

## **Final Report**

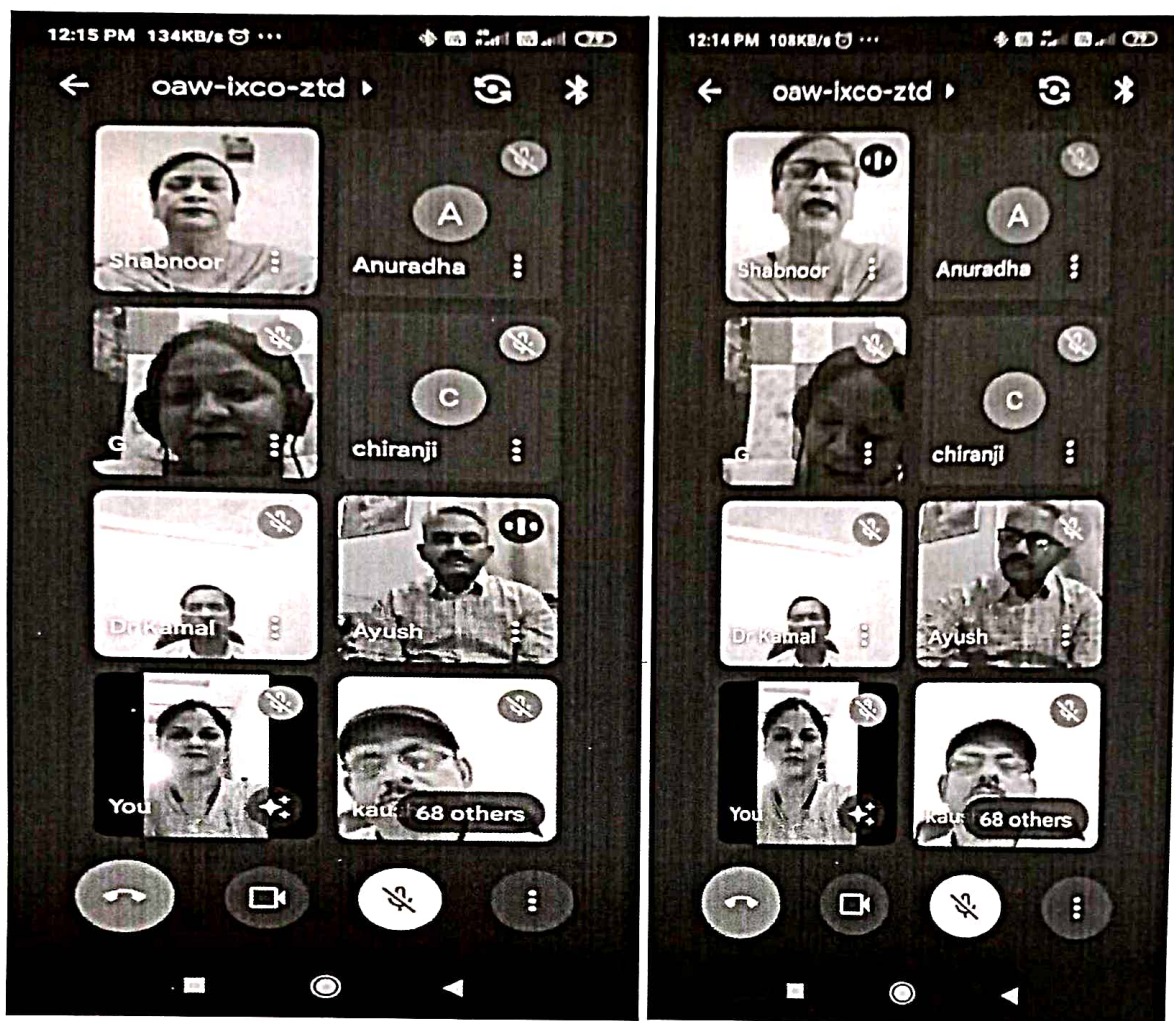
### **Virtual workshop on “Advanced Characterization Tools: Fundamentals and Applications”**

**16<sup>th</sup> – 21<sup>st</sup> May 2022**

**Jointly organized by-  
Dept. of Physics, Pt. Shyamacharan Shukla College Dharasiwa, Raipur  
&  
Dept. of Physics, C V Raman Global University, Bhubaneswar**

Department of Physics in association with C V Raman Global University Bhubaneswar has organized a Virtual work on “Advanced Characterization Tools: Fundamentals and Applications” during 16<sup>th</sup>-21<sup>st</sup> May 2022. The program was conducted virtually (online) through Google Meet. The program was scheduled for six days starting from 16<sup>th</sup> May and ending on 21<sup>st</sup> May 2022. In the inaugural functional the Chief guest was honorable Dr. Ayush Khare, Associate Professor, National institute of Technology, Raipur (CG) and presided by respected principal Prof. Shabnoor Siddiqui. The inaugural function was started at 12:00 noon by worshipping goddess Saraswati, followed by the welcome address by principal Prof. Shabnoor Siddiqui. Chief guest Dr. Khare congratulated the principal and staff of department of Physics and faculty of science for organizing the workshop. Convenor of the workshop Dr. G Nag Bhargavi, Assistant prof. department of Physics introduced the sessions with the outline of the workshop. She also gave a brief account of the various topics to be covered during these six days and the subject experts who will address the sessions. The co-convenor Dr. Tanmaya Badapanda explained the theme and objectives of the workshop and the relevance to the present-day scenario. In the end of the inaugural session Shri Kaushal Kishore, head department of Botany gave vote of thanks to the chief guest, eminent speakers, academicians and research scholars for participating in this workshop. In this workshop total 125 participants have registered all over the map from different states, universities and colleges.





