



Koneru Lakshmaiah Education Foundation

(Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

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Campus: Green Fields, Vaddeswaram - 522 502, Guntur District, Andhra Pradesh, INDIA.

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Department of PHYSICS

DATE: 31.01.2022

Report on the National Virtual Seminar on Role of Materials in Science and Engineering jointly organised by the Dept. of Physics, KLEF, Vaddeswaram and Materials Research Society of India (MRSI), India on 31/01/2022 from 2:00 to 4:00 pm IST

The National Virtual Seminar started exactly at 2 pm and waited for few minutes to join for the remaining participants. The session began with addressing the participants by the Co-Convenor (Dr KRK) followed by the HOD where Dr GSS madam highlighted about the department (Academics and Research) briefly to the participants and resource persons with the opening remarks of the seminar. Also, the Convenor Dr MVVK spoke few words about the importance of seminar on Materials Science & Engineering. After this, immediately we started the presentations by our resource persons one by one by giving their introduction to the participants. The seminar ended with a vote of thanks given by the Co-Convenor (Dr KRK) and finally requested the participants to fill the feedback form where the link is shared in WebEx chat box to get their e-certificates. With this, the seminar ended on a grand note and very successful in holding 68 participants online throughout the seminar duration which went for about 1 h 50 min.

Information communicated on 28/01/2022 to get registrations from the participants and the same was shared to the previous participants through whatsapp, email and other social media platforms.

The Department of Physics (DST-FIST Sponsored), KLEF, Guntur jointly organised a **National Virtual Seminar on Role of Materials in Science and Engineering** in association with Materials Research Society of India (MRSI), India.

The webinar details are as follows:

Seminar Topic: **Role of Materials in Science and Engineering**

Date: 31 January 2022 (Monday)

Time: 2:00 pm – 4:00 pm (Indian Standard Time; UTC+5:30 h)

Online Platform: Cisco WebEx

NO REGISTRATION FEE

Registration Link: <https://forms.gle/JuBX82vbXJL2xRsKA>

Resource Persons:

1. Dr. Madhuri Wuppulluri, Associate Professor, School of Advanced Sciences, VIT, Vellore, Tamilnadu.

2. Dr Mahamuda Shaik, Associate Professor, Dept of Physics, KLEF, Vaddeswaram, Guntur, AP.

E-certificate will be provided to the registered participants those who submitted feedback form and attending all the sessions.

Join the meeting here:

<https://kluniversity.webex.com/kluniversity/j.php?MTID=mc58933ece46ae47a160d5d4c059b945f>

For any queries on the webinar, the following are contacted.

Dr. MVVK Srinivas Prasad, Asst. Prof., Dept of Physics, KLEF, Vaddeswaram, AP.

Email:- mutyasrinivas@kluniversity.in ; Mobile:- 9985336448.

Dr. K. Raghavendra Kumar, Assoc. Prof. & Co-Convenor, Dept. of Physics,

Email: rkkhanike@kluniversity.in, Mobile: 9391392189.

STAY HOME, STAY SAFE, STAY HEALTHY#####

With regards

Seminar Chair

Dr. G. Sunita Sundari, Associate Professor & HOD, Department of Physics, Koneru Lakshmaiah Education Foundation (KLEF), Vijayawada, Andhra Pradesh.

1. Poster designed for communication purpose with the National Virtual Seminar

National Virtual Seminar on
ROLE OF MATERIALS IN SCIENCE & ENGINEERING

Resource Persons

No Registration Fee

Date:- 31st January 2022
Time:- 2:00 - 4:00 PM
Registration link:- <https://forms.gle/JuBX82vbXJL2xRsKA>
Platform:- Cisco WebEx

Registration is free.
E-certificate will be provided to all participants

Join for updates
<https://chat.whatsapp.com/C6445D1M0f550V5GVNVWZ>

Seminar Chair: Dr. G. Sunita Sundari, HOD, Dept. of Physics, K. L. University.
Convener(s): Dr. M.V.V.K. Srinivas Prasad & Dr. K. Raghavendra Kumar, K. L. University

2. Whats app group created for easy communication and updating the information to registered participants. Online meeting link shall be provided through Whatsapp group.

