

INTERNATIONAL WEBINAR

ON

Application of Physical Science in Emerging Fields

Organised by : Departments of Physics & Chemistry, Fakir Mohan Autonomous College, Balasore

Date : 15/01/2021 : 10 AM to 1 PM & 16/01/2021 : 10 AM to 11.30 AM



About the College:

Fakir Mohan Autonomous College, Balasore is a leading institution of Higher Education in Odisha. It was established in the year 1944.

It is affiliated to Fakir Mohan University and imparting teaching in Graduate and Post-Graduate courses in different subjects. The students from the institution have occupied various higher posts in different parts of India and Abroad.

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- Jagannath : 6570942802

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Resource Persons

Topics

15/01/2021

Prof. Lamodar Prasad Singh
Asst. Prof. Utkal University
Bhubaneswar

Our Beautiful Universe

Shri Jagannath Jena
Research Scholar
Max Planck Institute, Germany

Topological Spin
textures in Magnetism :
From Fundamental to
Technological Applications

16/01/2021

Dr. Purnendu Parhi
Asst. Prof.
Ravenshaw University, Cuttack

Recent Development in
Photocatalysis

ABOUT THE WEBINAR

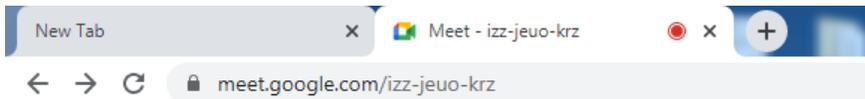
This Webinar is organised as a joint venture of Physics and Chemistry Departments of Fakir Mohan Autonomous College, Balasore. It covers the topics related to Photocatalysis, Cosmology and Magnetism.

Link for Registration form : <https://forms.gle/WBqRjpcyYlry5zeQ6>

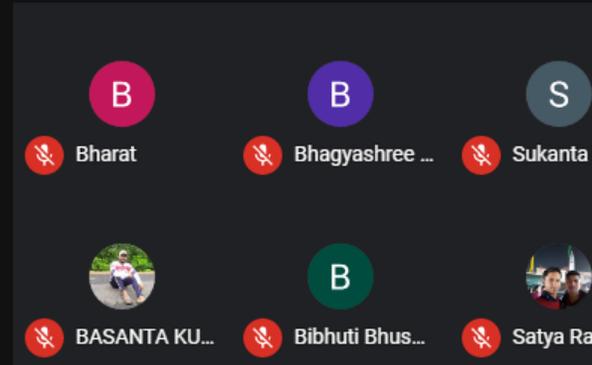
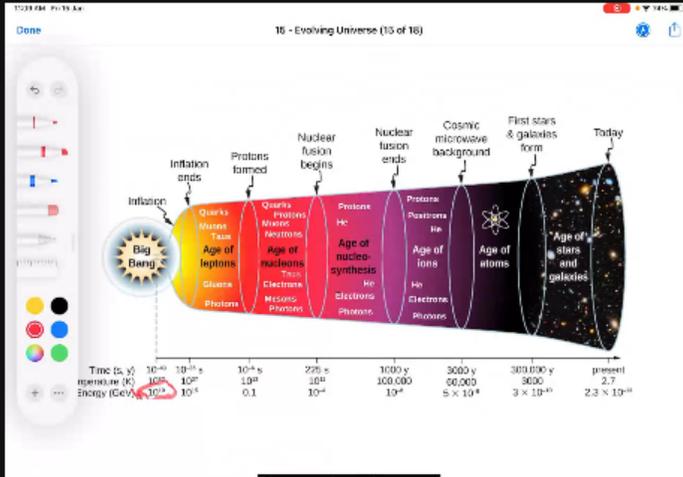
Link for Whatsapp Group : <https://chat.whatsapp.com/HQ4G8W8E2BwHTVLM>

Link for Webinar Platform will be provided one day before.