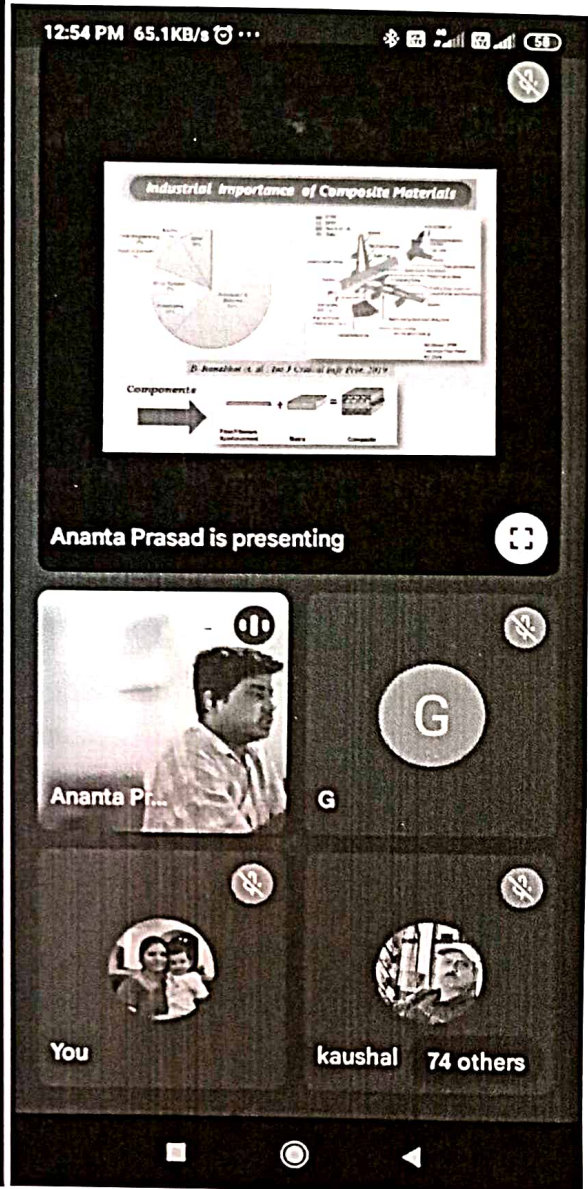
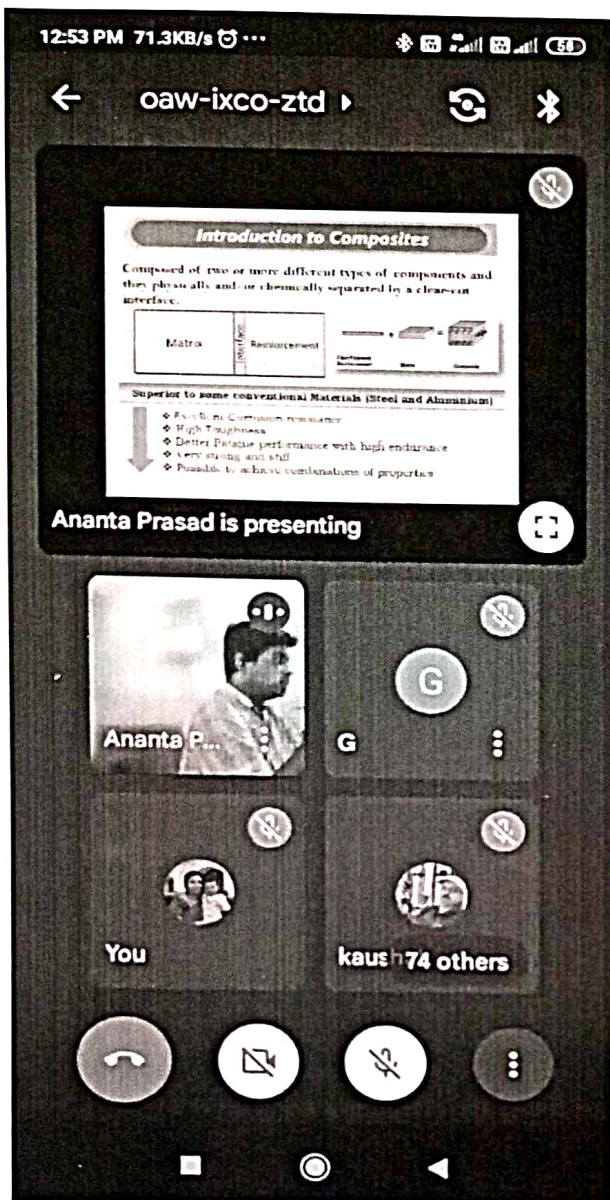
### Technical Session 1 (16.05.2022)

(12:30-2:00 PM)

In the first technical session there was an invited talk on “Characterization techniques involved for FRP composite exposed to various stringent exposing environments” delivered by Dr. Ananta Prasad Chakraverty, Gangadhar Meher University, Sambalpur, Odisha. He started his talk with a basic information about composite materials and its applications in different fields of science and technology also in our daily life. He lucidly explained about fibre reinforced polymer composite (FRP) and different tools/techniques used to characterize and study the properties of FRP. He also used results obtained from his research work to explain the properties of FRP. In the end few of the scholars asked some of their queries which was explained by Dr. Chakraverty. Dr. G Nag Bhargavi Gave vote of thanks to the speaker.

*Bhargavi*





### Technical Session 2 (17.05.2022)

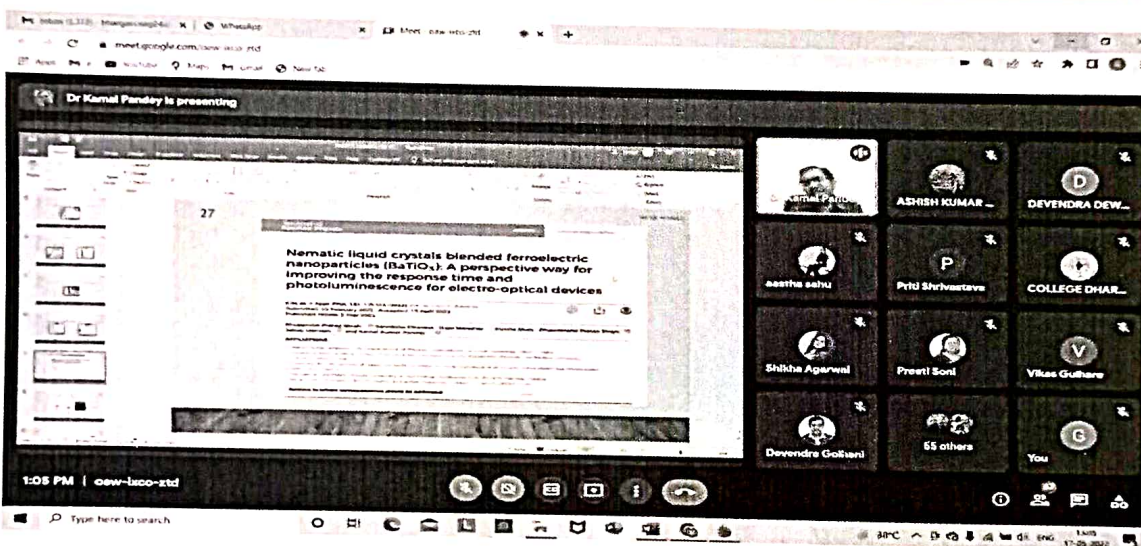
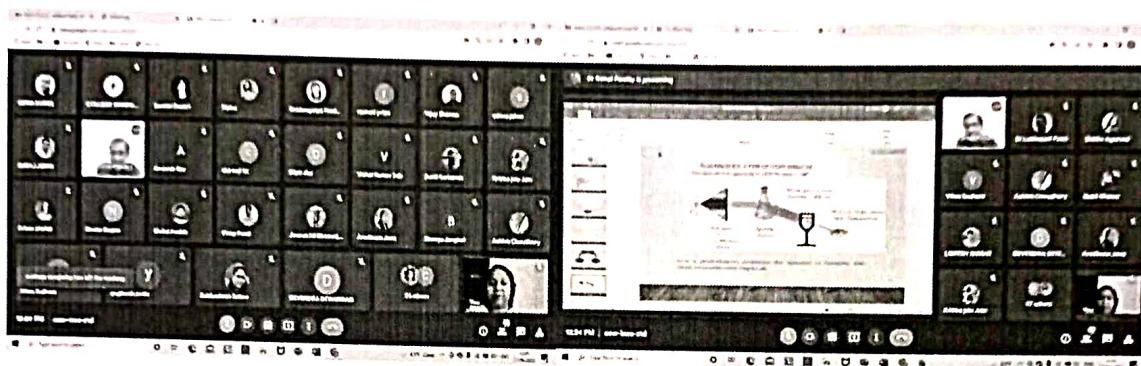
(12:00-1:30 PM)

