

- 28-30 July 2020: Lectures 3,4 and 5 of DBT Online Lecture Series CTMS 2020

Google Meet | Meet - Bishop Moore College | +

meet.google.com/bne-xvhp-bsa

Amazon.in | AliExpress

REC | L Lethy Pradeep is presenting

shijin abdul vah... and 170 more

182 | 45 | 11:08 | You

### Access to ENERGY : Heart of Global Development

- 1.2 billion people without access to electricity

GLOBAL ACCESS TO ELECTRICITY

Archana S has left the meeting

Activate Windows  
Go to PC settings to activate Windows.  
Turn on captions

Lethy Pradeep is presenting

Windows Taskbar: 11:08 AM, 28-Jul-20

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234 of 234 participants

Google Meet Attendance - v0.7.10

Bishop Moore College DBT ...

People (199) | Chat (70)

Add people

IQAC Bishop Moore College (Y...)

A K Sadanandan

ABHIJEET PATIL

ABHIRAMI B

aishu aishwarya

Aishwarya Unnikrishnan Unnikri...

Akash P Jadhav

Akhila Molate

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Benazeera Beegum has left the meeting

Lethy Pradeep

Windows Taskbar: 11:16 AM, 28-Jul-20

meet.google.com/cbx-jkci-icn

Suresh S J is presenting

Class List

- ✓ ipac bishop mode college
- ✓ anju dlu
- ✓ swapna v v

58 of 187 participants

Start: 11:04

11:24

161

Paused

Sister Jeena and 150 more

Suresh S J

Dnyaneshwar walte

Vijith Raj

question girl

Deepmala Sali

Gopichand Ramteke

Sankaran nampoothiri

Ravina Swami

Go to PC settings to activate Windows.

Show all

Bright Field & Dark Field Imaging

Isolated individual Gold Atoms around Gold Nanoparticles: (left) dark field image, (right) bright field image.

4mban (2).pptx

4mban (1).pptx

Lecture 5.jpg

meet.google.com/fod-bkib-qxx

Sunidhi Shenoy is presenting

Meeting Start

Your Meet has started

Please confirm that the following settings are correct:

- Your Meet start-time is set to 11:33 and it is now 11:33. If your start-time is not correct, click [here](#).
- The monitor attendance checkbox is **not** selected on the Settings tab. This means that the reports will only show the students' arrival (and **won't** include the duration of stay, etc.). If you want to enable monitoring, you must exit the Meet, click the checkbox in the Settings tab in the Attendee list, and rejoin the meet.
- Remember to correctly take and monitor attendance for the entire class. Your class is larger than 16 students so you **must** use the Grid View extension. It appears that you have not installed (or perhaps have disabled) the Grid View extension. The Grid View extension can be downloaded [here](#).

Click the red 'x' above to close this help page.

Click the version info in the footer below to show recent updates or click the question mark icon for help.

Electron gun

Electron beam

First condenser lens

Spray aperture

Second condenser lens

Deflection coils

Final lens aperture

Backscatter electron detector

Sample

Vacuum pump

Secondary electron detector

X-ray detector

Objective lens

Lekshmi Nair

tintu kuruvilla

MUSICMANIA!

Anandhu S

Sunidhi Shenoy

Deepmala Sali

Ravina Swami

Gopichand Ramteke

Sankaran nampoothiri

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Meet - DBT Online Lecture Series: Lec...  
 Sign in - Google accounts  
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 Paused

REC Suresh S J is presenting

Class List  
 iqac bishop moore college  
 anju dilu  
 swadna v v

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Incident beam  
 Transmitted beam  
 (hkl) plane  
 Crystalline specimen  
 Diffracted beam from the (hkl) plane  
 Back focal plane  
 Image plane  
 Formation of the diffraction pattern and the image in the TEM

Dr. ALLEN S has left the meeting  
 swapna Y V  
 Ann Mary Jose  
 Suresh S J  
 Sankaran nam...  
 SUD-APSC PSG...

