

NATIONAL PHYSICS WEBINAR

NTR GOVERNMENT DEGREE COLLEGE FOR WOMEN

(Re-Accredited with "B" Grade by NAAC), MAHABUBNAGAR -509001



ONLINE WEBINAR

On the title

"Fundamentals of LASER and its Applications"

Organized by

Department of Physics

NTR Government Degree College for Women, Mahabubnagar

in Association with IQAC

on 17th March, 2023 at 11:00 AM Onwards

Live on ZOOM & You Tube

Registration Link

<https://forms.gle/6u5hhG3ozGqTaVWu7>



Resource Person
Dr. Suresh Sripada
Asst. Prof., JNTUH
Jagityal

No Registration Fee

E- Certificates will be issued to all the participants after Submission of the feedback Form

Surayya Jabeen
Head Dept. of Physics
Webinar Convener

Dr.T.Vijayalaxmi
Head Dept. of Mathematics
IQAC Coordinator

S. Gangadarhar
Chairman & Principal
NTR GDC (W), MBNR

TOPIC: FUNDAMENTALS OF LASER AND IT'S APPLICATIONS

Resource Person: Dr. Suresh Sripada

Assistant Professor

Department of Physics

JNTUH UNIVERSITY COLLEGE OF ENGINEERING

Jagtyal - Nachupally – 505501

Telanagana state

AIM OF THE WEBINAR:

The main aim to conduct this webinar is to provide all physics students & faculty

Throughout the state with remote access to an in depth presentation focused on fundamentals of LASER and its applications.

The goal of the webinar is to educate and demonstrate information regarding lasers and its applications in various fields of life to all the students.

This webinar will help students to improve their knowledge and stay up-to-date with modern technology and new applications of lasers which are lesser known to students.

CONTENT OF THE WEBINAR:

LASER an acronym for "LIGHT AMPLIFICATION BY STIMULATED EMISSION OF RADIATION"

This webinar has focused on detailed explanation of fundamental of LASER,

Different types of LASERS and their applications

- Important concepts related to LASER light like spontaneous & stimulated emission, population inversion, pumping, active system etc.
- Difference between ordinary light & LASER
- Important characteristics of LASER :
 - Monochromatic
 - Coherent
 - High directionality
 - Highly intense

➤ Different types of LASERS

GAS LASERS (He-Ne LASER)

RUBY LASER

Semiconductor laser

➤ APPLICATIONS OF LASER

Barcode scanner

Medical field (treatment of different surgeries like eye, kidney stone, cancer tumor etc.)

In military (laser guns, laser guided missiles etc.)