On the second day of workshop another interesting talk on “**Photoluminescence- basics and applications**” was delivered by the subject expert Dr. Kamal Kumar Pandey, Assistant Professor, department of Physics, Sri jai Narayan Mishra PG College Lucknow (KKC), An Associate college of University of Lucknow. In the beginning convenor Dr. G Nag Bhargavi welcomed the resource person and gave a brief introduction of him to the session. Dr. Pandey has elaborately explained the basic physics involved in the process of luminescence. He used the famous Jablonski diagram to explain the basic phenomena of photoluminescence. He used different examples from real time and demonstrated the process of analyzing data. He also explained the instrumentation technique involved in the process of photoluminescence. Dr.

*Shargavi*



Pandey patiently answered all the questions raised by the participants. In the end Dr. Bhargavi gave vote of thanks to the speaker and participants.



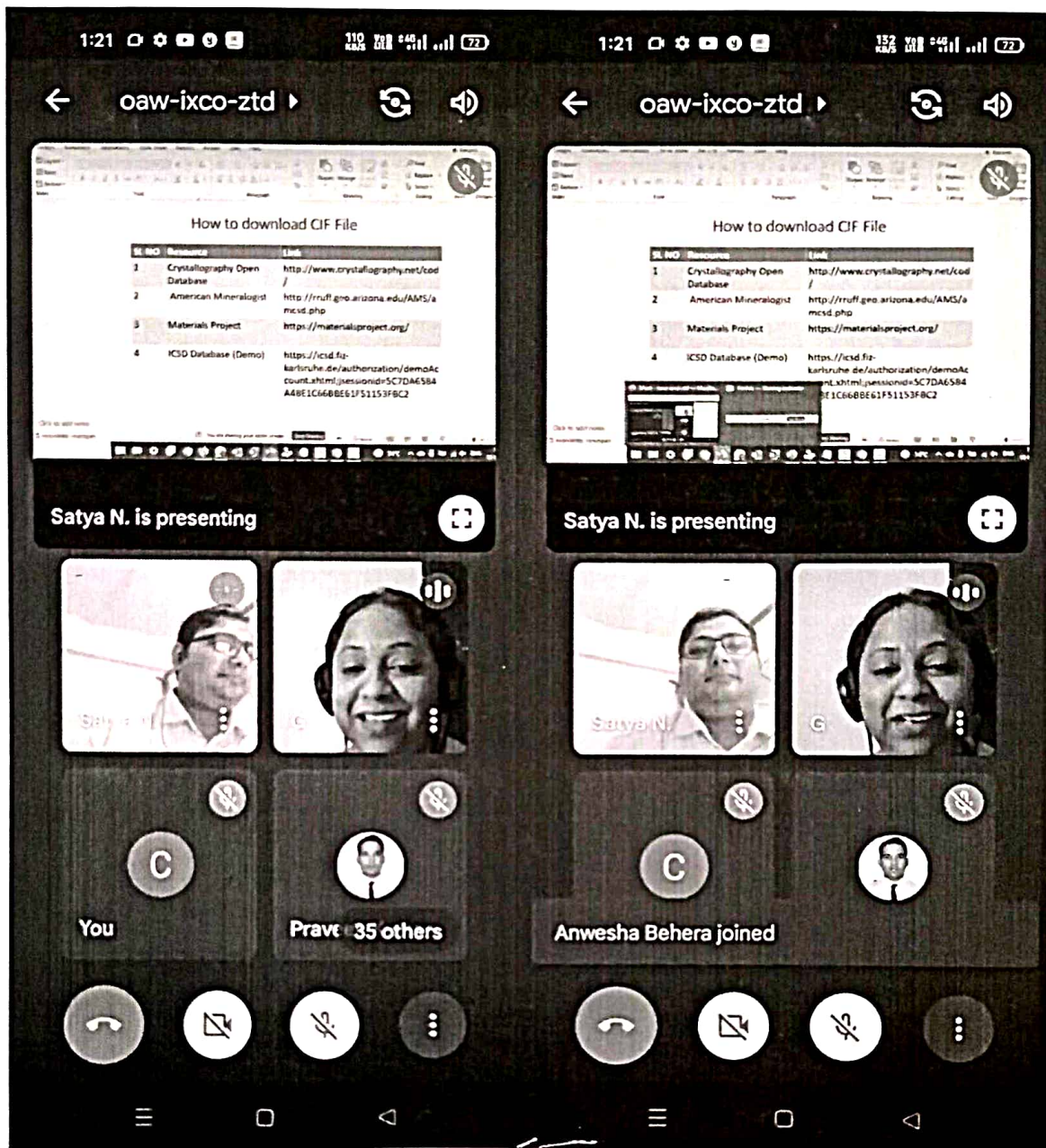
### Technical Session 3 (18.05.2022)

(12:00-1:30 PM)

On the third day of the workshop the invited talk was delivered on "X-ray Diffraction" was by subject expert Dr. Satya Narayan Tripathy, Assistant Professor, Department of Physics, Sri Sri Sri University, Cuttack Odisha. The program was started at 12 noon, in the beginning convenor Dr. G Nag Bhargavi welcomed the resource person and gave a brief introduction of him to the session. Dr. Tripathy started with fundamentals of X-ray diffraction. Then he explained the rietveld refinement process of X-ray data. He practically explained the process of rietveld refinement using various softwares. He explained the process using examples from different class of solid samples. His talk was classified in two groups (i) crystal structure determination and (ii) microstructural studies. He also answered the queries asked by the participants. In the end Dr. Bhargavi gave vote of thanks to the speaker and participants.