DBT Online Lecture Series: Lec...  
 Peop... (135) 72 Chat (19)  
 Add people  
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 ABHIJEET PATIL  
 ABHIRAMI B  
 aishu aishwarya  
 Aishwarya Raj  
 Aishwarya Unnikrishnan Unnikri...  
 Akash P Jadhav  
 Akhila Mol

10:55 AM  
 30-Jul-20

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 anju dilu  
 swadna v v

Google Meet Attendance - v0.7.10

TEM Imaging

STANDARD TEM IMAGE MODES

**BRIGHT FIELD (BF) IMAGE:**  
 Only the transmitted beam is allowed to pass through the objective aperture.  
 Image is  $\therefore$  bright where diffraction in specimen is weak.

**DARK FIELD (DF) IMAGE:**  
 Only one diffracted beam passes through objective aperture.  
 Image is dark where diffraction is weak, bright where diffraction is strong.

**LATTICE IMAGE (High Resolution TEM: HRTEM image):**  
 Interference of transmitted beam (TB) and diffracted beams (DBs) produces an image of the crystal lattice.

**DIFFRACTION PATTERN:**  
 Intermediate lens adjusted to image the diffraction pattern formed in back focal plane (BFP) of object.

Suresh S J  
 Deepmala Sali  
 SUD-APSC PSG...  
 Sankaran nam...  
 Gopichand Ra...  
 D Sajan  
 Ann Mary Jose

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 Aishwarya Unnikrishnan Unnikri...  
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 AKHIL M ANAND  
 Akhila Mol

11:01 AM  
 30-Jul-20

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Meeting Start

# Your Meet has started

## How is Resolution Affected by Wavelength?

Please confirm that the following settings are correct before you get going:

1. Your Meet start-time is set to 9:37 and it is now 9:37. If your start-time is not correct, click [here](#).
2. The monitor attendance checkbox is not selected on the Settings tab. This means that the reports will only show the students' arrival times (and won't include the duration of stay, etc.). If you want to enable monitoring, you must click the checkbox the Settings tab in the Attendance dialog and then start the meet.
3. Remember, to correctly take and monitor attendance, all students must be visible in your Meet window for the entire duration of your class. Your class is small enough to use the built-in Tiled layout. Please confirm that you are using this layout by clicking the vertical ellipsis '⋮' in the bottom right corner of the screen and selecting 'Change layout' (or make sure the Grid View extension is installed & enabled).
4. If you must present content from your computer, I suggest that you

low frequency wavelength

poor resolution

high frequency wavelength

good resolution

meet.google.com is sharing your screen. [Stop sharing](#) [Hide](#)

DBT Online Lecture Series: Lec...

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Suresh S J is presenting

DBT Online Lecture Series: Lec...

People (92) 72 Chat (9)

Add people

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- A K Sadanandan
- aishu aishwarya
- Aishwarya Raj
- Akhila Mol
- akshaya vijay
- alan m s
- Anandhu S

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Links 10:37 AM 30-Jul-20



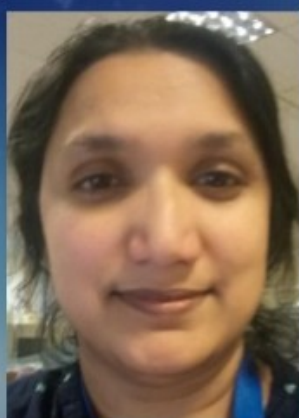
# Bishop Moore College

Mavelikara, Kerala, India, 690110

DBT STAR Lecture Series on Characterisation  
Techniques in Materials Science

**28-30 July  
2020**

**CTMS 2020**



## Lecture 3: Emerging Solar Cell Technologies

**Dr. K.J. LETHY**

Organic Semiconductor Centre,  
School of Physics and Astronomy,  
University of St. Andrews, UK

**28 July**

11.00 am - 12.30 pm

## Lecture 4 & 5 Principle and Applications of Scanning Electron Microscope and Transmission Electron Microscope

**Dr. SURESHA S.J.**

Technology Manager  
Centre For Nano Science  
and Engineering (CeNSE),  
Indian Institute Of Science  
(IISc), Bengaluru



**29 & 30 July**

11.00 am - 12.30 pm

Interested Faculty members, research scholars or students can register through the following link:

<https://forms.gle/yFamaxBHZL68NWN66>

The number of participants is restricted to 125

E-Certificates will be issued to the participants attending the sessions