Optical fiber communication

In metallurgy

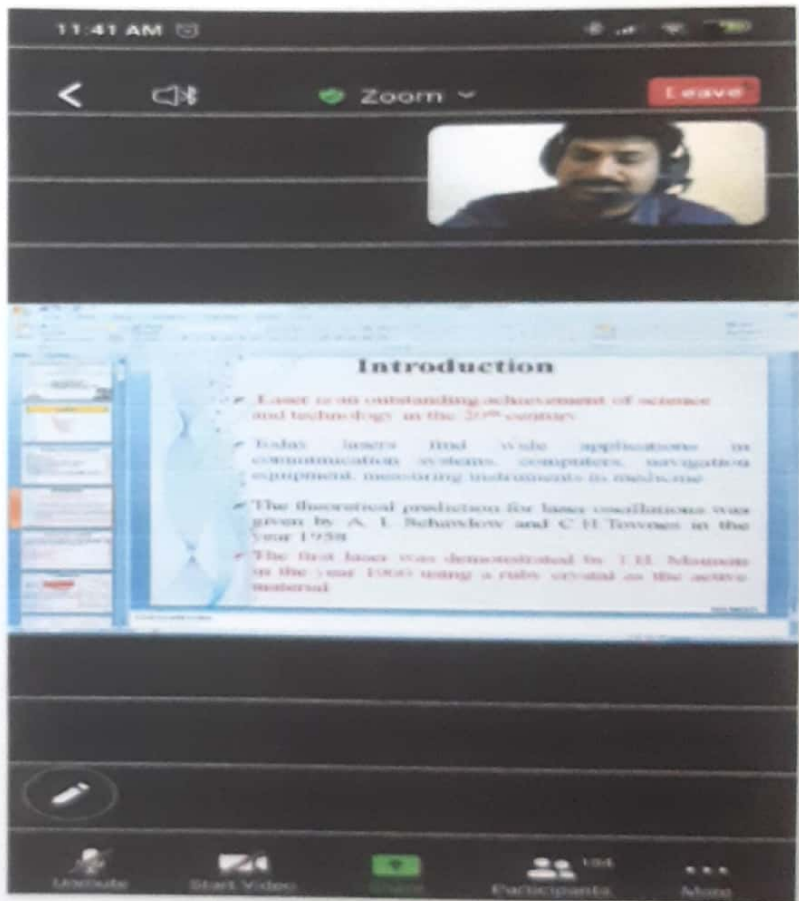
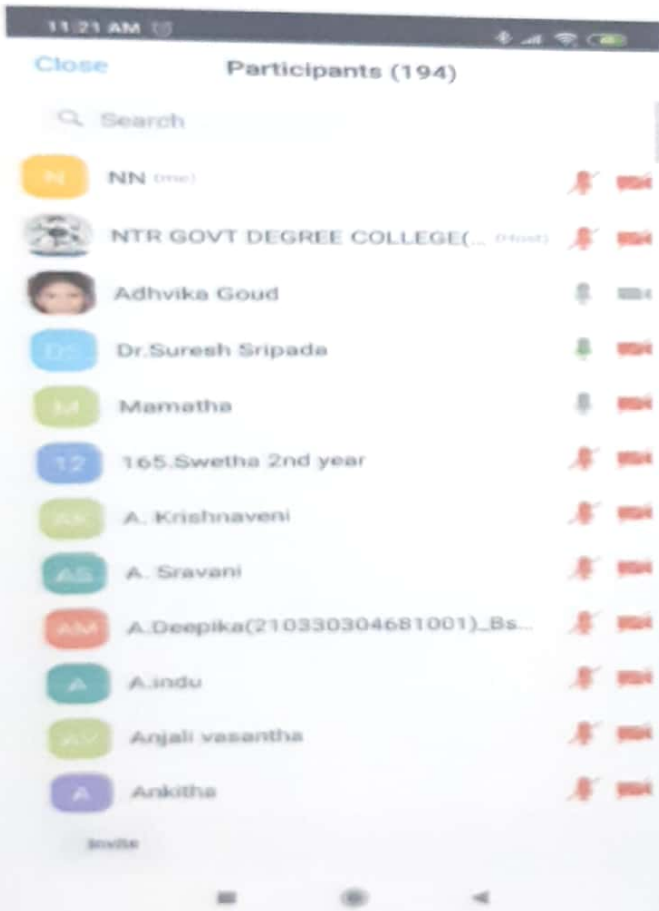
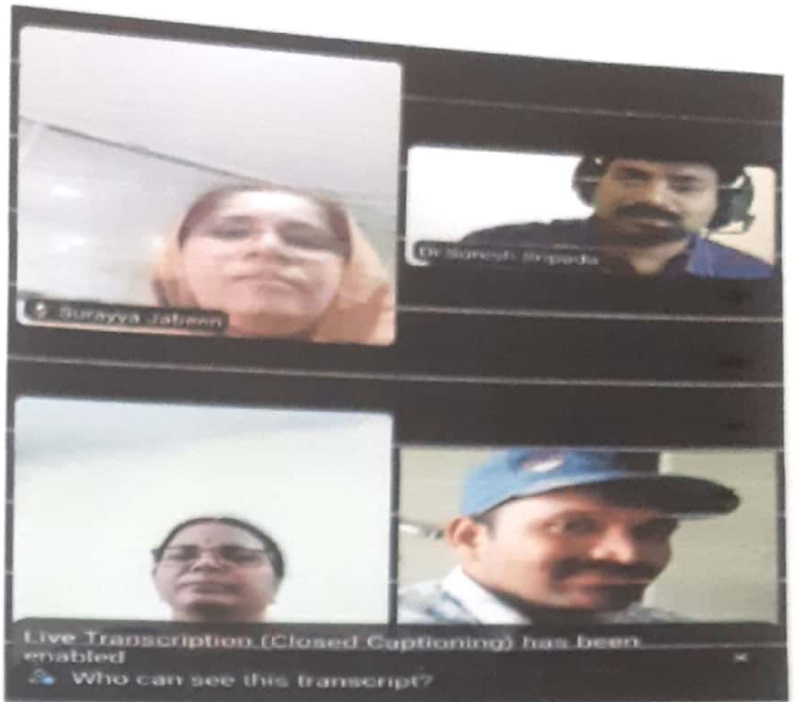
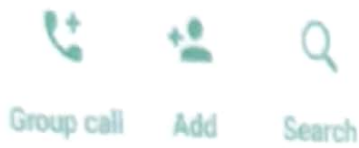
In robotics and toys

In entertainment industry (laser shows) etc.



Dept of Physics -Online Webinar

Group · 351 participants



Signature

Signature