



Report of Outreach Programme on 'Virtual Workshop on Laboratory Set-Up

**organized under the aegis of Vidya Vistar Project & DBT Star College Scheme
by Shyam Lal College & Kalahandi University**

This is hereby reported that Shyam Lal College, University of Delhi and Kalahandi University, Odisha organized an Outreach Programme on '**Virtual Workshop on Laboratory Set-Up**' under the aegis of Vidya Vistar Project and DBT Star College Scheme on **07th December 2021** at 12:30 pm using Zoom as an online platform (**Annexure 1**). The Vidya Vistar Scheme is based on the principle of mutual respect, cooperation and sharing between two Colleges/Departments of both the universities as equal partners. The Vidya Vistar Project is being launched with the purpose of sharing a knowledge and offering a holistic academic approach to the young pupil by fostering innovative thinking and research aptitude through interaction with different universities from varied areas of science and technology. It is believed that such workshops of educators and students among the Kalahandi University and Shyam Lal College would enable them in harnessing their skills and creativity to accelerate the innovation at personal as well as organizational levels. With these objectives in mind, the present workshop was organized which is also the very first event organized under the above-said project. The event was well attended by over 100 participants, including **Prof. Sanjay Satpathy**, Vice Chancellor, Kalahandi University, **Prof. Rabi Narayan Kar**, Principal, Shyam Lal College, **Mr. Haladhar Sahu**, Nodal Officer, Kalahandi University, **Prof. Kusha Tiwari**, Coordinator Vidya Vistar & IQAC along with teachers and students of both the universities from varying backgrounds. Many of the students from Kalahandi University joined the session using a single id and got benefitted by listening to the speakers on a common projector screen. Various highlights of the event are mentioned below:

- After the opening remarks by **Dr. Ashu Gupta** (Convener, Coordinator DBT, Department of Chemistry, SLC) and **Prof. Kusha Tiwari** (Coordinator Vidya Vistar & IQAC), **Dr. Ajay Pratap Singh** (Assistant Professor, Department of Chemistry, SLC) shared a few glimpses of the various courses, activities and projects in which the faculties and the students of Chemistry Department are indulged in. He also gave a roadmap which the students can follow after the completion of their graduation courses.

- Afterwards, **Dr. Radhika Gupta** (Assistant Professor, Department of Chemistry, SLC) gave a virtual tour of the Chemistry Laboratory and the Sophisticated Analytical Instrumentation Laboratory where numerous instruments are kept many of which have been purchased using the DBT Grant provided under the Star College Scheme such as UV-Vis Spectrophotometer, Flame Atomic Emission Spectrophotometer, pH-cum-potentiometer, etc. She also explained the working and the possible experiments which the students are performing according to the reported BSc syllabi and also under the DBT Project.
- In a similar manner, **Dr. Monika Goyal** (Physics Coordinator, DBT) also gave a virtual tour of Physics Department including the various laboratories, staff room, lecture theatres, etc. She along with other staff members including **Dr. Pradeep** and **Dr. Sunny Aggarwal**, gave a brief explanation about the principle and working of various instruments.
- Finally, the vote of thanks was proposed by **Dr. Yukti Monga** (Assistant Professor, Department of Chemistry, Shyam Lal College).

An overwhelming response was recorded. The feedback forms reflected that a majority of the participants rated the workshop to be very informative and found the concepts to be presented excellently (**Annexure 2**). For this overwhelming success, the organizers are very thankful to **Prof. Rabi Narayan Kar** (Principal, SLC) for his support and guidance throughout the organization of this event. Glimpses of the event are attached herewith as **Annexure 3**.

