One week online Faculty Development Program on

Materials: Recent Trends & Engineering Applications

2 - 7 June 2020

Dr. V. Basaveswara Rao Mandava

Secretary, AP Akademi of Sciences, Amravathi
Professor and BOS, Chemistry, Krishna University

2 June 2020, 5 - 6:30 PM

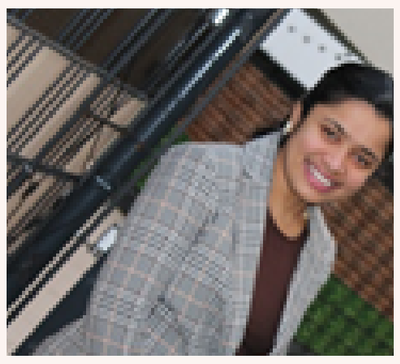
Diversity Oriented Strategies for Multifunctional Biological activities

Dr. Y. Aparna

Professor & Head,
Dept. of Physics, JNTUH
Former Scientist, NPL, New Delhi

3 June 2020, 5 - 6:30 PM

Synthesis and Characterization of Nano materials



Dr. Saranya Azhaarudeen

Scientist,
Technical University of Vienna, Austria

4 June 2020, 5 - 6:30 PM

Coatings Tribology for Protective Applications.

Dr. KVR Murthy

Professor of Physics, MS University of Baroda, Baroda
President, LSI.

5 June 2020, 5 - 6:30 PM

Progress of Light usage and Applications.

Dr.S. Venkata Mohan

Principal Scientist: IICT, Hyderabad

6 June 2020, 10 - 11:30 AM

Engineering Innovations in Environmental Science and Engineering

Dr. R. Balaji Rao

Professor & Head,
Department of Physics,
GITAM University,Hyderabad

7 June 2020, 5 - 6:30 PM

Micro Structural Characterization from Bulk to Nano: Experimental Study.

Inaugural address by

Dr. J. Praveen,
Principal, GRIET

Coordinators
Dr.B. Srinivas Rao,
Professor & Head,Department of H&S
Dr. M. Sridhar,
Professor of Physics, GRIET
Conveners
Dr.CRV Rao,
Professor of Chemistry, GRIET
Dr. J. Kishore Babu,
Faculty of Physics, GRIET

FREE REGISTRATION @
https://forms.gle/Z1Gqw3F8rvafF8BAA

Mail: convenerfdpgriet@gmail.com

E-Certificate to all participants

Queries: 9866444077:

Organizing Secretaries
Dr.G.Patrick
Professor of Physics, GRIET
M.Haritha Kiranmai
Faculty of Chemistry, GRIET

Organized by Faculty of Chemistry and Physics
Department of Humanities and Sciences
Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY (Autonomous)

Department of Humanities and Basic Sciences

EVENT SUMMARY REPORT

Griet/Other institutes/Organization Address:	GRIET		
Department	Chemistry & Physics H & BS	**Professional Body**	**Institutional Body**
Nature of the Event (Workshop / Seminar / Guest Lecture / Tech Talk/ FDP/GD/ Training Program / Quiz / Presentation/Conference/ Industry Visit/Any Co &Extra curricular Activities	FDP		
Title / Theme of the Event	Materials: Recent Trends & Engineering Applications. 1. Diversity Oriented strategies for multifunctional biological activities. 2. Synthesis and characterization of nano materials. 3. Coatings tribology for protective applications. 4.Progress of light usage and applications 5. Engineering innovations in environmental science and engineering. 6. Microstructural characterization from bulk to nano experimental study.		
Details of the Coordinator& Designation	Dr M. Sridhar, Professor in Physics (**Coordinator)** Dr CRV Rao, Professor in Chemistry (**Convener-1)** Dr J Kishore Babu, Assistant Professor in Physics **(Convener-2)**		
Event Dates/Days	From	To	No. of Days
	02-6-2020	07-6-2020	6

<table>
<tr><td>Details of the Speaker / Guest
Organization
Address:</td><td>1. Dr. V. Basaveswara Rao, Professor, Dept. of chemistry, Krishna University, MachiliPatnam, Andhrapradesh.

