Ms. Swati Dhole	76 D	500	201	28
21	Mr Tanveer Jahan	TKNOM )	Trana	- Krian	Tona
22	Ms. Gaytri Deshmukh	Gr. Dus	Gr. Die	Gr. De	3.9 /20
23	Ms. Unaiza Khan	Chelan	Oblan	Orbber	alpha
24	Mr Vaibhav Surve	Visusty	Usersh	Usell	Well
25	Mr. Vilas Bhosale	V. B. Bhosale	0	e V. Bhasle	V. Bhosale
26	Mr. Vinod Chavan	V.charaus	vichanan	v charan	Vcharah
27	Mr. Shubham Ingale	र्मिस	21914	2191म	21914
28	Mr. Vitthal Thigale	thighe	thegle.	Megle.	Truge
29	Mr. Yuvraj Bangale	Vanale	4 Bangle	ybangle	Yeards,
30	Mr. Sanjay Lakhade	Makherlo	Latracle	Xlakhack	Makhaola
31	Mr. Sanket Newre	Snewer,	Snevere ?	Solver	Snowle,
32	Mr. Santosh Mandave	Smandve	Smandue	Smandve	Smandre
33	Ms. Sapana Lendhe		1.1	1,1	1.1
34	Ms. Sayali Ghewande	न्मा होवर्	व्याः घेवद	शा - होवंद	सा । धवद
35	Mr. Shubham Gavande	\$	&	De la companya della companya della companya de la companya della	80
36	Mr. Shubham Surushe	Shul	Shul	Saul	Solul
37	Mr. Shubham Wagmare	Sugfh	Decept	8604	- saec
38	Mr. Rahat Tabassum	Rachata	Rosheta	Rachets	Ro " hut s
39	Mr. Rajeshwar Ghogare	Donogre	Panogree	Rongre	Parhose.
40	Ms. Rajlaxmi Ghadyale	Retractione		Richardiyale	9 /-
41	Ms. Renuka Raut	ROW (	Palaut	RRus	PRut.
42	Mr. Rizwan Shaikh	2) Twell	DIZWON	pirwan	& Pizwan
43	Ms. Roshni Kalkonde	gkalkarde	<b>PKalkard</b> P	Rivande	Archande
44	Mr. Rushikesh Mahale	Brohole		Employe	Emphale
45	Ms. Sakshi Anwani	Si	TSi,	T.	S
46	Ms. Sakshi Bairagi	Gen .	Sur	Street	Spe
47	Ms. Sanjana Arakh	Arath	Arch	Shallh_	Stockh
48	Ms. Komal Sawale	Pros	Baros .	Day	Records
49	Ms. Komal Wagh	Quagh	Buagh	0 1	
50.	Mr. Mahadev Shirale	- Judy	- Andrews	Muagh	Mwagh
51.	Mr. Satish Shelke	15	AND	ATTES	- Aute

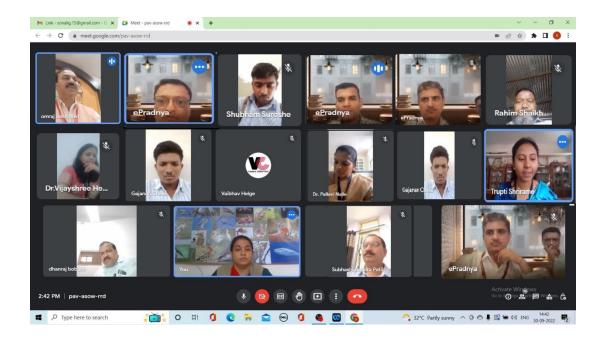
52.	Ms. Nivedi Jaybhay	NiTaybhay	Nitaybhan	N. Thubbay	N. Thubbay
53.	Ms. Pallavi Gayki	पुल्प्वायकी	40-3014601	प्रमाथकी )	4m211401
54.	Ms.Pallavi Solanki	Spallaria	Spallar	Spalland	Spallen ,
55.	Ms. Pankaj Dhavale	Shavale	Charale	Charale	Showale,
56.	Ms. Pooja Ingle	Portle	Profle	Poste	Prote
57.	Ms. Pooja Sajare	P. sajare	P. sa.jage	p. sajage	p. sajase
58.	Ms. Priti Chandre	Pied	Qued	Dind	Ocised
59.	Mr. Dyaneshwar Bakal	D. bokel	D. bokal	D. bokal	D. bakal
60.	Mr. Dyneshwar Mahale	D. ms	D.ue	D. ml	D. ml
61.	Mr. Gajanan Cheke	G(heke	GCheke.	GChebe.	ycheke.
62.	Mr. Ganesh Bhalekar	G.S. Bhalag	G-s-Bhalcleor	G-S-Bhalchers	G.S. Bharelul?
63.	Mr. Ganesh Bhusari	हारोश . भूरंसरही	कारीया भूसाही	भारतिशाम्प्रसारी	गणेश जूसारी
64.	Mr. Ganesh Sawant	Cawant_	Conwant	Francist.	Cowart
65.	Ms. Gayatri Ambhore	Camlohos	Camphone	Gentohoco	Gambhaza
66.	Ms. Gayatri Birgal	3112511	الجيرياد .	आयत्री.	भारती.
67.	Mr. Girish Rajput	Kerish.	Klieish.	Hyrish.	Ruish
68.	Mr. Haribhau Jitkar	Hear.	Hert.	(Hart.	Del.
69.	Mr. Kartik Kharat	Behanal	Khonah	Athenes	Jahorel
70.	Mr. Abhishek Patil	A. Patil	A. Patil	A. Patil	A. Patil
71.	Mr. Aditaya Deshmukh	Adi	AeU	Aeli	Adi
72.	Mr. Aditaya Sonune	( sonune.	(a sonune.	(asonun eo	asanyne
73.	Mr. Ajinkya Jadhao	Atadhao.	Arachao.	tracheo.	Tachoo o
74.	Mr. Atul Shedge	- Eur	8	Low	Lan
75.	Mr. Avej Shaikh	Shaikh &	& herith	Aherkh p	& herikh ,
76.	Mr. Bhagwan Kawale	Ritaly	Rusay	Burneys	Brown-
77.	Ms. Bhagyashri Pimpale	B. Pimpale	B. Pimpale	B. Pimpale	B. Pimpale
78.	Mr. Dipak Pawar	Dipak	Dipak euras	Pipak quas	Dipak awar
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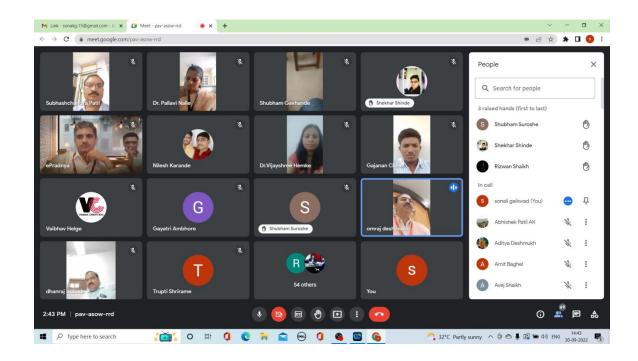
Workshop Coordinator
Dr. Mrs. V. M. Hemke
Asst. Prof. in Zoology
Shri Shiwaji Sci. & Arts College
Childhi, Dist. Buldana