Annexure 1



SLC (University of Delhi)

SHYAM LAL COLLEGE

&

KALAHANDI UNIVERSITY

*under the aegis of VIDYA VISTAR Project
& DBT Star College Scheme*

organise

OUTREACH PROGRAMME

on

Virtual Workshop on Laboratory Set-Up

**07th Dec
2021
12:30 PM**

Organizing platform



PATRON

Prof. Rabi Narayan Kar
Principal, Shyam Lal College

Prof. Sanjay Satpathy
Vice Chancellor, Kalahandi University

ORGANIZING MEMBERS

Dr. Ashu Gupta
Convener, Coordinator DBT,
Department of Chemistry, SLC

Prof. Kusha Tiwari
Coordinator
Vidya Vistar & IQAC, SLC

Dr. Monika Goyal
Physics Coordinator
DBT, SLC

Mr. Haladhar Sahu
Nodal Officer
Kalahandi University

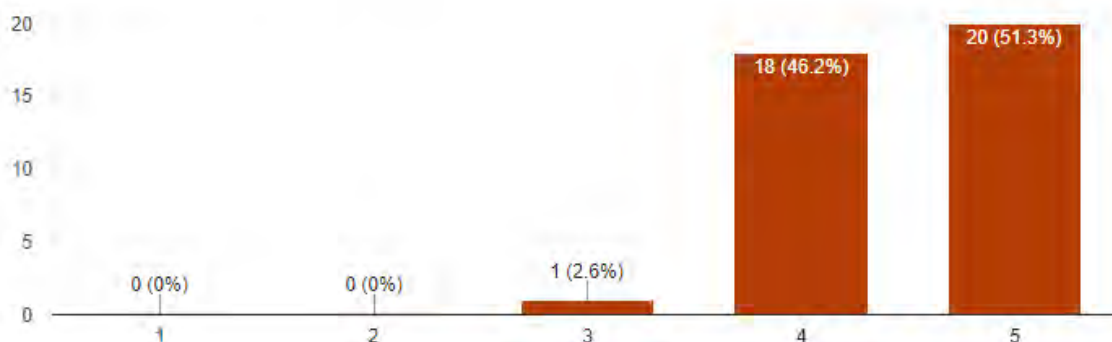
Dr. Ajay Pratap Singh, Dr. Yukti Monga, Dr. Radhika Gupta
Faculty Members, Department of Chemistry, SLC

Dr. Sunny Aggarwal, Dr. Pradeep
Faculty Members, Department of Physics, SLC

Annexure 2

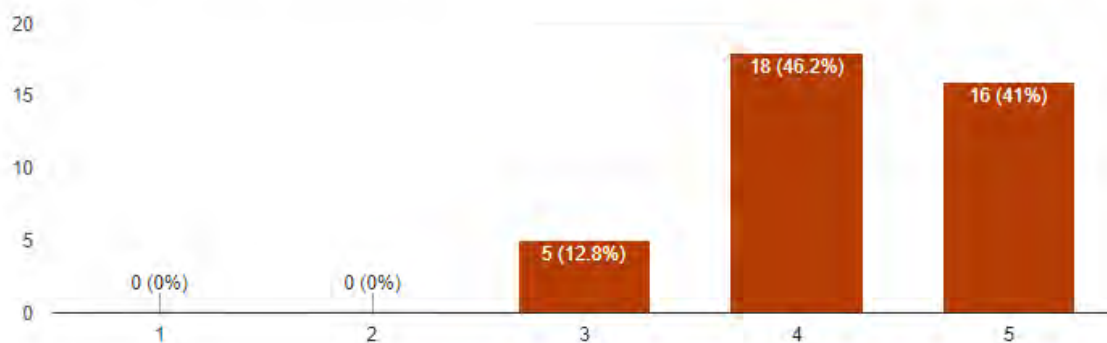
How informative did you find the workshop?

39 responses



How clear were the concepts we presented?

39 responses



Any other comment

21 responses

Excellent

Overallly it was good

very nice

We like to see zoology lab setup

It's a nice presentation and Nice collaboration of both the Kalahandi university and SLC which will definitely beneficial for both students and teachers ...Thanks alot 🙏😊

A very good initiative.... kindly arrange for Biological science also

This meeting is really very good and informative.

