

**Department: ME | Date: December 02, 2021**

**FIVE DAY FDP**

*on*

**"ADVANCES IN MATERIALS SCIENCES"**

**01<sup>st</sup> March 2022 to 5<sup>th</sup> March 2022**

An online Five Day FDP on "**ADVANCES IN MATERIALS SCIENCES**" was organized by the Department of Mechanical Engineering, Sree Vidyanikethan Engineering College (Autonomous), Tirupati, Andhra Pradesh.

The online Five Day FDP was scheduled on 01st March 2022 to 5th March 2022 @ 2.00 PM to 4.00Pm.

**Day 1.**

The Coordinator of the event **Dr. Sadanand Sarapure**, Associate Professor, Department of Mechanical Engineering welcomed the Resource person **Dr. P.K. JAIN** and all the participants of this event and provided brief introduction about the FDP.

Later **Dr. Sadanand Sarapure** introduced the resource person **Dr. P.K. JAIN**, Scientist "G" & Team Leader, Center for Carbon Materials, (ARCI), Balapur Post, RCI Road, Hyderabad-500005 to all the participants and later handed over the session to the guest speaker. **Dr. P.K. JAIN** delivered his session on topic "The Synthesis of Carbon Nanomaterial's and their Various Applications".

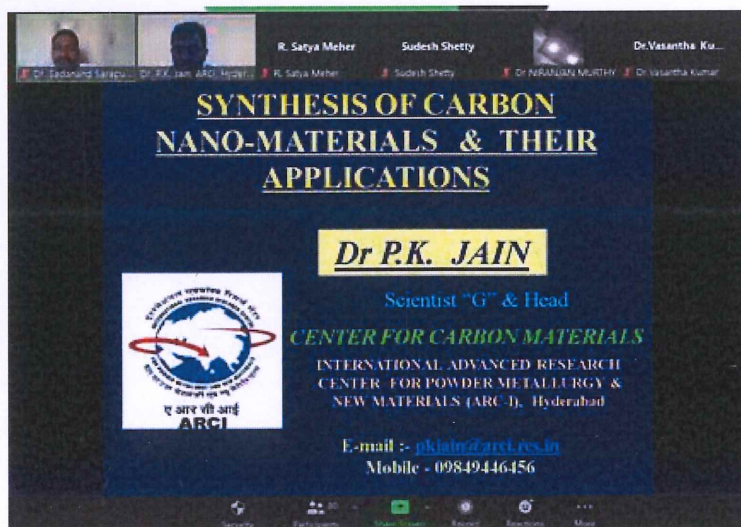


Figure 1 welcoming and introduction of resource person- Day 1

## Day 2.

The Coordinator of the event **Dr. Sadanand Sarapure**, Associate Professor, Department of Mechanical Engineering welcomed the Resource person **Dr. Sanjay R. Dhage** and all the participants of this event. Later **Dr. Sadanand Sarapure** introduced the resource person **Dr. Sanjay R. Dhage**, Scientist "E" Center for Carbon Materials, International advanced Research Center for Power Metallurgy and New Materials (ARCI), Balapur Post, RCI Road, Hyderabad-500 005 to all the participants and later handed over the session to the guest speaker. **Dr. Sanjay R. Dhage** delivered his session on topic "Thin film processes and applications in advanced Energy Materials"

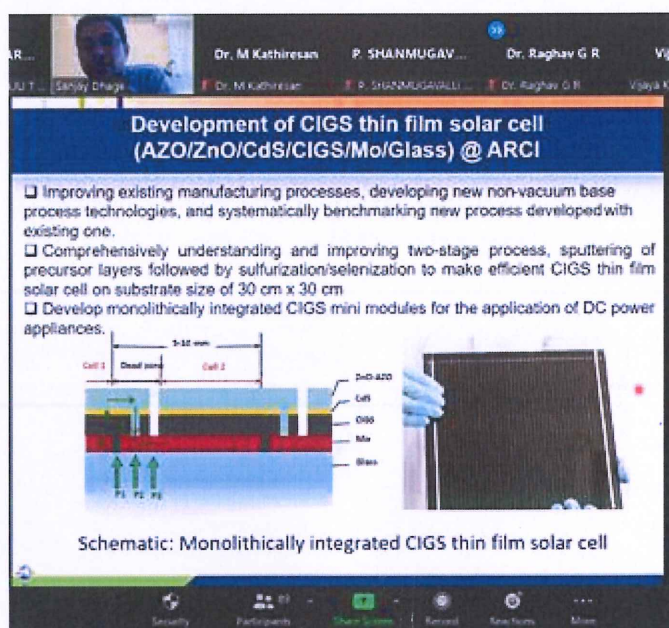


Figure 2 Resource person delivering talk about concepts of design- Day 2

## Day 3.

The Coordinator of the event **Dr. Sadanand Sarapure**, Associate Professor, Department of Mechanical Engineering welcomed the Resource person **Dr. Ravi Kali** and all the participants of this event. Later **Dr. Sadanand Sarapure** introduced the resource person **Dr. Ravi Kali**, DST-INSPIRE Faculty, Center for Carbon Materials, International Advanced Research Center for Powder Metallurgy and New Materials (ARCI), Balapur PO, Hyderabad – 500005 to all the participants and later handed over the session to the guest speaker. **Dr. Ravi Kali**, delivered his session on topic "Role of Advanced Materials in Energy Storage Applications".