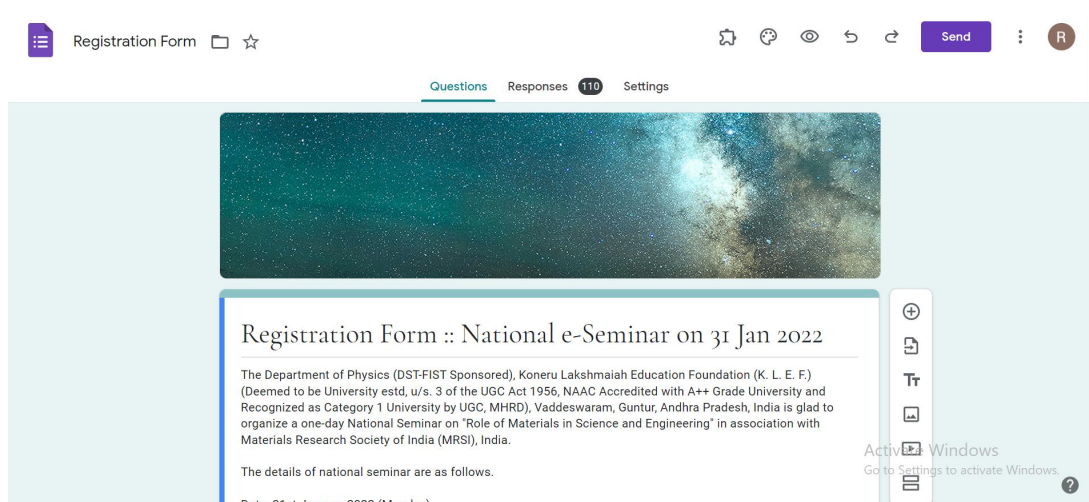
The Department of Physics (DST-FIST Sponsored), KLEF, Guntur jointly organised a **National Virtual Seminar on Role of Materials in Science and Engineering** in association with Materials Research Society of India (MRSI), India **was conducted and completed successfully on 31/01/2022 between 2:00 and 4:00 pm (IST).**

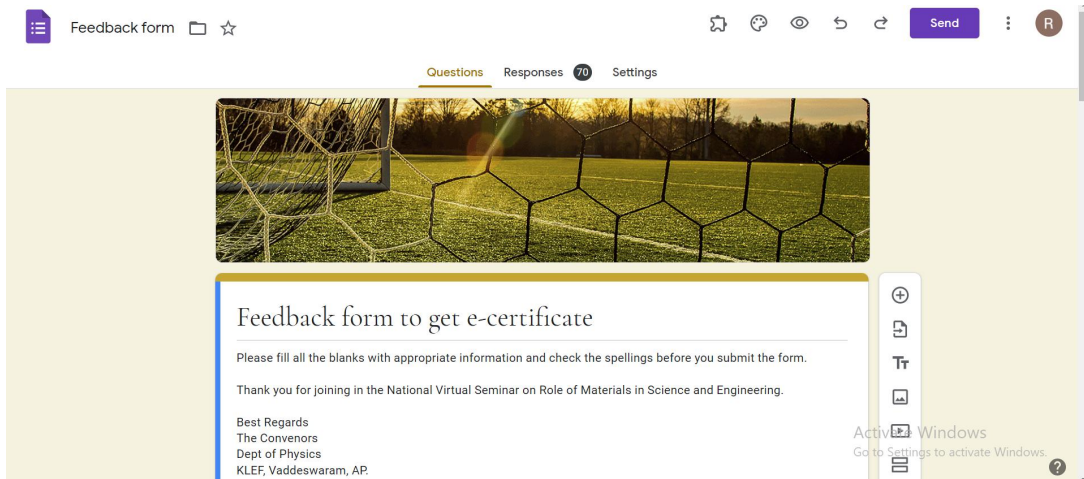
Thanks to the CCO & Director, Dean-MHS, Principal-Sciences, Coordinator of FED, HoD (Dept of Physics), and Physics faculty on successful completion of National Seminar. Special thanks to the Management and higher authorities of KLEF, Vaddeswaram, Guntur.