The session was really informative and motivating I wish to visit these labs and perform experiment in near future ...

It is an informative session.

This session was more informative and motivating, and I would like to visit the lab and perform experiments....

We would like to see the zoology lab set up

This has been very informative. Wish to see the Biological Lab settings in the near future.

We would like to see the zoology lab setup

Thanks for enlightening us and we are highly interested to see the biological lab set up in the future

no

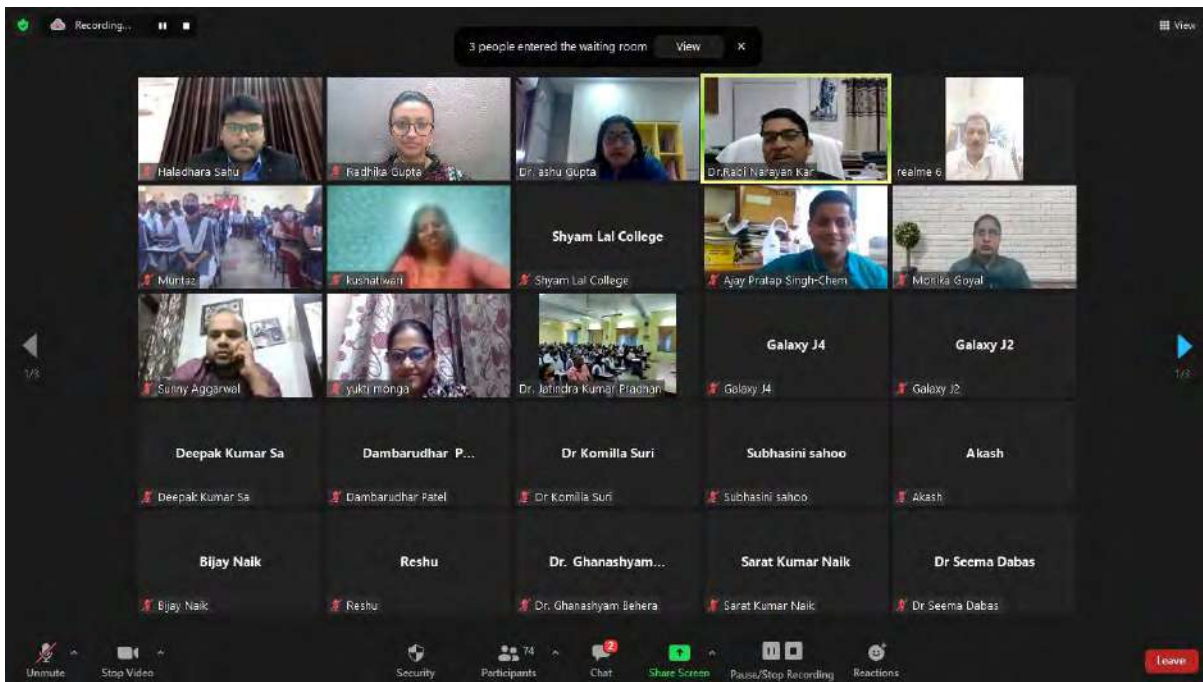
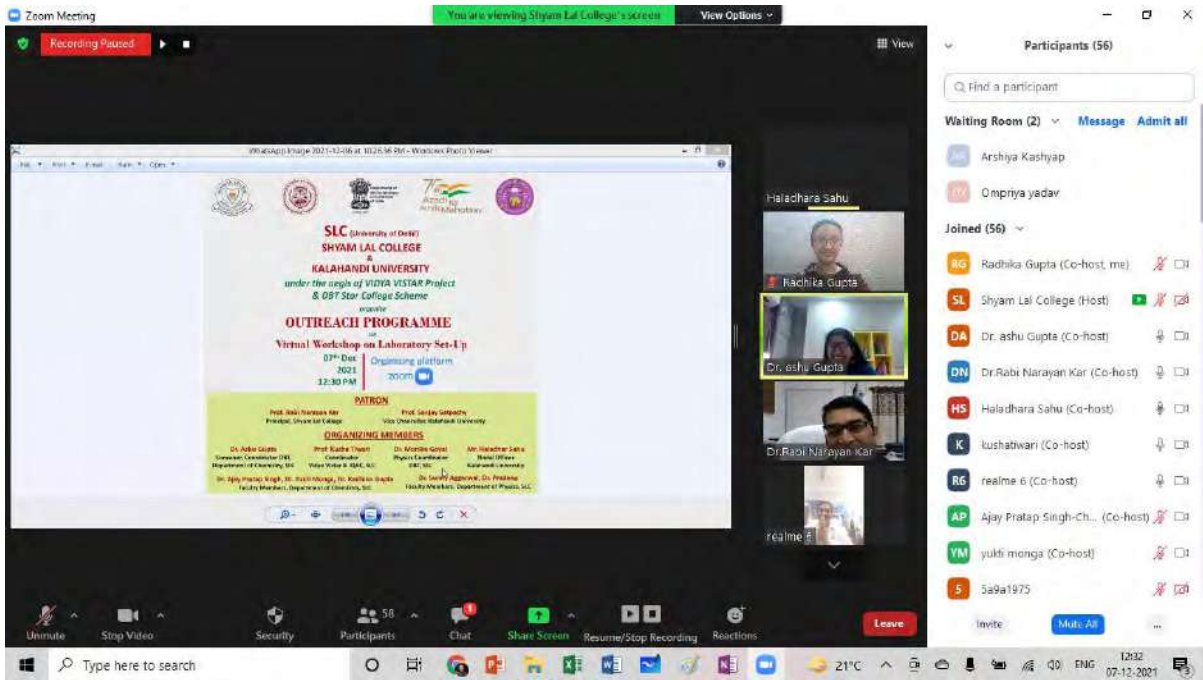
We would like to see the zoology lab setup.