2. Dr. Y. Aparna, Professor, Dept. of Physics, JNTUH, Hyderabad.

3. Dr. Saranya Azhaarudeen, Scientist, Rhi Magnesita, Austria.

4. Dr. KVR Murthy, Professor, Dept. of Physics, MS University of Baroda, Gugarat.

5. Dr. S. Venkata Mohan, Principal Scientist, Dept. of chemistry, IICT, Hyderabad, Telangana.

6. Dr. R. Balaji Rao, Professor, Dept. of Physics, GITAM University, Hyderabad, Telangana.</td></tr>
<tr><td>Participants
(Teaching Faculty / Non-Teaching Faculty / Students)</td><td>
<table>
<tr><th>No. of Faculty</th><th>No. of UG students</th><th>No.0f PG Students</th><th>No. of outside participants</th><th>Total Participants</th></tr>
<tr><td>24</td><td>Nil</td><td>Nil</td><td>766</td><td>790</td></tr>
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</td></tr>
<tr><td>Faculty Names & Designation</td><td>Registration form attached</td></tr>
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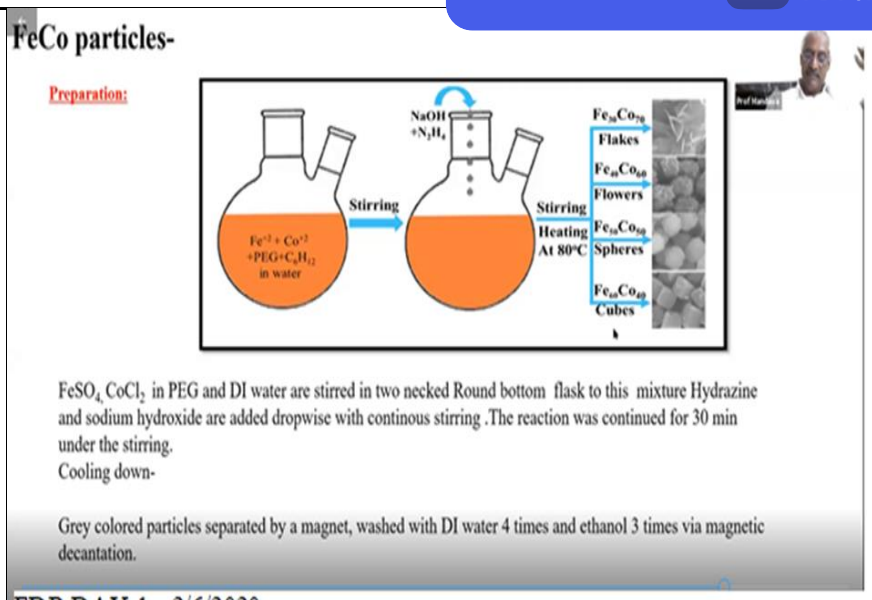
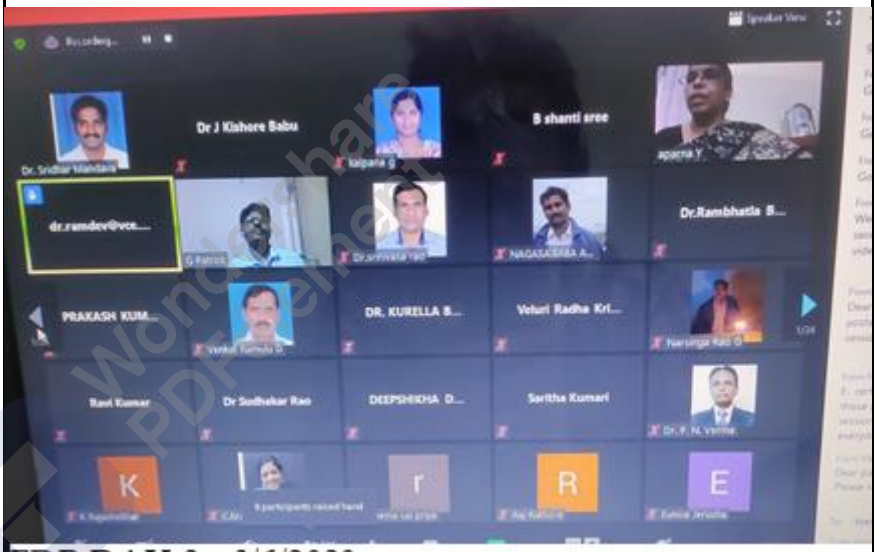
Summary of the Event	1."Diversity Oriented strategies for multifunctional biological activities" Speaker: Dr.Mandava Basaveswara Rao In this lecture, the speaker has discussed the synthesis of a variety of organic molecules as possible drug candidates for covid-19 and cancer. Favipiravir is a drug under intense study as a possible molecule. One of the interesting group of molecules studied is on anticancer evaluation of carbazole fused amino pyrimidine derivatives. Novel thiadiazole derivatives also were discussed at length. His lecture was mainly focused on organic reactions involving extensive synthesis and reaction mechanism. Many faculty members highly appreciated the presentation involving hardcore preparatory methods. Faculty members with organic chemistry background are benefitted most. 2." Synthesis and characterization of nano materials" Speaker: Dr. Y. Aparna In this lecture, the speaker has discussed the origin of nanotechnology, detailed discussion about synthesis of nanomaterial's using various techniques and Applications of nano materials are discussed. Faculty of physics as well as chemistry benefitted from the lecture. 3. "Coatings tribology for protective applications" Speaker: Dr.Saranya Azhaaruddin The speaker has explained tribology in depth by taking relevant examples. She has got lot of industrial experience abroad in the area of tribology. She has gone into fundamentals and then explained how the principles are applied. Lubrication mechanism is used to show how friction is reduced between two surfaces rubbing against each other. Boundary lubrication mechanism is easily understood with the visuals she has projected. Hydrodynamic lubrication has also attracted the interest of the audience because of the good quality visuals she has shown. Everybody appreciated her wonderful lecture. 4. "Progress of light usage and applications" Speaker: Dr. KVR Murthy In this lecture speaker has discussed about light usage, generation, some optoelectronic devices such as LED,SEMICONDUCTOR DIODES,SOLARCELLS, this session is very helpful for faculty of physics and chemistry also, to learn about new candidates of light generation.