Dr. Omraj S. Deshmukh PRINCIPAL Shri Shivaji Science & Arts College, Chikhli, Dist.Buldana

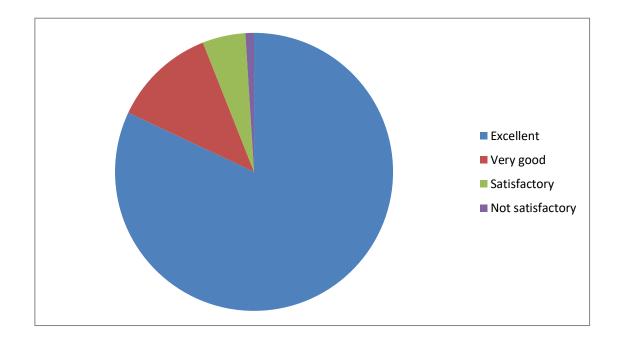
#### Glimpses







Feedback: Overall feedback of the participants about Workshop on Virtual Lab. From the feedback it is suggested that they are interested to know more details of Virtual Lab



### **News paper Cutting:**

# **७** सकाळ

# श्री शिवाजी महाविद्यालयात नवीन तंत्रज्ञानावर कार्यशाळा

चिखली, ता. १ : येथील श्री शिवाजी महाविद्यालयात व्हर्च्युअल लॅब या विषयावर प्राचार्य मा. डॉ. देशमुख यांच्या अध्यक्षतेमध्ये कार्यशाळा झाली. या कार्यशाळेमध्ये आभासी प्रयोगशाळा-विज्ञान प्रयोगाचे नवे विश्व या विषयावर तज्ञांचे मार्गदर्शन आयोजित करण्यात आले होते.