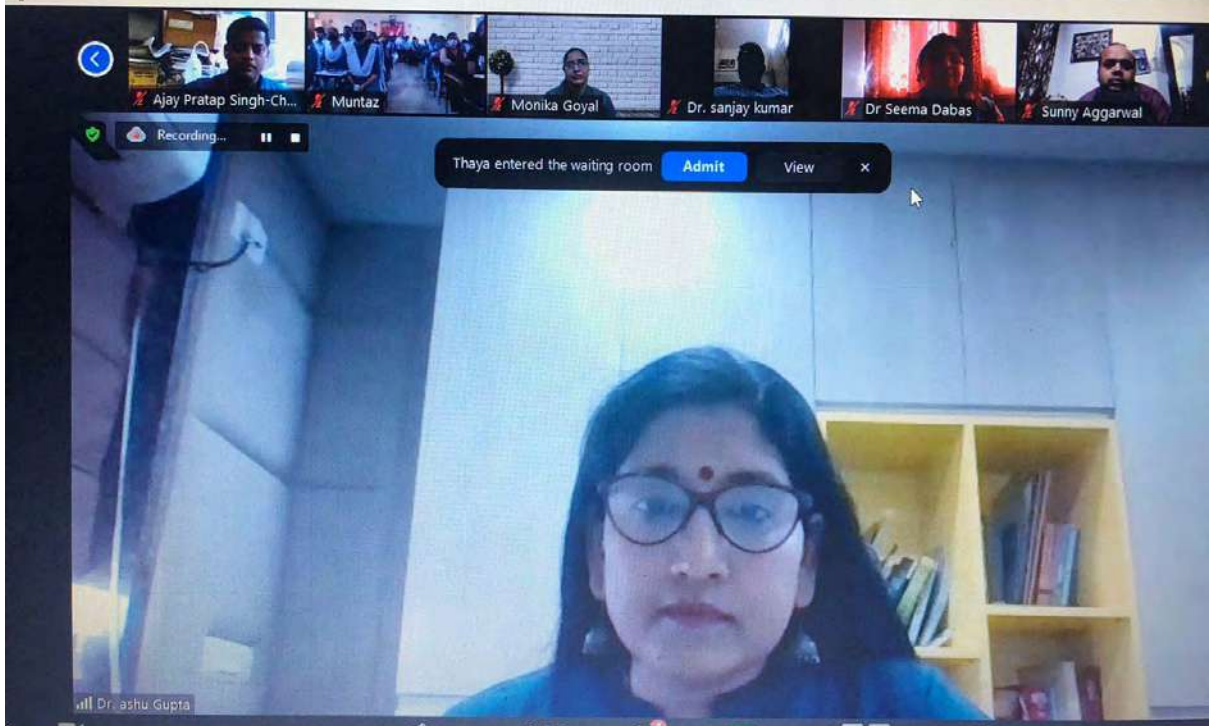
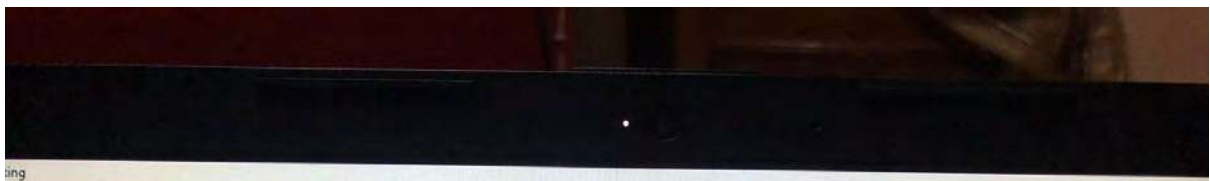