	5.“Engineering innovations in environmental science and engineering” Speaker: Dr. S.Venkata Mohan The speaker with his extensive environmental science and engineering background has explained environmental engineering issues well. He has used his experience in executing his projects at IICT in projecting the matters related to energy. Bioengineering problems related to waste water treatment were explained by him with relevant practical examples. He has well explained topics in the areas of Advanced Waste Remediation, Aciodogenesis, Microbial Electro genesis, Photosynthesis, CO_2. 6. “Microstructural characterization from bulk to nano experimental study” Speaker: Dr.R Balaji Rao In this lecture, speaker discussed various characterization techniques like SEM, EDAX, XRD.This session is very useful to both physics and chemistry faculty because characterization is common in both of the subjects, this session is very useful to researchers to improve their characterization techniques.
IRG (in rupees**)**	Nil
Expenditure (in rupees**)**	Nil
POs attained with this Event (number and description)	PO (a): apply knowledge of maths, science and fundamentals. PO (d): ability to function on multidisciplinary teams. PO (j) : develop knowledge of contemporary issues.

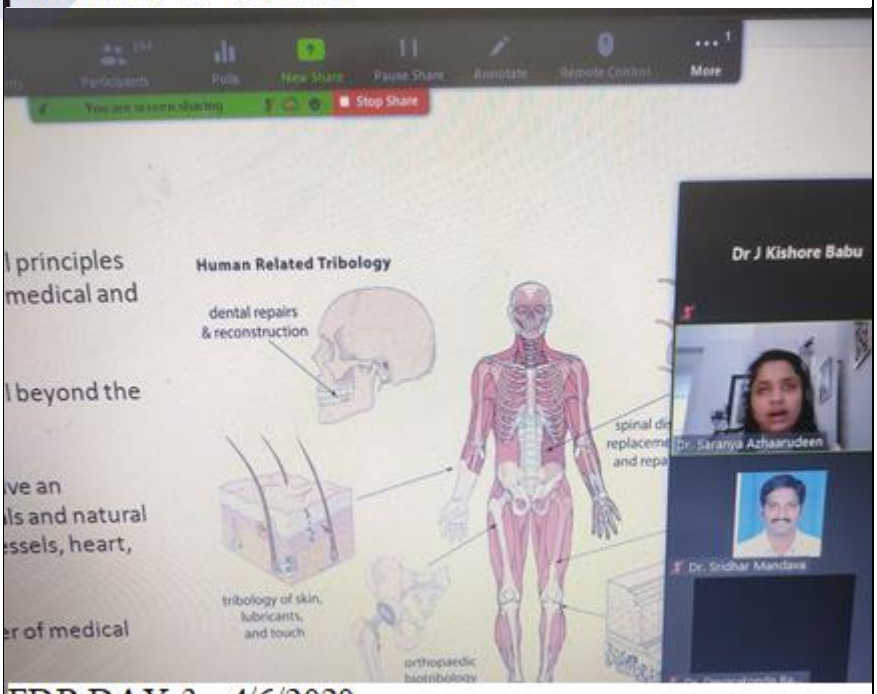
Photographs of the event
(Hard copy and Soft copy)