*Bhargavi*





#### Technical Session 4 (19.05.2022)

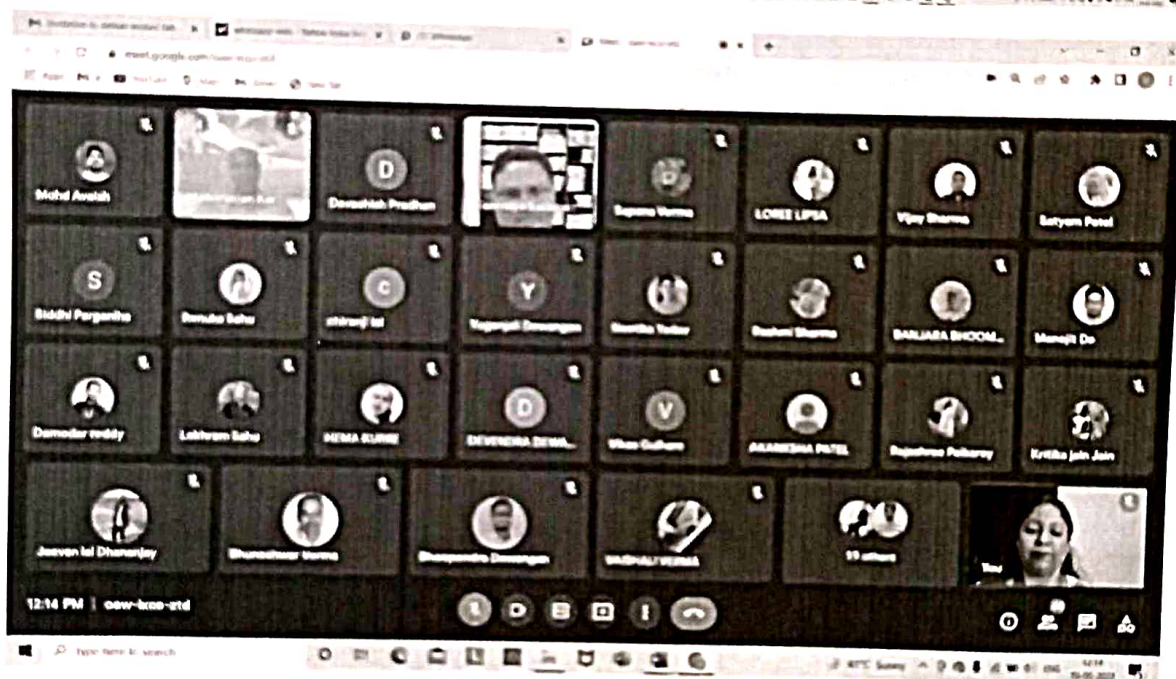
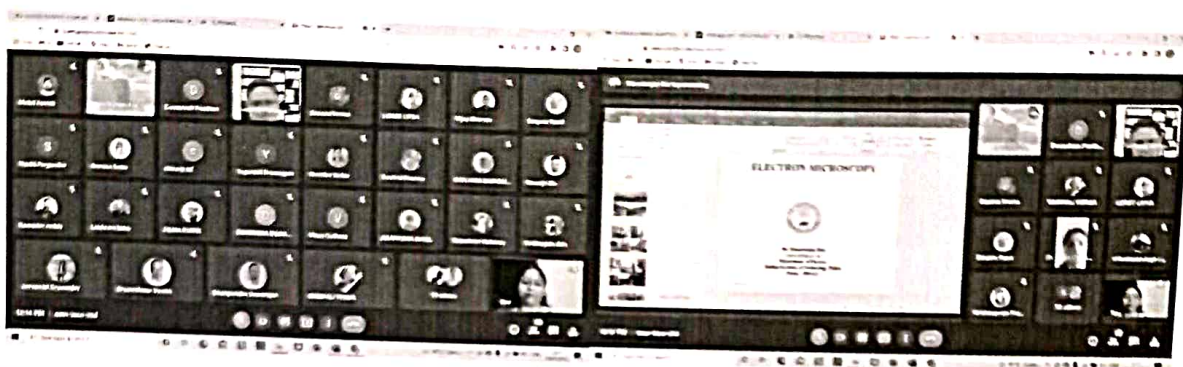
(12:00-1:30 PM)

The fourth technical session was started on 19.05.2022 at 12 Noon. The convenor Dr. G Nag Bhargavi welcomed the resource person Dr. Manoranjan Kar, Associate Professor, Department of Physics, Indian Institute of Technology, Patna. She also welcomed all the participants (Academicians, Teachers, Research scholars, Students). Before his talk a brief introduction was given to the audience. Dr. Kar delivered a talk on "Electron Microscopy" a very important tool for materials characterization. In his talk he started with very fundamental concept of Classical and Quantum Mechanics and explained the role of Quantum mechanics in understanding the physics behind electron microscopy. He elaborated the different types of electron microscopy like Scanning Electron Microscopy and Transmission Electron Microscopy. He explained the

*Bhargavi*



basic phenomena involved in obtaining the micrographs of samples and described the instrumentation technique. He also talked about the range of optical microscopy and the technological limitations in capturing the micrographs of samples. After the talk Dr. Tanmaya Badapanda, (Co-convenor) gave vote of thanks to the participants.



### Technical Session 5 (20.05.2022)

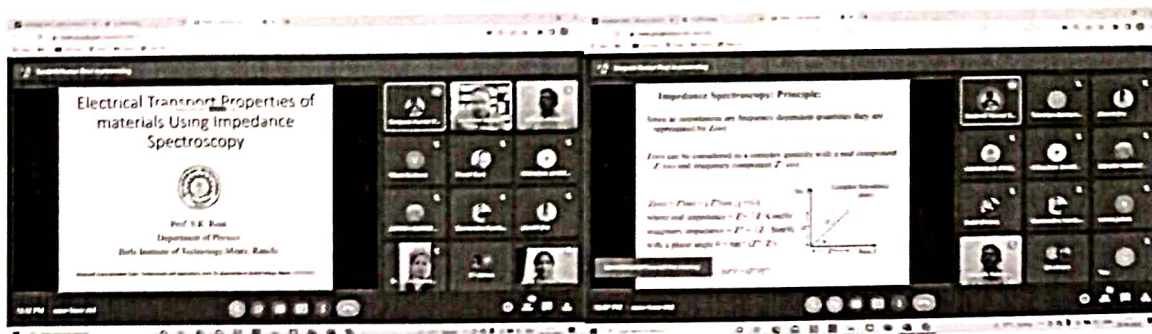
(12:00-1:30 PM)