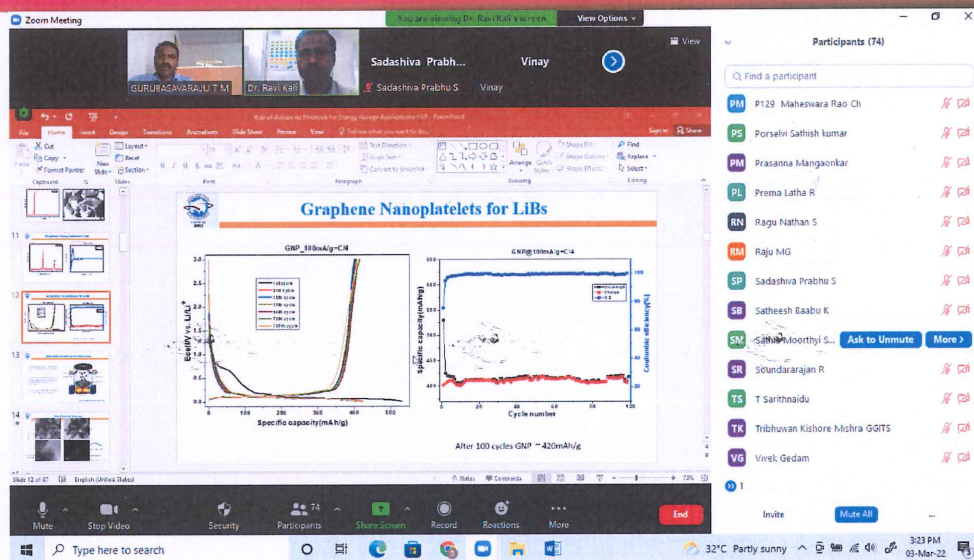


Figure 3 Resource person delivering talk about concepts of design- Day 3

#### Day 4.

The Coordinator of the event Dr. Sadanand Sarapure, Associate Professor, Department of Mechanical Engineering welcomed the Resource person Dr Balaji Padya and all the participants of this event. Later Dr. Sadanand Sarapure introduced the resource person Dr Balaji Padya, Scientist-E, Centre for Powder Metallurgy and New Materials (ARCI), Balapur Post, RCI Road, Hyderabad-500 005 to all the participants and later handed over the session to the guest speaker. Dr Balaji Padya, delivered his session on topic "Understanding and Implementation of Graphene related Materials for Automotive Industry".

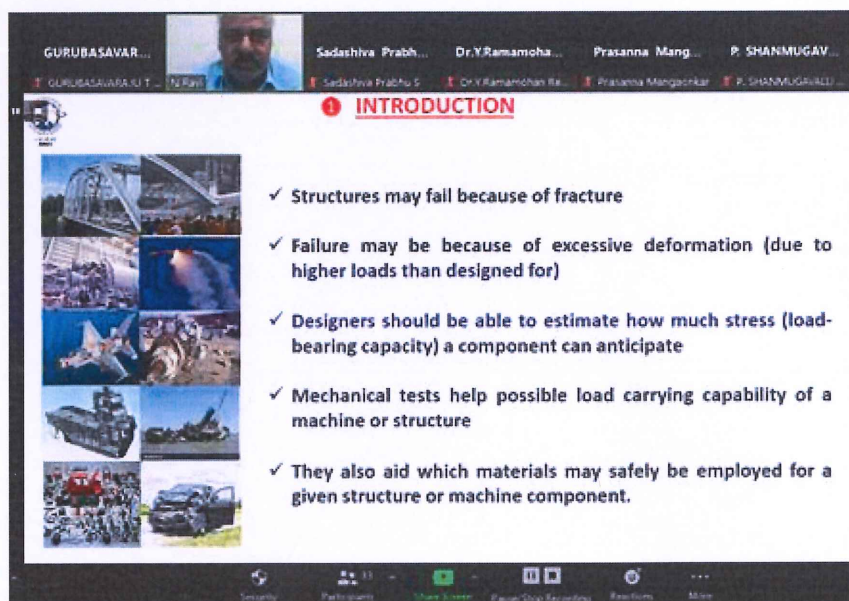


Figure 4 Resource person delivering talk about concepts of design- Day 4

**Day 5.**

The Coordinator of the event **Dr. Sadanand Sarapure**, Associate Professor, Department of Mechanical Engineering welcomed the Resource person **Dr. N. Ravi** and all the participants of this event. Later **Dr. Sadanand Sarapure** introduced the resource person **Dr. N. Ravi**, Scientist 'F', Centre for Engineered Coatings, (ARCI), Balapur Post, RCI Road, Hyderabad-500 005 to all the participants and later handed over the session to the guest speaker. **Dr. N. Ravi**, delivered his session on topic "Insights of Mechanical Characterization of advanced materials"