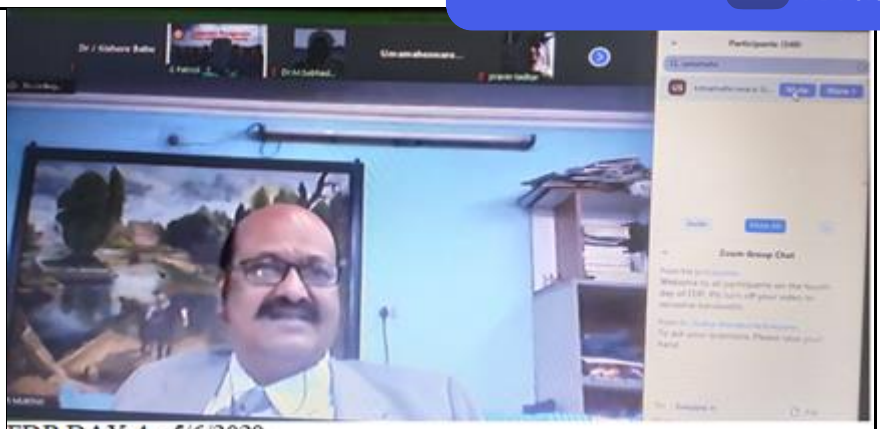
FDP DAY 1 - 2/6/2020



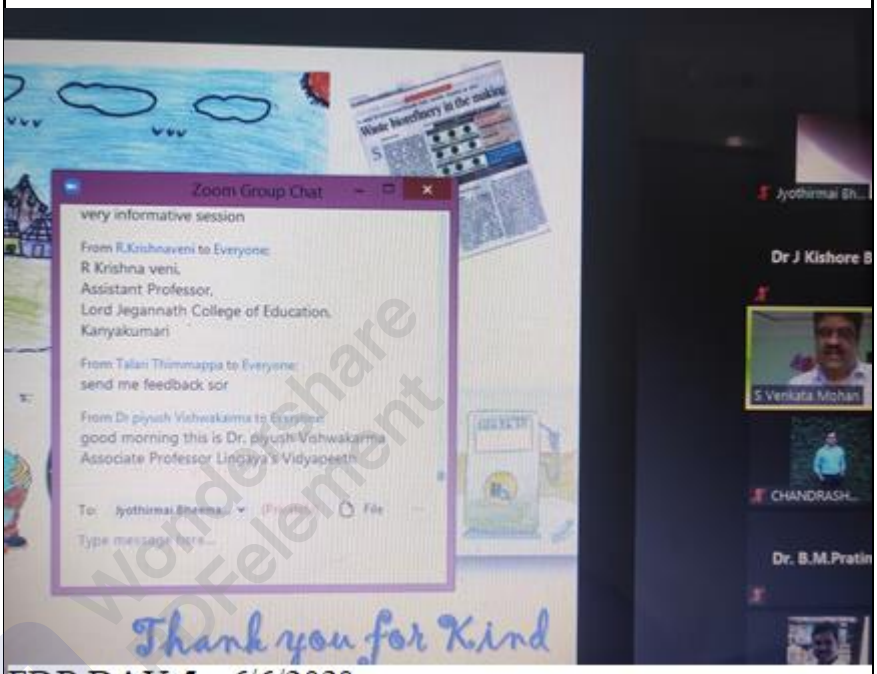
FDP DAY 2 - 3/6/2020



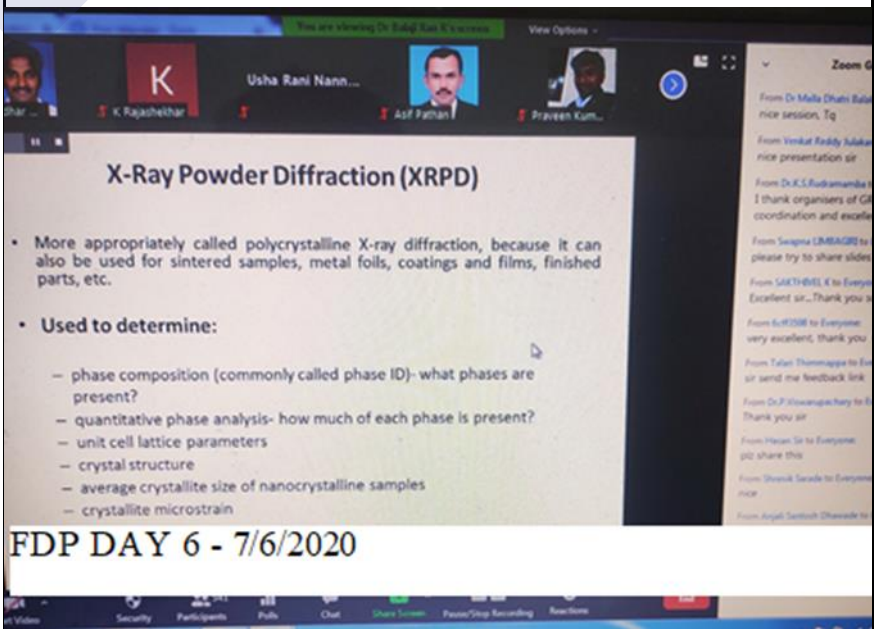
FDP DAY 3 - 4/6/2020



FDP DAY 4 - 5/6/2020



FDP DAY 5 - 6/6/2020



FDP DAY 6 - 7/6/2020

Proofs: **1.Certificates copies** **2.Profile of Speaker**	Profile of the speaker and program leaflet are enclosed.

(Dr.M.Sridhar)	(Dr.CRV Rao)	(Dr. J.Kishore babu)	(Dr.BS Rao)
Signature of Coordinator	Signature of Convener-1	Signature of Convener-2	Signature of HOD

GOKARAJU RANGARAJU

Institute of Engineering and Technology

(Autonomous)

{{Certificate ID}}

One week online Faculty Development Program on Materials: Recent Trends & Engineering Applications

CERTIFICATE

This is to Certify that ***{{Full Name}},*** {{Designation}} from {{Institution Name}} has attended One Week Online **FDP** on ***Materials: Recent Trends & Engineering Applications*** during 02 - 07 June 2020.

Dr J Kishore Babu	Dr CRV Rao	Dr M Sridhar	Dr B Srinivasa Rao	Dr Praveen Jugge
Convener	Convener	Coordinator	HOD - H&S	Principal