The fifth technical session was started on 20.05.2022 at 12 Noon. The convenor Dr. G Nag Bhargavi welcomed the resource person Dr. S K Rout, Professor, Department of Physics, Birla Institute of Technology, Mesra. She also welcomed all the participants (Academicians, Teachers, Research scholars, Students). Before his talk a brief introduction of him was given to the audience by the Co-convenor Dr. Tanmaya Badapanda. Dr. Rout started his talk with the basic information on impedance consisting of resistance, capacitance and inductance. He discussed the fundamental Ohm's law and difference between direct and alternating currents. He explained in detail that why Impedance spectroscopy is used for electrical characterization. He also discussed about how to analyze impedance data and obtain various parameters like

*Bhargavi*



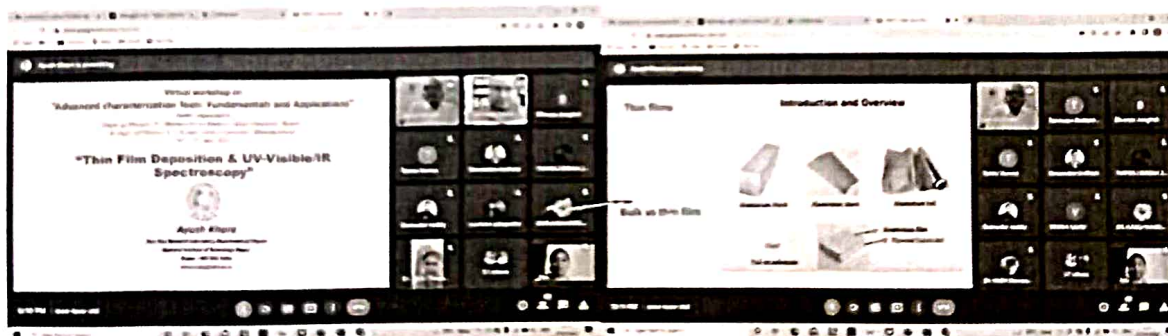
grains, grain boundaries and also about modeling of impedance spectroscopy plots. In the end Dr. Tanmaya Badapanda gave vote of thanks to the speaker and other participants.



### Technical Session 6 (21.05.2022) And valedictory function

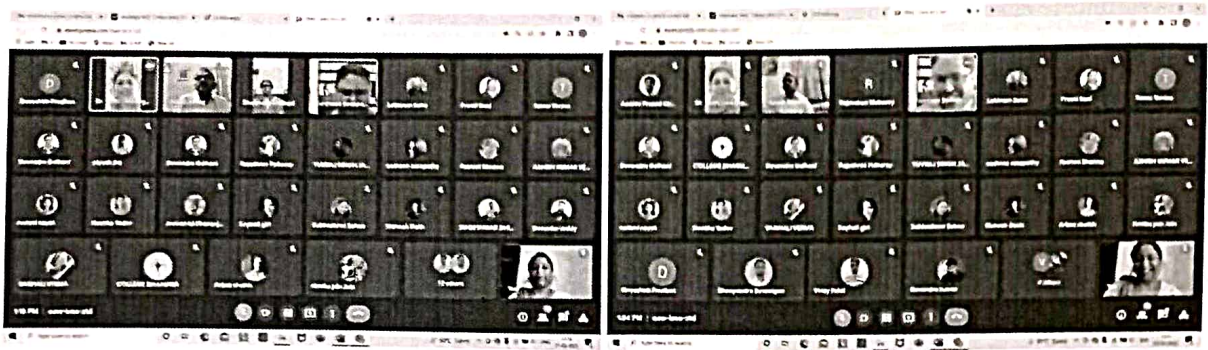
(12:00-2:00 PM)

The sixth technical session was started on 21.05.2022 at 12 Noon. The convenor Dr. G Nag Bhargavi welcomed the resource person Dr. Ayush Khare, Associate Professor, Department of Physics, National Institute of Technology, Raipur. She also welcomed all the participants (Academicians, Teachers, Research scholars, Students). Before his talk a brief introduction of him was given to the audience by the convenor. Dr. Khare started his talk with the basic idea of bulk materials and thin films. He discussed the various thin film deposition techniques with its merits and demerits. He explained in detail the importance of UV visible and IR spectroscopy for finger printing. He explained the method of calculation of band gap and also explained tuning of band gap.



After his talk in the valedictory function respected principal madam Dr. Siddiqui addresses all the members present in the meeting. She congratulated the organizing committee for conducting such a nice academic event. Dr. G Nag Bhargavi presented the report of this six-days virtual workshop in brief. Dr. Ayush Khare and Dr. Ananta Prasad Chakraverty gave valuable suggestions to improve the eminence of the workshop. From the participants Dr. Preeti Soni and Devendra Golhani feedback on the workshop. In the end Dr. Tanmaya Badapanda gave vote of thanks to all the speakers who were present in all the six days as resource person for delivering such relevant and informative talks. He also thanks to all the participants and principal and members of organizing committee.

*Bhargavi*



## Feedback received from the participants

Feedback Dr. Chakraverty (Responses)