DAY-1



lambodar prasad singh is presenting



lambodar prasad singh

charged So eventually when the universe started expanding and cooling these positively and negatively charged particles would attract each other and would give rise to bound States and that is how you in fact entered into the area of atoms. So gradually you can see from nucleons to the nucleus.

Meeting details ^



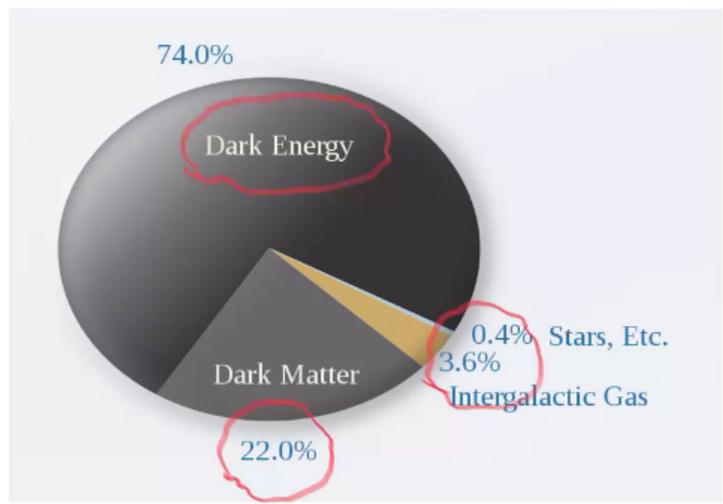
lambodar prasad singh is presenting

11:20 AM Fri 15 Jan

71%

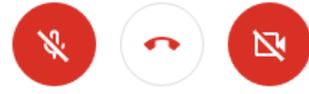
Done

16 - DM & DE (16 of 18)



- Bharat
- Sunita Mohanty
- priyanka panda
- BASANTA KUMAR SING

Meeting details ^



lambodar prasad singh is presenting

11:24 AM Fri 15 Jan 70%

Done 18- NATARAJ CERN (19 of 19)