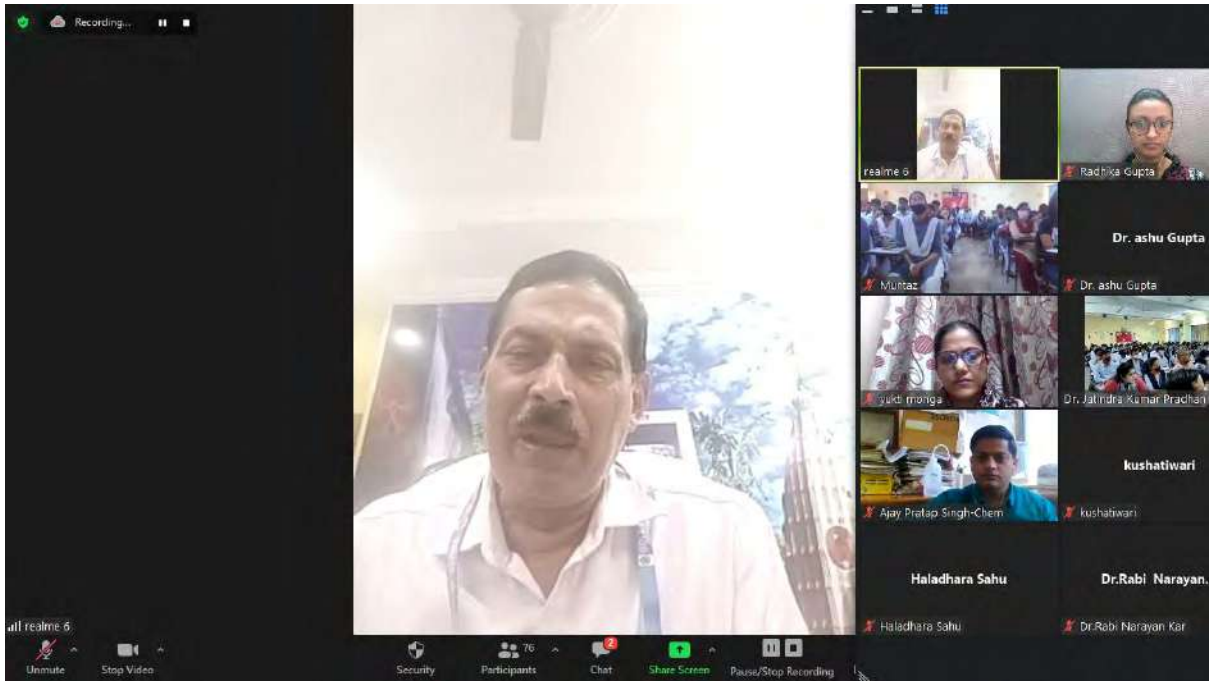
I liked it very much, it impressed me