To Email	Name of Participant	1. Content of 1/2	2. Relevance of the 3	3. Clarity of the 4	4. Presentation 5	5. Presentations 6	6. Language of the 7	7. Participative (Maximum 8)	8. Effective (Maximum 9)	Any suggestions
manisha19@post.uzh.ch	MANISHA FARIDA	Option 4	Option 4	Option 3	Option 3	Option 4	Option 4	Option 4	Option 4	
pp4974@umail.upi.com	P. Praveen	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Nice and effective Good
prakash22@rediffmail.com	Dr. Prakash Jha	Option 5	Option 5	Option 4	Option 5	Option 5	Option 5	Option 5	Option 5	
gmujepta@umail.upi.com	Seyha Guri	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	
kanurparanjita@rediffmail.com	Dr. Sarayu Paranjita	Option 2	Option 3	Option 4	Option 4	Option 3	Option 4	Option 4	Option 5	
manishdion112@rediffmail.com	Mahesh Gosh	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	No suggestions Good
prakash22@rediffmail.com	Dr. Prakash Jha	Option 5	Option 5	Option 4	Option 5	Option 5	Option 5	Option 5	Option 5	
datan.suarthi73@gmail.com	DASARI SVATHI	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
shankarsharma1@shankarsharma.com	SHANKAR SHARMA	Option 5	Option 5	Option 4	Option 4	Option 5	Option 5	Option 5	Option 5	Thank you Today's talk was really interesting and nice
devanga14654@rediffmail.com	Rhosmitra Kumar Dew	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Everything good
sooh1205@post.uzh.ch	BODHI RAM CHACHAN	Option 5	Option 4	Option 4	Option 4	Option 4	Option 4	Option 5	Option 5	It was good talk
meeraanand@rediffmail.com	Meenakshi Chandra	Option 4	Option 4	Option 3	Option 2	Option 4	Option 4	Option 4	Option 3	It had taught me some talk about soil physics
ajaykumar123@rediffmail.com	Chandrika Kumar Gohari	Option 4	Option 4	Option 3	Option 3	Option 3	Option 4	Option 3	Option 3	
aashishanil123@rediffmail.com	Aashish Sahu	Option 4	Option 5	Option 3	Option 5	Option 5	Option 5	Option 4	Option 4	
bhushan.veeraj@gmail.com	D. B. R. Verma	Option 4	Option 4	Option 4	Option 4	Option 5	Option 4	Option 5	Option 5	Nicely organized workshop
urkashan@rediffmail.com	Utkal Patra	Option 4	Option 4	Option 4	Option 4	Option 5	Option 4	Option 5	Option 4	
parvathy@rediffmail.com	Rajashree Parvathy	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
anp1@rediffmail.com	Aradhana Jena	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
sunilb4@gmail.com	B. Ravi Kumar	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Need more information regarding soil
lone.ashish@rediffmail.com	Lone Lata	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
saayan@rediffmail.com	Saayan Kumar Dubey	Option 3	Option 3	Option 4	Option 2	Option 2	Option 3	Option 3	Option 3	
satishkumar4@gmail.com	Anita Satish	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Good session
ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	

Feedback Dr. Kamal Pandey (Responses)

Timestamp	Email	Name of Participant	1. Content of 1/2	2. Relevance of 3	3. Clarity of 4	4. Presentation 5	5. Presentations 6	6. Language of the 7	7. Participative (Maximum 8)	8. Effective (Maximum 9)	Any suggestions
5-17-2022	vpr211024@vsnl.com	Vinay Kumar Patel	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	sanjaykumar@rediffmail.com	Sanjay Kumar	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	shankarsharma1@shankarsharma.com	SHANKAR SHARMA	Option 3	Option 2	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	Very impressive lecture and great conducted sessions Thank you
5-17-2022	veer.ph@rediffmail.com	Vijay Sharma	Option 5	Option 5	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Nice
5-17-2022	sooh1205@post.uzh.ch	BODHI RAM CHACHAN	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Some network issues are there
5-17-2022	sunilb4@gmail.com	B. Ravi Kumar	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Very impressive lecture and great conducted sessions Thank you
5-17-2022	shankarsharma1@shankarsharma.com	SHANKAR SHARMA	Option 5	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	very informative
5-17-2022	kanurparanjita@rediffmail.com	Dr. Sarayu Paranjita	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
5-17-2022	meeraanand@rediffmail.com	Meenakshi Chandra	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Very informative lecture
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
5-17-2022	prakash22@rediffmail.com	Dr. Prakash Jha	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Talk was very informative
5-17-2022	prakash22@rediffmail.com	Dr. Prakash Jha	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Talk was so informative
5-17-2022	devanga14654@rediffmail.com	Rhosmitra Kumar Dew	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Collaborations Dr. Bhargava
5-17-2022	praveen.veeraj@gmail.com	P. Praveen	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	nivedita22@rediffmail.com	Nivedita Yadav	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
5-17-2022	praveen.veeraj@gmail.com	P. Praveen	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
5-17-2022	anil123@rediffmail.com	Anil Kumar	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	no
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
5-17-2022	ajaysharma@rediffmail.com	Utkal Anand	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	More applications to be taken

*Bhargava*





Feedback Dr. Rout (Responses)

Email	Name of Participant	1. Content of the	2. Relevance	3. Clarity	4. Presentation	5. Presentation style	6. Language of the Task	7. Participative (Maximum 5)	8. Effective (Maximum 5)	Any suggestions
sanjaydubey219@gmail.com	Sanjay Kumar Dubey	Option 3	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
vaishu@gmail.com	Sachin Singh	Option 4	Option 4	Option 3	Option 4	Option 2	Option 4	Option 4	Option 4	
sanjaydubey219@gmail.com	Rakesh Sharma	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Very effective session
chaitanyamishra@gmail.com	Charu Verma	Option 5	Option 5	Option 4	Option 5	Option 5	Option 5	Option 4	Option 5	
shaahenkhanna@gmail.com	SHASHIYA BHARMA	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Very impressive lecture and great conducted sessions
ushaksharma@gmail.com	Usha Rathore	Option 4	Option 4	Option 4	Option 3	Option 5	Option 4	Option 5	Option 4	
manojkumar12@gmail.com	Dr. Manoj D.	Option 5	Option 5	Option 5	Option 5	Option 5	Option 4	Option 5	Option 5	Good one
praveen101@gmail.com	Rashmi Devi Dey	Option 5	Option 5	Option 5	Option 5	Option 4	Option 4	Option 5	Option 5	Nice presentation
anishkumar14@gmail.com	Dr. Anish Sam	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
vaishu@gmail.com	Vaish Sharma	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Nice
anishkumar14@gmail.com	Anish Sam	Option 4	Option 5	Option 4	Option 3	Option 4	Option 5	Option 4	Option 4	No
ankita1108@gmail.com	Kritika Jain	Option 4	Option 4	Option 5	Option 4	Option 5	Option 5	Option 5	Option 4	
praveen101@gmail.com	Dr. Praveen	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Very Commendable
vaishu@gmail.com	Dr. Vaishu Gurbhar	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Nice presentation
purnimajaiswal@gmail.com	Purnima Patel	Option 5	Option 4	Option 5	Option 4	Option 5	Option 5	Option 5	Option 5	
Omankumar1978@gmail.com	Omankumar	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
suhashramesh@gmail.com	Suhashramesh Sahoo	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Extremely good
satishkumar@gmail.com	Satish Sangita Satpathy	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
praveen101@gmail.com	Praveen Phakiraj	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Very informative session
praveen101@gmail.com	Praveen Phakiraj	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
Santoshkumar16@gmail.com	Santosh	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	
devangana24@gmail.com	Dr. Devendra Kumar Dew	Option 5	Option 4	Option 4	Option 5	Option 5	Option 5	Option 5	Option 5	
ankita1108@gmail.com	LEKHANA SARKI	Option 3	Option 3	Option 2	Option 2	Option 2	Option 2	Option 2	Option 2	
praveen101@gmail.com	Praveen Jais	Option 1	Option 2	Option 2	Option 3	Option 3	Option 5	Option 5	Option 1	Very good
anishkumar14@gmail.com	ANISHAN LAL DHANANJAY	Option 4	Option 4	Option 4	Option 3	Option 3	Option 4	Option 5	Option 4	
sanjaydubey219@gmail.com	Sanjay Kumar Dubey	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	