- JYOTIPRAKASH BARIK
- Sunita Mohanty
- Bharat
- BASANTA KUMAR SING

Meeting details ^

Microphone Muted, Video Off, Screen Share Off

lambodar prasad singh

JYOTIPRAKASH BARIK

Sunita Mohanty

Bharat

BASANTA KUMAR SING

monalisa saho

priyanka panda

Satya Ranjan Padhi

Jyoti Prakash Mohanta

Meeting details ^





Meeting details ^





 ... Jyoti Prakash Mohanta

Meeting details ^



lambodar prasad singh

Jyoti Prakash Mohanta

Satya Ranjan Padhi

JYOTIPRAKASH BARIK

Sunita Mohanty

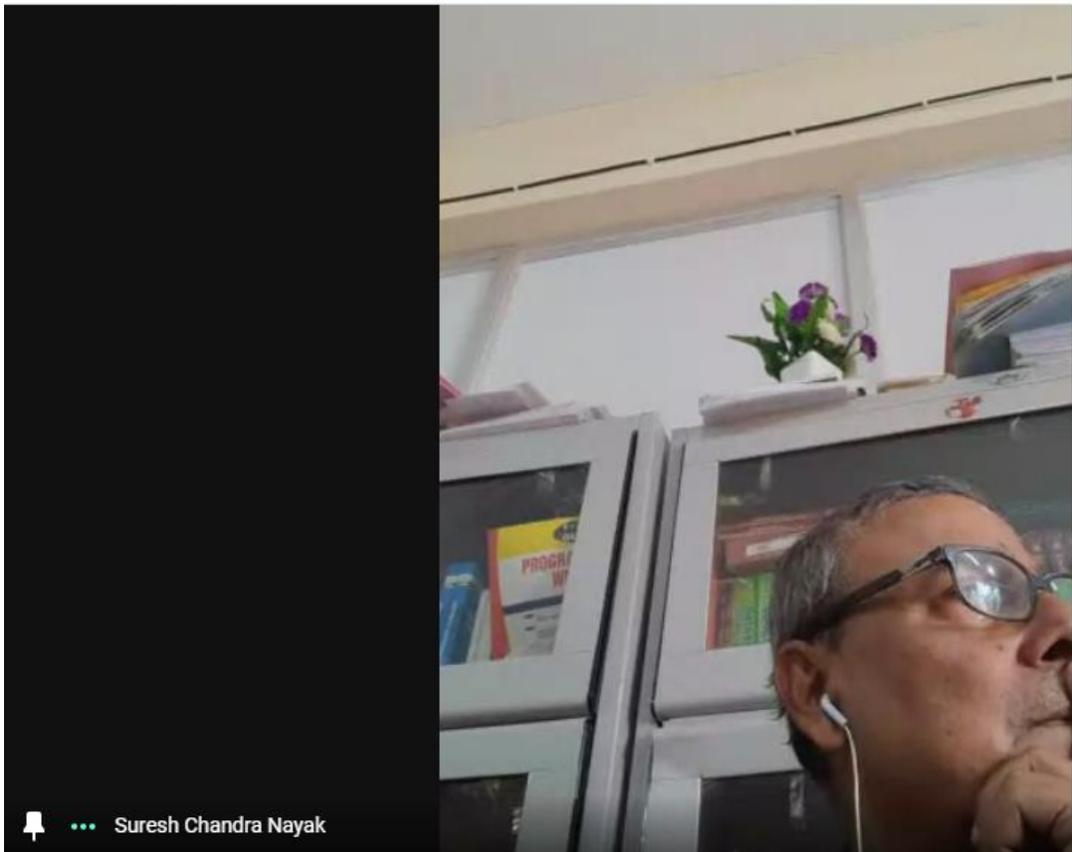
Bharat

BASANTA KUMAR SING

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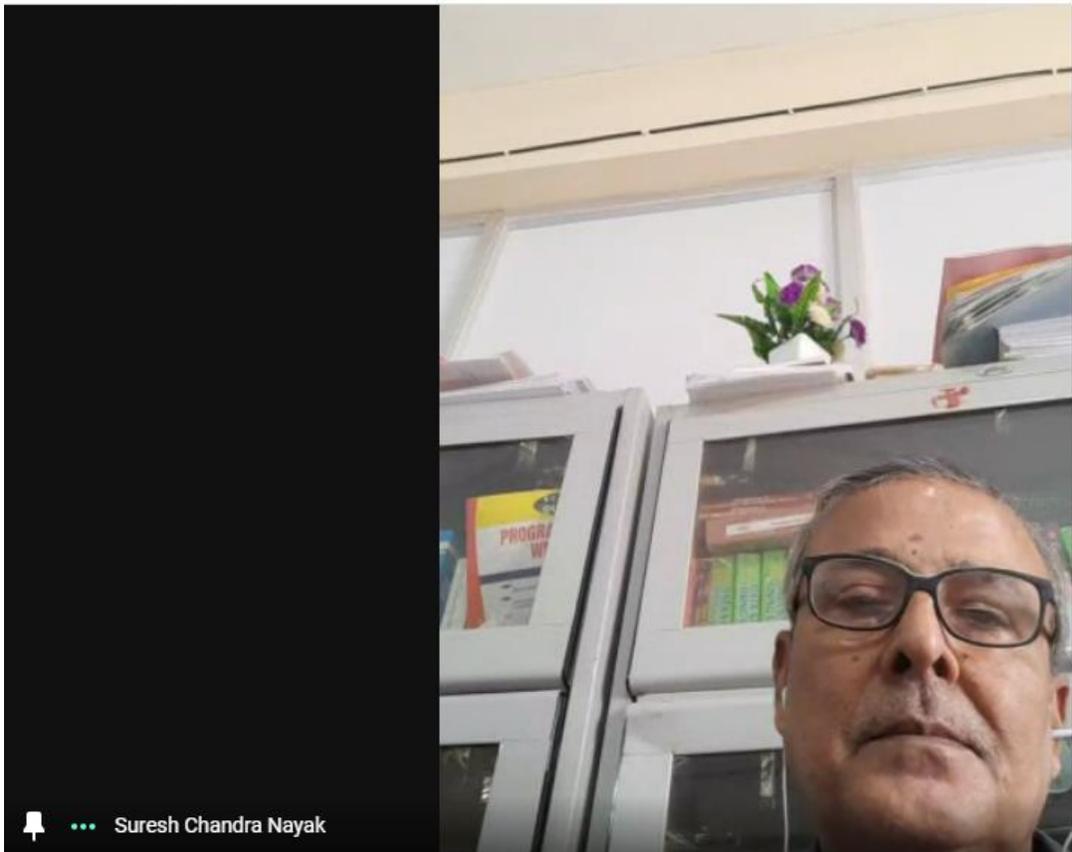
priyanka panda