1. E-Certificates were issued to participants who registered, participated/attended the webinar, and successfully submitted the feedback form. A Sample certificate is attached here.



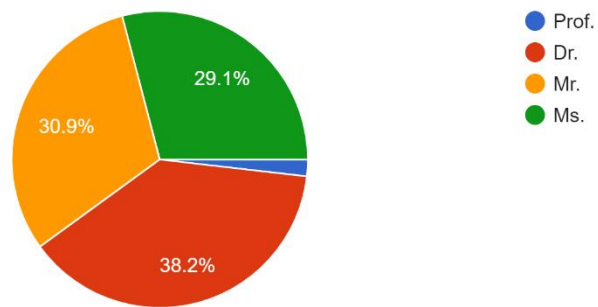
2. Registration and feedback forms and responses from the participants with statistics
Total registrations received: 110





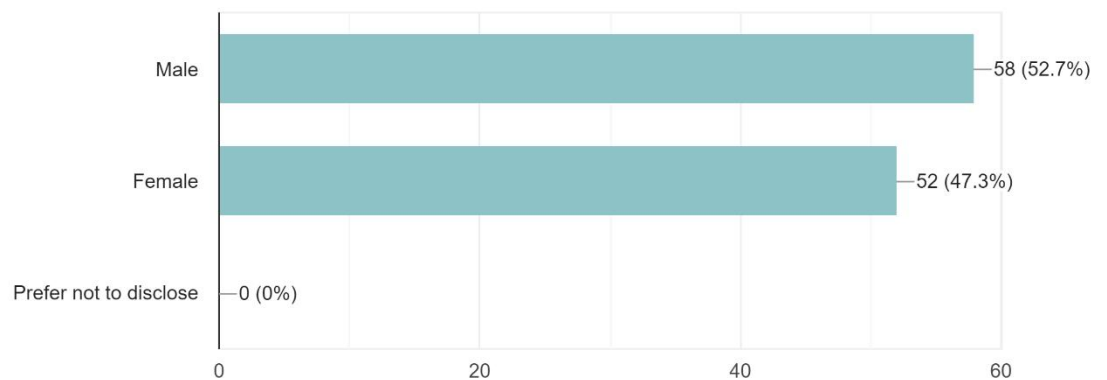
Salutation

110 responses



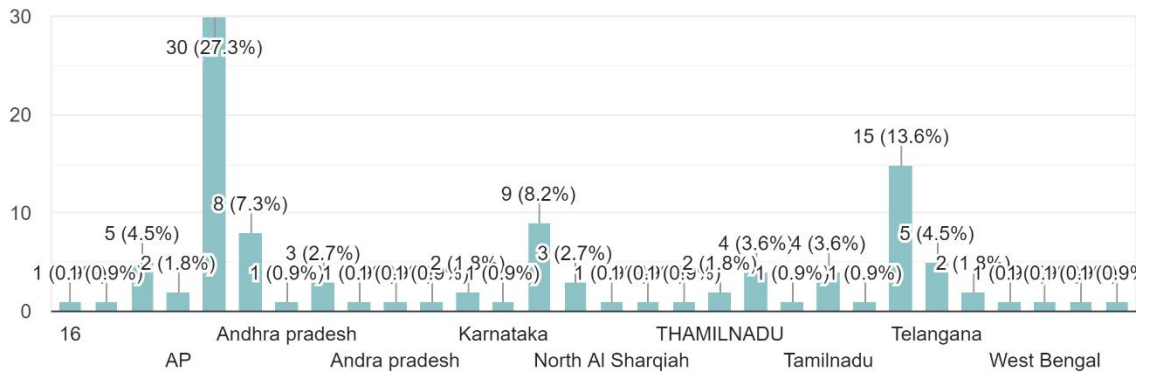
Gender

110 responses

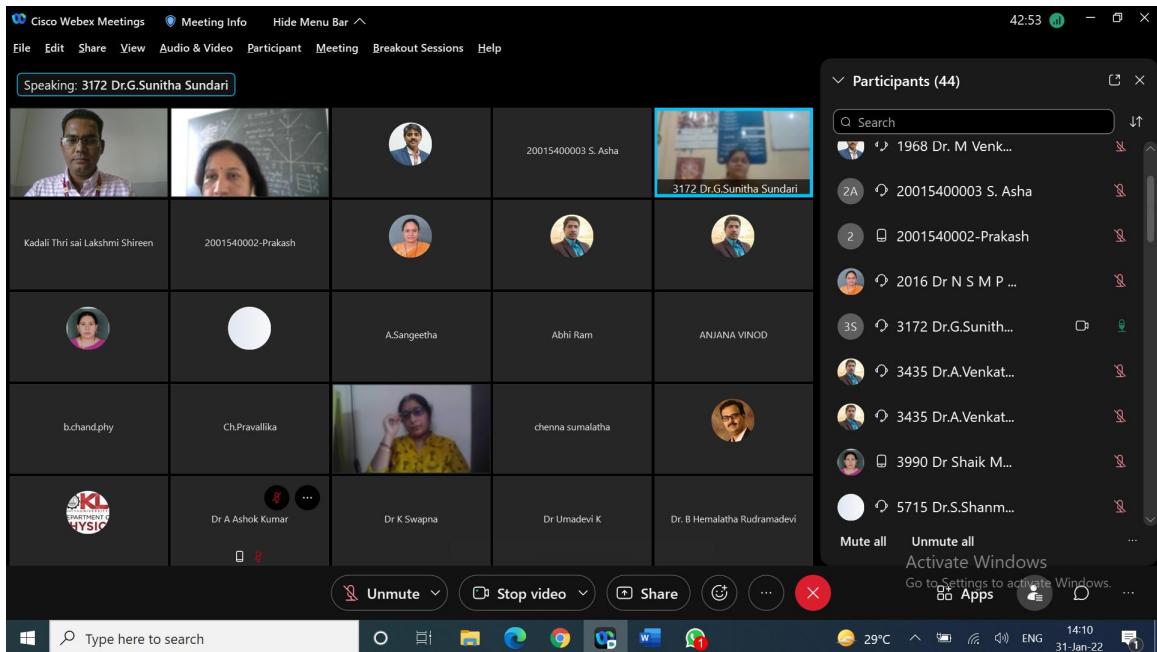


State/Province

110 responses



3. Screenshots/photos taken during the international webinar are attached below as proof.



Cisco Webex Meetings Meeting Info Hide Menu Bar ^

File Edit Share View Audio & Video Participant Meeting Breakout Sessions Help

Speaking: 3435 Dr.A.Venkateswara Rao

Participants (55)

3435 Dr.A.Venkateswara Rao

20015400003 S. Asha 3172 Dr.G.Sunitha Sundari

Kadali Thiri sai Lakshmi Shireen

2057 Dr. M V V K Srinivas Pras... 2057 Dr. M V V K Srinivas Pras... 3172 Dr.G.Sunitha Sundari

A.Sangeetha Abhi Ram

Anitha reddy 2 ANJANA VINOD b.chand.phy Ch.Pravallika

chenna sumalatha Dr K Swapna Dr. A Ashok Kumar

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Type here to search 29°C 14:17 31-Jan-22

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Participants (54)

Viewing Madhuri W's applica...

Hybrid Microwave Sintering Of Ceramics For Electrical Applications

@ National Virtual Conference on Role of Materials in Science and Engineering K L University

By Dr Madhuri W Associate Professor CFM, VIT, Vellore 632014

VIT Vellore Institute of Technology

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Participants (68)

Conventional Sintering

- Heat is generated by external heating elements
- Heating via radiation, conduction and convection
- Muffle furnace
- SiC, Nichrome, Kanthal etc
- Arranged on the side walls or roof of the muffle
- Top ceiling of the muffle
- High initial and running costs




- High thermal gradients
- Thermal stress
- Large grain growth
- Micron size particles

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Type here to search 29°C 14:45 31-Jan-22