Feedback Dr. Khare (Responses)

Email	Name of Participant	1. Content of the	2. Relevance	3. Clarity	4. Presentation	5. Presentation style	6. Language of the Task	7. Participative (Maximum 5)	8. Effective (Maximum 5)	Any suggestions
sanjaydubey219@gmail.com	Chaudhary Anuradha Das	Option 5	Option 4	Option 4	Option 5	Option 4	Option 5	Option 5	Option 5	
praveen101@gmail.com	P. PRAVEEN	Option 6	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
manishkumar112@gmail.com	Manish Dash	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
anishkumar14@gmail.com	Dr. Anish Sam	Option 5	Option 5	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	No
satishkumar@gmail.com	Satish Sangita Satpathy	Option 6	Option 5	Option 6	Option 5	Option 5	Option 5	Option 5	Option 5	It was awesome
manishkumar112@gmail.com	Manish Dash	Option 5	Option 5	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	
anishkumar14@gmail.com	Dr. Anish Sam	Option 5	Option 5	Option 4	Option 3	Option 3	Option 4	Option 4	Option 4	
lekhana@gmail.com	LEKHANA SARKI	Option 4	Option 4	Option 4	Option 3	Option 3	Option 4	Option 4	Option 4	
anishkumar14@gmail.com	AREAZ SHERKH	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
anishkumar14@gmail.com	Dr. Anish Sam	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Nice presentation
devangana24@gmail.com	Dr. Devendra Kumar Dew	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
vaishu@gmail.com	Dr. Vaishu Gurbhar	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	
sanjaydubey219@gmail.com	Dr. Sanjay Kumar Dubey	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	Option 3	
praveen101@gmail.com	Praveen Jais	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
vaishu@gmail.com	Vaish Sharma	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Nice
praveen101@gmail.com	Praveen Jais	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	All the six day lectures are very effective and informative
praveen101@gmail.com	Praveen Jais	Option 4	Option 4	Option 4	Option 3	Option 3	Option 3	Option 3	Option 3	Session was very informative
praveen101@gmail.com	Praveen Jais	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	
praveen101@gmail.com	Praveen Jais	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Everything was very helpful for us
praveen101@gmail.com	Praveen Jais	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	This type of workshop should be conducted in physical mode here also very informative
praveen101@gmail.com	Praveen Jais	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Option 5	Very informative lecture
praveen101@gmail.com	Praveen Jais	Option 1	Option 1	Option 1	Option 2	Option 1	Option 1	Option 1	Option 1	
praveen101@gmail.com	Praveen Jais	Option 5	Option 4	Option 5	Option 4	Option 5	Option 5	Option 5	Option 5	
praveen101@gmail.com	Praveen Jais	Option 5	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	Option 4	

*Sharma*

*Sharma*

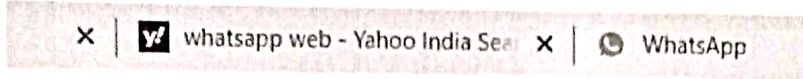
**प्रभारी प्राचार्य**

**सारणीय पं. श्यामाचरण मुक्त महाविद्यालय**

**अस्सीबा (शंकर नगर) रायपुर (छ.ग.)**



# Media Coverage



CHHATTISGARH

## शासकीय महाविद्यालय धरसीवा में छः दिवसीय राष्ट्रीय स्तर कार्यशाला का हुआ शुभारंभ

By Ayan News - May 21, 2022  
Time to Read: 1 min - 173 words



आयन न्यूज (Ayan News)  
एन.एन.टी. कॉम्प्यूटर प्रिण्टिंग प्रि. लि.  
आयन न्यूज (Ayan News)



शासकीय महाविद्यालय धरसीवा में छः दिवसीय राष्ट्रीय स्तर कार्यशाला का हुआ शुभारंभ

भौतिक शास्त्र विभाग अखिल भारतीय प्रमुखता महाविद्यालय धरसीवा, रायपुर एवं सौदी रमन ग्लोबल यूनिवर्सिटी भुनेश्वर के संयुक्त सहयोग में राष्ट्रीय स्तर की कार्यशाला का आयोजन किया गया। Advanced characterization Tools: Fundamentals and application विषय पर आयोजित इस कार्यशाला के उद्घाटन सत्र में देश के विभिन्न विश्वविद्यालयों, महाविद्यालयों एवं शोध संस्थानों से वैज्ञानिक विषय विशेषज्ञ शिक्षक-शोधार्थी एवं स्नातकोत्तर छात्रों के छात्र सम्मिलित हुए। मुख्य अतिथि के रूप में राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर से जुड़े डॉ. आर्यु खरे ने कार्यशाला को प्रारंभिक एवं दर्शन समय में नए शोधार्थियों के लिए आदर्श आदर्शक बनाया। कार्यशाला की रूपरेखा एवं विषय वस्तु के बारे में क्रमशः डॉक्टर जी. मा. भार्गवी (संयोजक) एवं डॉ. लक्ष्मण बसुपाका (सहसंयोजक) ने जानकारी दी। छः दिवसीय इस कार्यशाला में पदार्थ विज्ञान के विभिन्न तकनीकों पर विषय विशेषज्ञों द्वारा चर्चा की जाएगी। देशों के विभिन्न राज्यों और विश्वविद्यालयों से जुड़े शोधार्थियों को लाभ पहुंचाने के उद्देश्य से इस कार्यशाला का आयोजन किया जा रहा है। महाविद्यालय की प्राचार्य डॉक्टर राबिन्द्र सिन्धीनी ने इस आयोजन हेतु आयोजन समिति को शुभकामनाएं दीं। कार्यक्रम में डॉ. कौशल किशोर शर्मा, डॉ. निधि देवान, श्री हेमंत देवगुज धारू वर्मा अदि शामिल थे।



*Aranga*

## Youtube Links to the program

Day-1 <https://youtu.be/by0ijco7XQ0>

Day -2 <https://youtu.be/XulZzsAK20c>

Day-3 <https://youtu.be/kCbhQerrpHs>

Day-4 [https://youtu.be/xMBJ4\\_UkI84](https://youtu.be/xMBJ4_UkI84)