Meeting details ^



Suresh Chandra Nayak

Meeting details ^

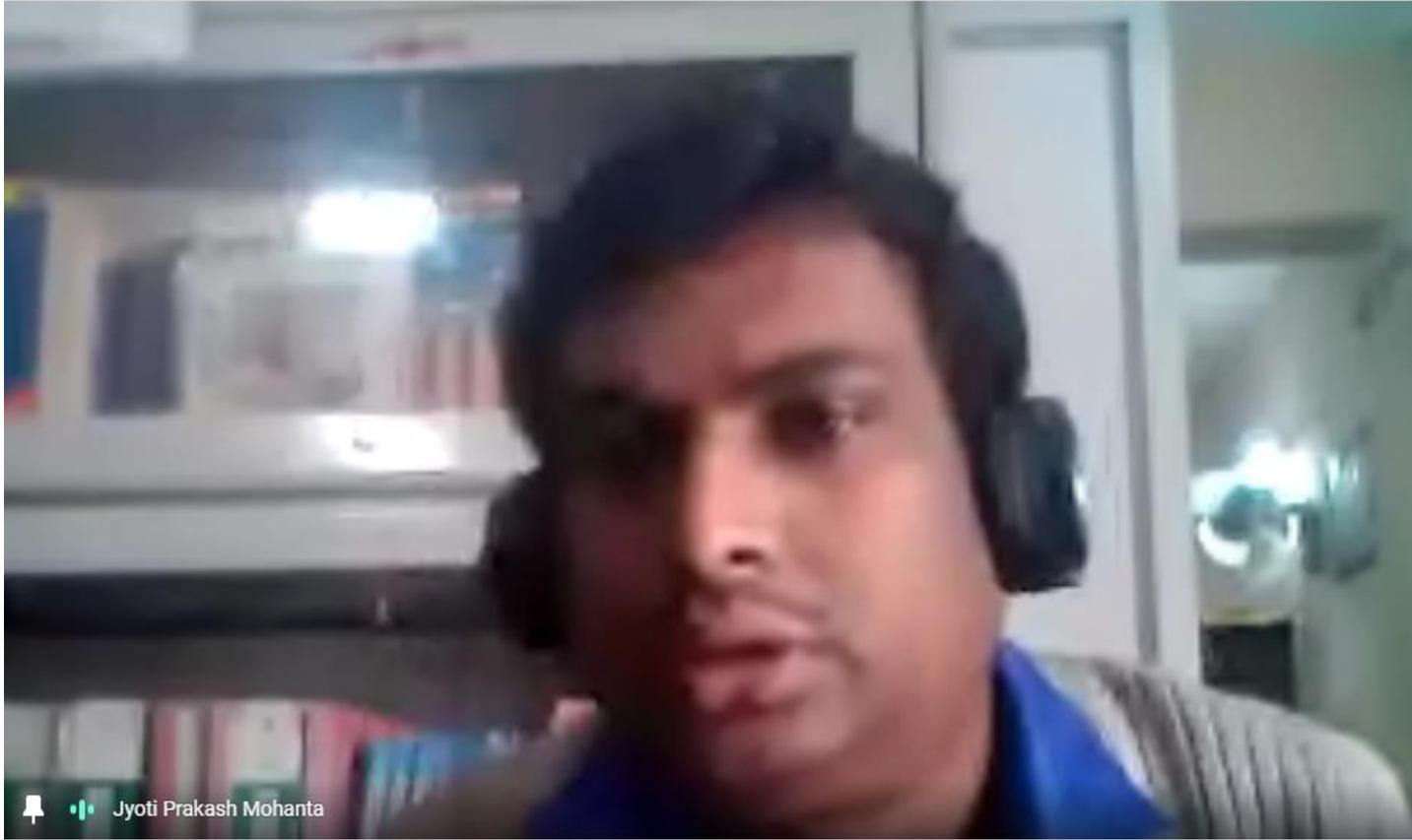


 ... Suresh Chandra Nayak

Meeting details ^

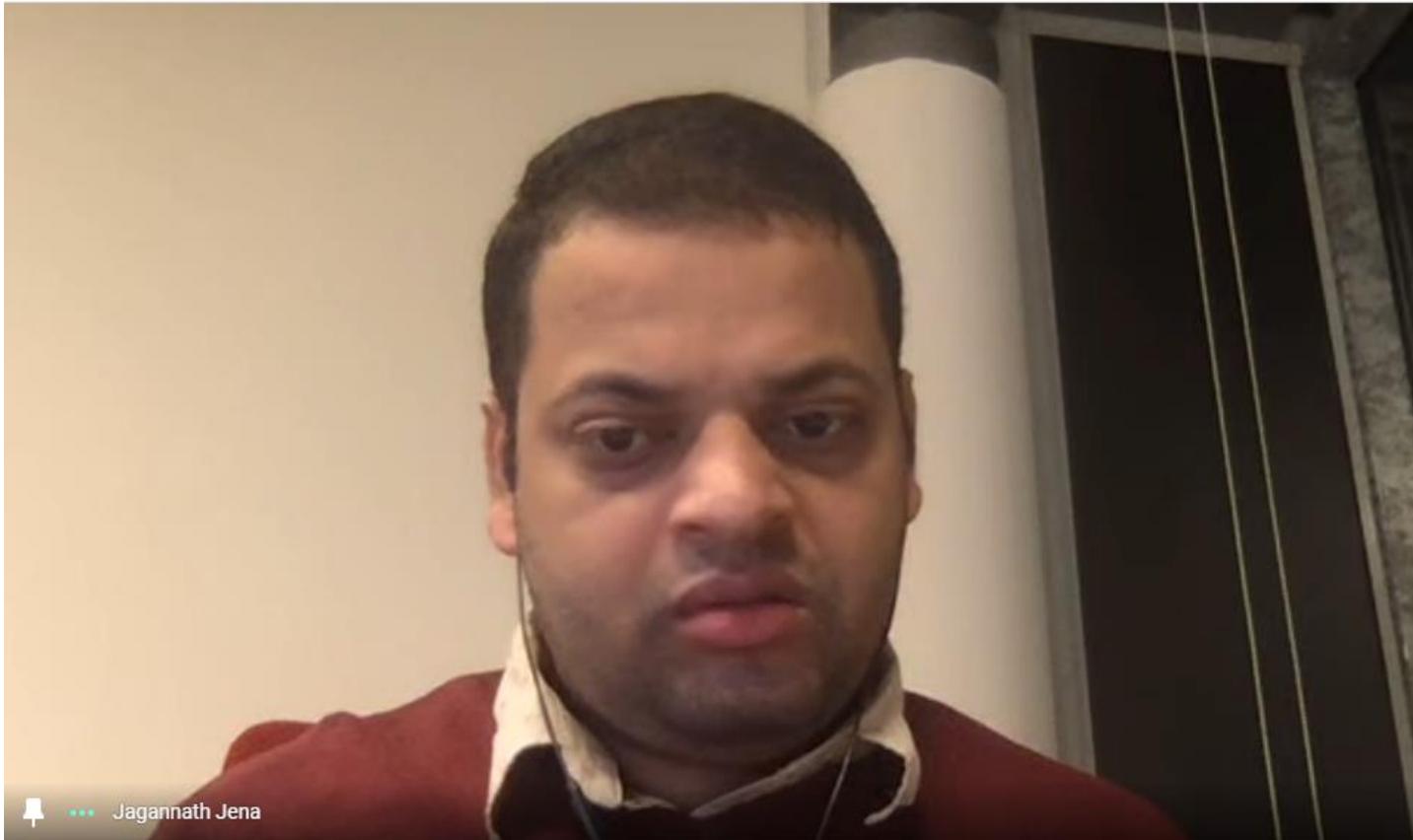




  Jyoti Prakash Mohanta

Meeting details ^





Jagannath Jena

Meeting details ^



DAY-2

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "Mechanism Behind Photocatalysis Process". The slide contains two chemical reaction schemes. The top scheme, labeled "Direct Dye Degradation", shows a dye molecule being excited by visible light to a singlet state (Dye^*), which then undergoes intersystem crossing to a triplet state (Dye^{Δ}). This triplet state reacts with oxygen (O_2) to produce superoxide anions ($O_2^{\cdot-}$), which further react with the dye to form oxidation products. The bottom scheme, labeled "Indirect Dye Degradation", shows the dye being excited to a singlet state (Dye^*), which then reacts with hydrogen peroxide (H_2O_2) to produce hydroxyl radicals ($\cdot OH$). These radicals then react with the dye to form oxidation products. The chat window on the right shows messages from SHAIKH NAZRUL and You, including a link to a form and an attendance link. The meeting details at the bottom show "purnendu parhi is presenting".