The session was so informative. I gained much more knowledge from this. Thank you for organizing such a meeting.

This was a nice initiative and informative session. We wish to see biological sciences lab setup in the near future.

Annexure 3





Zoom Meeting

Recording...

Mute Stop Video Security Participants Chat Share Screen Pause/Stop Recording Reactions Leave

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Recording...

Chemistry Department Lab Facilities and Research Oriented Activity

- Double Beam UV-vis Spectrophotometer
- Flame Photometer
- pH Meter
- Colorimeter
- Microwave
- Potentiometer

Research Oriented DBT Project is running

Haladhara Sahu
Radhika Gupta
Dr. eshu Gupta
realme 6
kushatwari
Ajay Pratap Singh-Chem
yukti, morgan...
Muntaq
Geleky JA
rr4r4rtttf
Sarat Kumar Naik
Bijay Naik
Deepak Kumar Sa
Thaya
Monika Goyal
Dr. Jatindra Ku...
Manas
Akankshya

Recording...

B.Sc. Chemistry lab work

Haladhara Sahu Haladhara Sahu	Radhika Gupta Radhika Gupta	Dr. ashu Gupta Dr. ashu Gupta
realme 6 realme 6	kushatiwari kushatiwari	Ajay Pratap Singh-Chem Ajay Pratap Singh-Chem
yukti monga yukti monga	Murtaz Murtaz	rk44rttt rk44rttt
Sarat Kumar Naik Galaxy J4 Sarat Kumar Naik	Bijay Naik Bijay Naik	
Deepak Kumar Sa Deepak Kumar Sa	Thaya Thaya	Monika Goyal Monika Goyal
Dr. Jatindra Ku... Dr. Jatindra Kumar Pr...	Manas Manas	Akankshya Akankshya


You are viewing Ajay Pratap Singh-Chem's screen

Major Government Opportunities

Haladhara Sahu Haladhara Sahu	yukti monga yukti monga
kushatiwari kushatiwari	Ajay Pratap Singh-Chem Ajay Pratap Singh-Chem
Dr. ashu Gupta Dr. ashu Gupta	Radhika Gupta Radhika Gupta

Stop Video Security Participants Chat Share Screen Pause/Stop Recording Reactions Leave

Recording...