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Dr K Swapna

3172 Dr.G.Sunitha Sundari

Synthesis Techniques

Solid State Reaction Method

- Microwave Solid State Reaction method
- Raw Materials: Fe_2O_3 , NiO and MgO (99.8% purity, sigma Aldrich)
- Weighed according to Stoichiometric ratio
- Grinding for 14 h
- Disc shaped cakes are pre-sintered at $800^\circ C/30min$
- The Green samples are ground for 4 h to prepare pellets and toroids (sintered at $1000^\circ C/30 m$)
- The resultant samples are characterized using XRD

Sample preparation

↓

Weighing & mixing

↓

Pre-sintering ($800^\circ C/30min$)

↓

Grinding for 4hrs

↓

Binder adding (PVA)

↓

Pressing (1 ton)

↓

Microwave sintering ($1000^\circ C/30min$)

↓

Characterization

Mute

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Participants (68)

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- 2016 Dr N S M P ...
- 2057 Dr. M V V K...
- 3172 Dr.G.Sunith...
- 3435 Dr.A.Venkat...
- 3435 Dr.A.Venkat...
- 3990 Dr Shaik M...
- 5715 Dr.S.Shanm...
- 5745 Dr.Monima ...



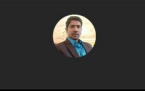
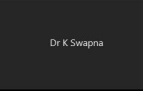
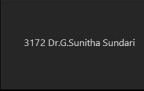

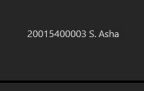
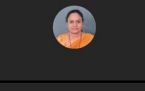
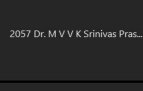
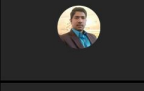
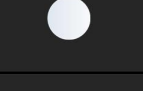
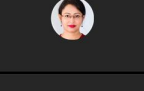
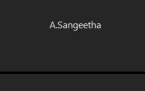
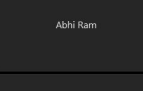
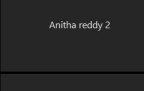
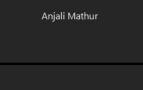
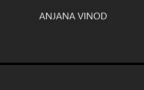

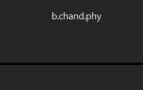


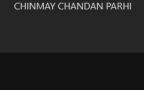
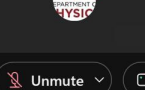
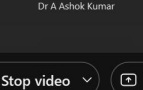
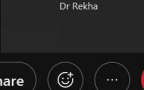
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Speaking: 1968 Dr. M Venkateswarlu

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- 3435 Dr.A.Venkat...
- 3990 Dr Shaik M...
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- 5745 Dr.Monima ...
- A.Sangeetha

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Role of the Optical Properties of Materials in Science & Engineering



Dr. Mahamuda Shaik
Associate Professor
Department of Physics, K L E F



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- A.Sangeetha

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3990 Dr Shaik Maham... Dr. K Swapna

Role of Rare Earths in Various Fields

wt% (REO)

- Catalysts: 21%
- Glass Industry: 22%
- Magnets: 20%
- Alloys Compounds: 9%
- Metallurgy: 9%
- Phosphors: 9%
- Other: 6%

Applications: Fiber lasers & amplifiers, Energy Materials, Displays & LED materials, Optical amplifiers, Solid state lasers, Waveguides.

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- 5745 Dr.Monima ...
- A.Sangeetha
- AR Abhi Ram
- A2 Anitha reddy 2
- AM Anjali Mathur
- AV ANJANA VINOD
- A arathi

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3990 Dr Shaik Maham...

Sm³⁺ ions doped OFB Glasses

Absorption Spectra UV-vis-NIR OFBSm15

PLE Spectra Intensity (a.u.) Wavelength (nm)

PL Spectra Intensity (a.u.) Wavelength (nm)

CIE Diagram & Co-focal Images CIE Chromaticity Coordinates

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- 3435 Dr.A.Venkat...
- 5715 Dr.S.Shanm...
- 5725 Dr.A.Sendil ...
- 5745 Dr.Monima ...

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3990 Dr Shaik Maham...

PL Excitation Spectra

Intensity (a.u.) Wavelength (nm)

PL Spectra Intensity (a.u.) Wavelength (nm)

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- 5725 Dr.A.Sendil ...
- 5745 Dr.Monima ...

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