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "Presentation (purnendu parhi)". The slide content is mostly obscured by a large circular video feed of the presenter, purnendu parhi. The chat window on the right shows a list of participants, including purnendu parhi, TISHAR CHA..., Manjushree..., BIKASH PRA..., Jeeban Sangr..., Manas Barik, khagendra m..., Chandan Mir..., and Jyotsna Prad... The meeting details at the bottom show "purnendu parhi is presenting".

Attendance Sheet for 16-01-2021 x Meet - izz-jeuo-krz

meet.google.com/izz-jeuo-krz

purnendu parhi is presenting

Chinmayee Dhal and 32 more

44 10:50 AM You

Microsoft PowerPoint

Steps for Photocatalytic Experiments

1. A cylindrical glass photoreactor equipped with a 125 W high pressure Hg lamp was used for photocatalytic reactions.
2. In order to eliminate light with wavelength < 400 nm, a glass jacket containing 1 mol L⁻¹ NaNO₃ solution was used as cut off filter.
3. Varying concentration of dyes dispersed with different amounts nanoparticles were mechanically stirred in the photoreactor.
4. At regular interval, 5 ml of reactant solution was withdrawn, centrifuges to separate the solid catalyst particle and the residual dyes concentration in the supernatant was computed from the measured absorbance values.
5. All spectral measurements were carried out using UV-vis spectrophotometer (Agilent).