instrumentvideo.mp4 - VLC media player

Dr. ashu Gupta Radhika Gupta realme 6

Dr. ashu Gupta Radhika Gupta realme 6

kushatiwari **Ajay Pratap Sin...** yukti monga

kushatiwari Ajay Pratap Singh-Ch... yukti monga

Galaxy M... Muntaz Sarat Kumar Naik

Galaxy M... Muntaz Sarat Kumar Naik

Bijay Naik Deepak Kumar Sa Thaya

Bijay Naik Deepak Kumar Sa Thaya

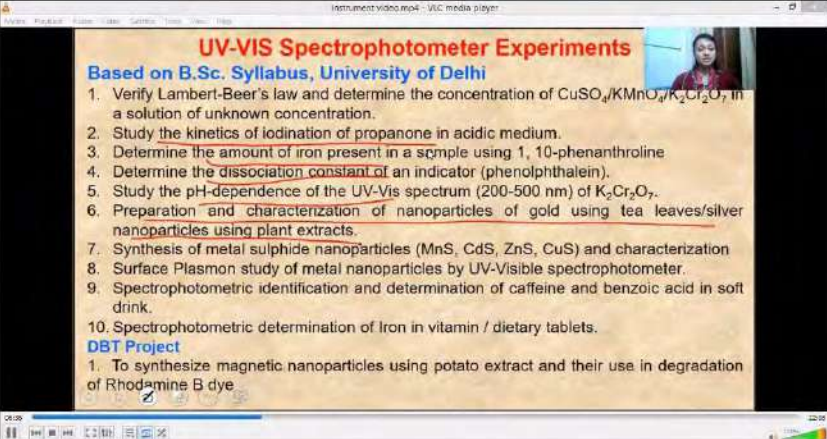
Monika Goyal Dr. Jatindra Ku... Sunny Aggarwal

Monika Goyal Dr. Jatindra Kumar Pr... Sunny Aggarwal

Biswa Ranjan N... Panchanan Raju

Biswa Ranjan Naik Panchanan Raju

Recording...



instrumentvideo.mp4 - VLC media player

UV-VIS Spectrophotometer Experiments

Based on B.Sc. Syllabus, University of Delhi

1. Verify Lambert-Beer's law and determine the concentration of $\text{CuSO}_4/\text{KMnO}_4/\text{K}_2\text{Cr}_2\text{O}_7$ in a solution of unknown concentration.
2. Study the kinetics of iodination of propanone in acidic medium.
3. Determine the amount of iron present in a sample using 1, 10-phenanthroline
4. Determine the dissociation constant of an indicator (phenolphthalein).
5. Study the pH-dependence of the UV-Vis spectrum (200-500 nm) of $\text{K}_2\text{Cr}_2\text{O}_7$.
6. Preparation and characterization of nanoparticles of gold using tea leaves/silver nanoparticles using plant extracts.
7. Synthesis of metal sulphide nanoparticles (MnS, CdS, ZnS, CuS) and characterization
8. Surface Plasmon study of metal nanoparticles by UV-Visible spectrophotometer.
9. Spectrophotometric identification and determination of caffeine and benzoic acid in soft drink.
10. Spectrophotometric determination of Iron in vitamin / dietary tablets.

DBT Project

1. To synthesize magnetic nanoparticles using potato extract and their use in degradation of Rhodamine B dye

Dr. ashu Gupta Radhika Gupta

Dr. ashu Gupta Radhika Gupta

realme 6 kushatiwari

realme 6 kushatiwari

Ajay Pratap Sin... yukti monga

Ajay Pratap Singh-Ch... yukti monga

Muntaz Suchit

Muntaz Suchit

Sarat Kumar Naik Bijay Naik

Sarat Kumar Naik Bijay Naik


Deepak Kumar Sa Monika Goyal

Deepak Kumar Sa Monika Goyal


Recording...

5 people entered the waiting room View X

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21:27

Dr. ashu Gupta Dr. ashu Gupta	Radhika Gupta Radhika Gupta
realme 6 realme 6	kushatiwari kushatiwari
Ajay Pratap Sin... Ajay Pratap Singh-Ch...	yukti monga yukti monga
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Sarat Kumar Naik Sarat Kumar Naik	Bijay Naik Bijay Naik
Deepak Kumar Sa Deepak Kumar Sa	Monika Goyal Monika Goyal

Recording...

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21:27

Dr. ashu Gupta Dr. ashu Gupta	Radhika Gupta Radhika Gupta
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Sarat Kumar Naik Sarat Kumar Naik	Bijay Naik Bijay Naik
Deepak Kumar Sa Deepak Kumar Sa	Monika Goyal Monika Goyal

Recording...