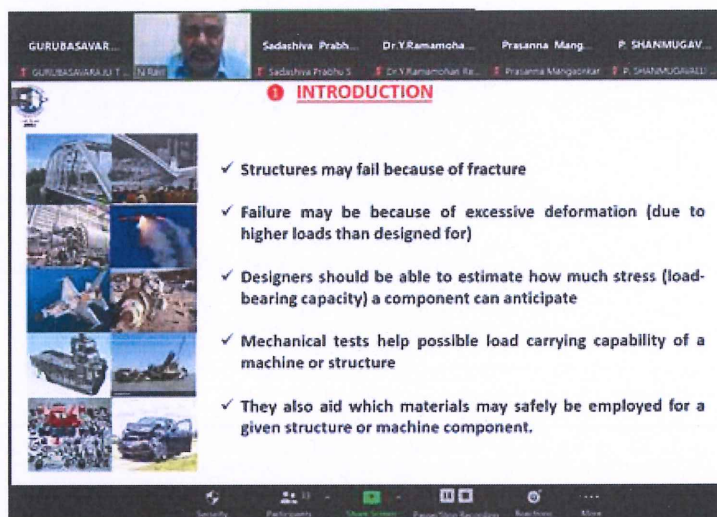


Figure 5 Participants interaction- Day 5

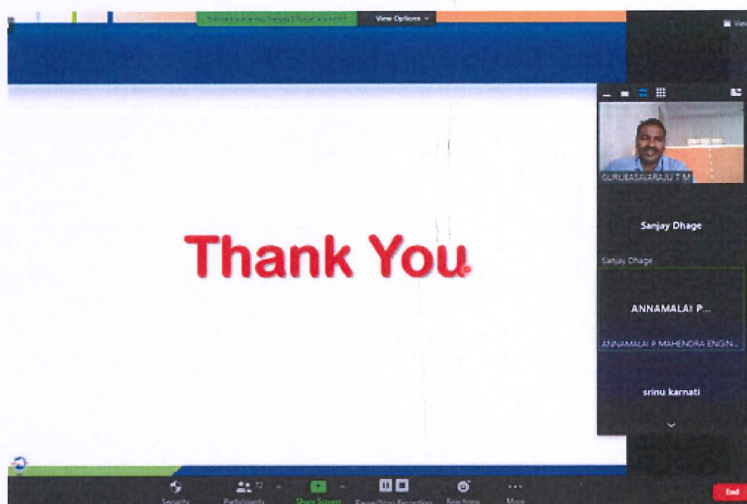


Fig.6. Dr.Sadanand Sarapure delivered vote of thanks at the end of Q&A session

The online event was organized through Zoom platform. A total of 283 faculties from around 8 different states across India from various colleges/ departments actively participated in this event. The Event has received an overwhelming response from the participants.

The FDP brought together people from different domains such as Mechanical Engineering,



Materials, Manufacturing and acquainted the participants from the industries and academia to new materials or technologies exploring the future scope in the areas of advanced materials and their applications.

Material selection and manufacturing processes are playing critical role in today's competitive and sophisticated product development environment. There has been substantial advancement in research and development of polymers, ceramics, semiconducting materials and composites as functional materials in the field of structural, biomedical, sensor and energy applications.


The main objective of this Five Day FDP is to introduce the fundamental principles of development of novel materials and their potential application from an R&D expert to the faculty members of Mechanical engineering as well as other departments and to motivate them to take up research activities in advance materials domain. The resource persons exposed all their real time research experience and important theoretical aspects which he has come across in their scientific research journey.

The outcomes of FDP are as follows:

The participants came to know about the fundamentals of Advance materials and technologies associated to them. Following were the important outcomes of the Five Day FDP

- All the sessions were very much informative. The discussed areas are of great benefit for the participants as the topics match with the current working domain.
- Participants were enlightened with the most widely used advance technologies in this domain.
- Will help in research activities.

**Dr. Sadanand Sarapure**, Coordinator of this event initially thanked the Management of SVEC, The Director, The Principal and Head of the Department of Mechanical Engineering for having extended their support in organizing this expert lecture. Later, he thanked all the participants for their enthusiastic participation. At the end, he conveyed his heartfelt thanks to the Resource persons without whom this program would not have happened. Later he thanked all the stakeholders for their constant support in making this event a grand success.



**Dr. R. SATYA MEHER**  
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