Cylindrical Glass Photo reactor

Meeting details

Turn on captions

purnendu parhi is presenting

10:50 AM 1/16/2021

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Meeting details

People (41) Chat

Jyoti Prakash Mohanta 10:50 AM
<https://meet.google.com/linkredirect?authuser=0&dest=https%3A%2F%2Fforms.gle%2FoZ1skrFhpukFJUq5>

Jyoti Prakash Mohanta 10:51 AM
<https%3A%2F%2Fforms.gle%2FoZ1skrFhpukFJUq5>

You 10:56 AM
<https://forms.gle/OoZ1skrFhpukFJUq5>
 link for todays attendance

Send a message to everyone

Microsoft PowerPoint

Characterization of CeO₂

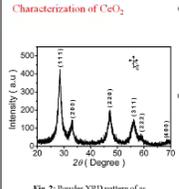


Fig. 2: Powder XRD patterns of as synthesized CeO₂ sample.

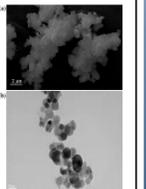


Fig. 3: SEM and TEM micrograph of as synthesized CeO₂ sample.

Meeting details

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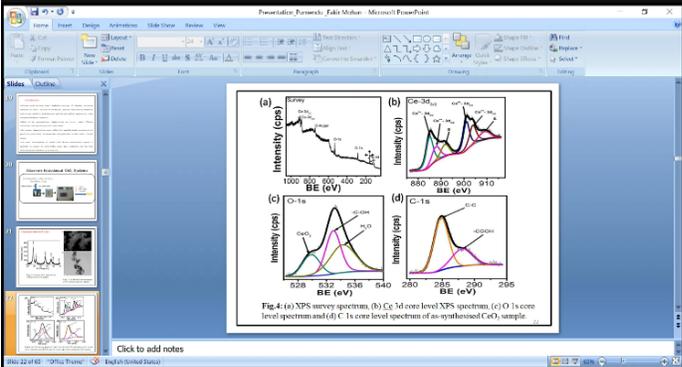
purnendu parhi is presenting

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purnendu parhi is presenting



Meeting details

People (41) Chat

Jyoti Prakash Mohanta 10:50 AM
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Jyoti Prakash Mohanta 10:51 AM
<https://forms.gle/OoZ1skrFhpukFJUq5>
 link for todays attendance

You 10:56 AM
<https://forms.gle/OoZ1skrFhpukFJUq5>

Send a message to everyone

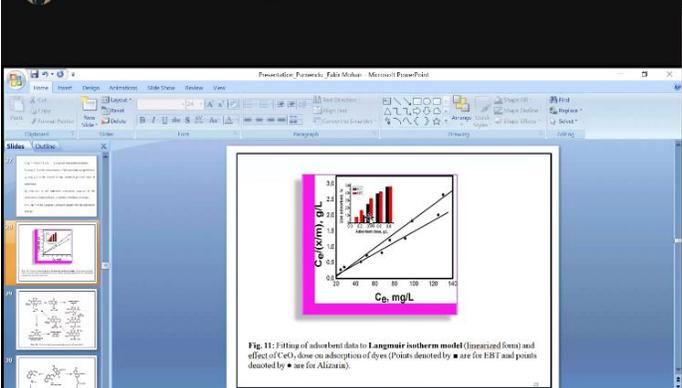
Turn on captions purnendu parhi is presenting

11:00 AM 1/16/2021

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Meeting details

People (36) Chat

IN CALL

- Bibhudatta Behera (You)
- ALOK KUMAR DWIBEDI
- Barsha
- BIKASH PRADHAN
- Biroj Kumar Ram
- Bishwaranjan Behera
- Chandan Mircha

Debasis Satpathy has left the meeting

Turn on captions purnendu parhi is presenting

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Meeting details

People (37) Chat

Jyoti Prakash Mohanta 10:51 AM
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You 10:56 AM
<https://forms.gle/OoZ1skrFhpukFJUq5>
 link for todays attendance

You 11:23 AM
<https://forms.gle/OoZ1skrFhpukFJUq5>
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Send a message to everyone

Turn on captions purnendu parhi is presenting

11:24 AM 1/16/2021