5 people entered the waiting room View X

documentvideo.mp4 - VLC media player

Flame Photometer Experiments

Based on B.Sc. Syllabus, University of Delhi

1. Preparation of zeolite and removal of Mg and Ca ions from water samples quantitatively using zeolite
2. Detection of constituents of CAN (Calcium, Ammonium and Nitrate ions) fertilizer and estimation of Calcium content
3. Determination of Calcium, Iron, and Copper in food
4. Detection of heavy metal pollutants in illegal dumping
5. Estimation of macro-nutrients: Potassium, Calcium and Magnesium in soil samples

DBT Project

1. Estimation of Sodium and Potassium ion in Yamuna and Ganga river water samples

Dr. ashu Gupta Radhika Gupta

realme 6 kushatiwari

Ajay Pratap Sin... yukti monga

Muntaz Suchit

Sarat Kumar Naik Bijay Naik

Deepak Kumar Sa Monika Goyal

Recording...

outlook_programs\apps - PowerPoint

PHYSICS DEPARTMENT SLC

- The Department of Physics was established in 1966 in SLC.
- The Department has well equipped Classrooms, Physics Laboratory and Electronics Laboratory along with Research Labs.
- The Department offers the course B.Sc. Physical Science with Chemistry, Electronics and Computer Science specializations.

Dr. ashu Gupta Radhika Gupta

realme 6 kushatiwari

Ajay Pratap Singh-Chem yukti monga

Muntaz Shyam Lal College

Monika Goyal Shyam Lal College

Suchit Abhisek Bishi

Suchit Sarat Kumar Naik


Recording... You are viewing Monika Goyal's screen View Options

Virtual Tour of Physics Department, SLC

Dr. ashu Gupta
Dir. ashu Gupta
Radhika Gupta
Monika Goyal
Monika Goyal
Ajay Pratap Singh-Ch...
yukti menga...
kushatiwari
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Sarat Kumar Naik
Sarat Kumar Naik
Bijay Naik
Bijay Naik
Deepak Kumar Sa
Deepak Kumar Sa
Sunny Aggarwal
Sunny Aggarwal

Unmute Stop Video Security Participants 44 Chat Share Screen Pause/Stop Recording Reactions Leave

Recording...



Dr. ashu Gupta
Dir. ashu Gupta
Radhika Gupta
Monika Goyal
Monika Goyal
Ajay Pratap Singh-Ch...
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Sarat Kumar Naik
Sarat Kumar Naik
Bijay Naik
Bijay Naik
Deepak Kumar Sa
Deepak Kumar Sa
Sunny Aggarwal
Sunny Aggarwal

Recording... You are viewing Monika Goyal's screen View Options

Galaxy J4 entered the waiting room [Admit](#) [View](#) [X](#)

Participant List:

- Dr. ashu Gupta
- Radhika Gupta
- Monika Goyal**
- Ajay Pratap Singh-Ch...
- yukti menga
- kushatiwari
- Muntaz
- Suchit
- Sarat Kumar Naik
- Deepak Kumar Sa
- Sunny Aggarwal
- Panchanan

Unmute Stop Video Security Participants 43 Chat Share Screen Pause/Stop Recording Reactions Leave


Recording... Chandan Behera entered the waiting room [Admit](#) [View](#) [X](#)

Participant List:

- Dr. ashu Gupta
- Radhika Gupta
- Monika Goyal**
- Ajay Pratap Singh-Ch...
- yukti menga
- kushatiwari
- Muntaz
- Suchit
- Sarat Kumar Naik
- Deepak Kumar Sa
- Sunny Aggarwal
- Panchanan

Unmute Stop Video Security Participants 43 Chat Share Screen Pause/Stop Recording Reactions Leave

Recording...



Dr. ashu Gupta
Dr. ashu Gupta

Radhika Gupta
Radhika Gupta

Monika Goyal
Monika Goyal

Ajay Pratap Singh Ch...
Ajay Pratap Singh Ch...

kushatiwari
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Suchit

Sarat Kumar Naik
Sarat Kumar Naik

Deepak Kumar Sa
Deepak Kumar Sa

Sunny Aggarwal
Sunny Aggarwal

Panchanan
Panchanan