Day-5 <https://youtu.be/gd8-spXRWYw>

Day-6 <https://youtu.be/AWOZSuP-3r0>

*Shargan*

*Shargan*

**प्रभारी प्राध्यापक**

**शास्त्रकीय पं. श्यामाकरुण कुव्ल महाविद्यालय  
धरसीदा ( शंकर नगर) रायपुर (छ.ग.)**



**Virtual workshop on  
“Advanced Characterization Tools: Fundamentals and  
Applications”**

**16<sup>th</sup> – 21<sup>st</sup> May 2022**

**Jointly organized by-  
Dept. of Physics, Pt. Shyamacharan Shukla College Dharsiwa, Raipur  
&  
Dept. of Physics, C V Raman Global University, Bhubaneshwar**

**INAUGURAL FUNCTION**

**Time: 12:00 Noon -12:30 PM**

Invocation	12:00 Noon
Welcome Address <b>Dr. Shabnoor Siddiqui-</b> Principal/Patron	12:00 – 12: 05 PM
Address by the Chief Guest <b>Dr. Ayush Khare</b> <i>Associate Professor</i> <i>Department of Physics</i> National Institute of Technology, Raipur (CG)	12:05 – 12: 15 PM
Outline of the workshop <b>Dr. G Nag Bhargavi-</b> (Convenor)	12:15 – 12: 20 PM
Theme of the workshop <b>Dr. Tanmaya Badapanda</b> (Co-convenor)	12:20 – 12: 25 PM
Vote of Thanks <b>Shri. Kaushal Kishore</b>	12:25 – 12: 30 PM

*Bhargavi*

*Shri*  
**प्रभारी प्राध्यापक**  
शासकीय पं. श्यामाचरण कुवल महाविद्यालय  
धार्श्रीवा ( संतक नगर ) ( उ.प्र. )

## Technical program

Date	Time	Remarks
16.05.2022 (Monday)	12:30-2:00PM	Characterization techniques involved for FRP composite exposed to various stringent exposing environments  <i>Speaker- Dr. Ananta Prasad Chakraverty Gangadhar Meher University, Sambalpur, Odisha</i>
17.05.2022 (Tuesday)	12:00-1:30PM	Topic- Photoluminescence- basics and applications  <i>Speaker- Dr. Kamal Panday, Sri Jai Narain Mishra PG College (K.K.C.) An Associate College of University of Lucknow</i>
18.05.2022 (Wednesday)	12:00-1:30PM	Topic-X-ray diffraction  <i>Speaker- Dr. Satya Narayan Tripathy, Sri Sri University, Cuttuck</i>
19.05.2022 (Thursday)	12:00-1:30PM	Topic- Electron Microscopy  <i>Speaker- Dr. Manoranjan Kar, Indian Institute of Technology, Patna</i>
20.05.2022 (Friday)	12:00-1:30PM	Topic- Impedance Spectroscopy  <i>Speaker- Prof. S K Rout, Birla Institute Technology, Mesra</i>
21.05.2022 (Saturday)	12:00-1:30PM	Topic- Thin film deposition & UV-Visible/IR Spectroscopy  <i>Speaker- Dr. Ayush Khare, National Institute of Technology, Raipur</i>
	1:30- 2:00PM	Valedictory session

Google meet Link- <https://meet.google.com/oaw-ixco-ztd>

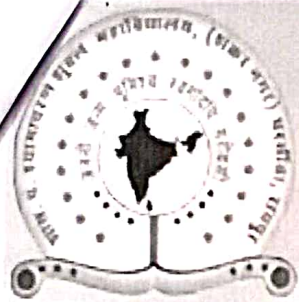
*Shargan*

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प्रभारी प्राचार्य

सार्वभौमिक पं. श्यामाकरन बुवल महाविद्यालय  
घरसीनिया ( संकर नगर) रायपुर (छ.ग.)





**Virtual Workshop**  
**On**  
**“Advanced Characterization**  
**Tools: Fundamentals & Applications”**



16<sup>th</sup> -21<sup>st</sup> May 2022

*Jointly Organizing by : Dept. of Physics, Govt. Pt. Shyamacharan Shukla College, Dharsiwa, Raipur & Dept. of Physics, C V Raman Global University, Bhubaneshwar*

**About the Workshop**

The workshop will mainly focus on the fundamental aspects and latest developments in the field of characterization tools for materials research. It aims to provide the in-depth understanding about the fundamental knowledge and technical aspects to various characterization tools and how these techniques can be employed to have a better understanding in probing materials behavior and their structure property correlation. This workshop will be much beneficial to faculty members young researchers students and working professionals in the field of material science and also to other allied disciplines to disseminate knowledge about the various applied characterization tools.

**Registration Fee**

- Faculty/ Scientists : Rs.100
- Research Scholars : Rs. 50
- Student : Rs. 50

**Online Payment Details :**

**Name:** Principal Govt. Pt. Shyamacharan Shukla College

**Bank:** Bank of Baroda

**A/c no. –** 86880 10000 3006

**IFSC Code –** BARB0DBDHS

**Topic to be Covered**

1. UV-Vis Absorption Spectroscopy /IR Spectroscopy
2. X-ray Diffraction
3. Photo luminescence
4. Impedance spectroscopy
5. Electron Microscopy
6. Thin film deposition

**Registration Link:** <https://forms.gle/XFbmAKtredbs6dHA7>

**Last Date:** 15.05.2022

**Patron /principal**  
**Dr. Shabnoor Siddiqui**

**Govt. Pt. Shyamacharan Shukla College, Dharsiwa, Raipur**

**Dr. G. Nag Bhargavi**  
(Convenor)  
GPSSC, Dharsiwa

**Dr. Tanmaya Badapanda**  
(Co-convenor)  
CVRGU, Bhubaneshwar

**Dr. Nidhi Dewangan**  
(Co-ordinator)  
GPSSC, Dharsiwa



**Virtual Workshop On**  
**“Advanced Characterization Tools: Fundamentals & Applications”**  
(16<sup>th</sup> - 21<sup>st</sup> May 2022)

**Program Schedule**

<b>Date</b>	<b>Time</b>	<b>Remarks</b>
16.05.2022 (Monday)	12:00PM-12:30PM	<b>Inauguration</b>
	12:30PM-2:00PM	<b>Keynote Address:</b> <i>Speaker- Prof. P K Bajpai, Guru Ghasi Das Central University, Bilaspur</i>
17.05.2022 (Tuesday)	12:00PM-1:30PM	<b>Topic-X-ray diffraction</b> <i>Speaker- Dr. Satya Narayan Tripathy, Sri Sri University, Cuttuck</i>
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	1:30PM-2:00 PM	<b>Valedictory session</b>

Contact us- 9981373012, 8878427915, 7978992841  
[bhargavi.nag24@gmail.com](mailto:bhargavi.nag24@gmail.com)

All registered participants will get Certificate.