भारतीय विद्यार्थी हे तंत्रज्ञानात असावे म्हणन सरकारने देशभरातील विविध अकरा आयआयटी संस्थेच्याच्या माध्यमातून संकल्पना राबविली असून औरंगाबाद या केंद्राचे तज्ञ डॉ त्रिशुल कुलकर्णी, डॉ. भगवान तोक्षा आणि डॉ. प्रशांत गुप्ता हे या कार्यशाळेस तज्ञ म्हणून लाभले. आपल्या अध्यक्षीय भाषणातून बोलताना मा. प्राचार्य डॉ ओमराज देशमुख यांनी, श्री शिवाजी महाविद्यालय हे विद्यार्थ्यांना नवनवीन तंत्रज्ञान आधारीत शिक्षण देण्यास नेहमी तत्पर असते, आपल्या विद्यार्थ्यांना बदलत्या जगाच्या गरजेनुसार शिक्षण देण्यास महाविद्यालय नेहमीच प्राधान्य देत आले आहे. म्हणून आधुनिक प्रयोगशाळेसह ग्रामीण भागातील विद्यार्थ्यांना आभासी प्रयोगशाळा देखील वापरता आली पाहिजे याचे मार्गदर्शन मिळावे. यासाठी आवर्जन या कार्यशाळेचे आयोजन केल्याचे अधोरेखित केले. डॉ. भगवान तोक्षा. विभागीय तांत्रिक समन्वयक यांनी आभासी प्रयोगशाळा याची संपूर्ण ओळख करून दिली. डॉ. त्रिशुल कलकर्णी विभागीय नोडल समन्वयक आपल्या मार्गदर्शनामध्ये करून दिली, तर प्रत्यक्षात आभासी प्रयोगशालेचा वापर कसा करावा हे डॉ प्रशांत गुप्ता यांनी आपल्या विस्तृत मार्ग दर्शनामध्ये करून दिली, संगणक विभागाच्या प्रा. डॉ सोनाली गायकवाड यांनी कार्यशाळेचे सुत्रसंचालन केले तर रसायनशास्त्र विभागाच्या प्रा. तृप्ती श्रीरामे यांनी तजांची ओळख करून दिली. प्राणीशास्त्र शास्त्र विभागाच्या प्रा. डॉ. विजयश्री हेमके यांनी आभार मानले.

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मानद संपादक : गुलाबराव खेडेकर

kisansabha2015@gmail.com

🛮 मुख्य संपादकः संजयकमार खेडेकर

🗆 कार्यकारी संपादक: गजानन खेडेकर

सोमवार ३ ऑक्टोबर २०२२

पृष्ठे : ४

किंमत २ रूपये

# श्री शिवाजी महाविद्यालयात नवीन तंत्रज्ञानावर आधारित Virtual Lab या विषयावर कार्यशाळा संपन्न

#### चिखली / प्रतिनीधीः

स्थानिक श्री शिवाजी महाविद्यालयात Virtual Lab या विषयावर प्राचार्य डॉ. ओमराज देशमुख यांच्या अध्यक्षते मध्ये कार्यशाळा संपन्न झाली. या कार्यशाळेमध्ये आभासी प्रयोगशाळा-विज्ञान प्रयोगाचे नवे विश्व या विषयावर तज्ञांचे मार्गदर्शन आयोजीत करण्यात आले होते

भारतीय विद्यार्थी हे तंत्रज्ञात तरबेज असावे म्हणुन भारत शासना ने देशभरातील विविध अकरा IIT संस्थेच्या च्या माध्यमातुन Virtual Lab ही संकल्पना राबविली असुन IIT-Bombay यांच्या MIT-औरंगाबाद या केंद्राचे तज्ञ डॉ त्रिशुल कुलकर्णी, डॉ. भगवान



तोक्षा आणि डॉ. प्रशांत गुप्ता हे या कार्यशाळेस तज्ञ म्हणून

आपल्या अध्यक्षीय भाषणातून बोलताना प्राचार्य डॉ ओमराज देशमुख यांनी, श्री शिवाजी महाविद्यालय हे विद्यार्थ्यांना नवनवीन तंत्रज्ञान आधारीत शिक्षण देण्यास नेहमी विद्यार्थ्यांना बदलत्या जगाच्या गरजेनुसार शिक्षण देण्यास महाविद्यालय नेहमीच प्राधान्य देत आले आहे म्हणुन आधुनिक प्रयोगशालेसह ग्रामीण भागातील विद्यार्थ्यांना आभासी प्रयोगशाला देखील वापरता आली पाहिजे याचे मार्गदर्शन मिळावे यासाठी

तत्पर असते, आपल्या आवर्जून या कार्यशाळेचे आयोजन केल्याचे अधोरेखित केले.

डॉ. भगवान तोक्षा, विभागीय तांत्रिक समन्वयक यांनी आभासी प्रयोगशाळा याची संपूर्ण ओळख करून दिली. डॉ त्रिशुल कुलकर्णी विभागीय नोडल समन्वयक यांनी feedback (उर्वरीत पान नं.२वर...)

#### ..पान नं.१वरून श्री शिवाजी महाविद्यालयात नवीन...

पद्धतीची ओळख आपल्या मार्गदर्शनामध्ये करून दिली. तर प्रत्यक्षात आभासी प्रयोगशालेचा वापर कसा करावा हे डॉ प्रशांत गुप्ता यांनी आपल्या विस्तृत मार्ग दर्शनामध्ये करून दिली.

संगणक विभागाच्या प्रा. डॉ सोनाली गायकवाड यांनी कार्यशाळेचे सूत्रसंचालन केले तर रसायनशास्त्र विभागाच्या प्रा. तृप्ती श्रीरामे यांनी तज्ञांची ओळख करून दिली, प्राणीशास्त्र शास्त्र विभागाच्या प्रा. डॉ विजयश्री हेमके यांनी सर्वांच्या सहकार्याबद्दल आभार मानले

कार्यशाळेस महाविद्यालयातील सर्व प्राध्यापक वृंद तसेच विद्यार्थी मोठ्या संख्येने उपस्थित होते. विद्यार्थ्यांनी अश्या या आभासी प्रयोगशाळेचे नवीन तंत्रज्ञान उत्साहाने आत्मसात केले.

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