

Guest Lecture on ‘LASER’

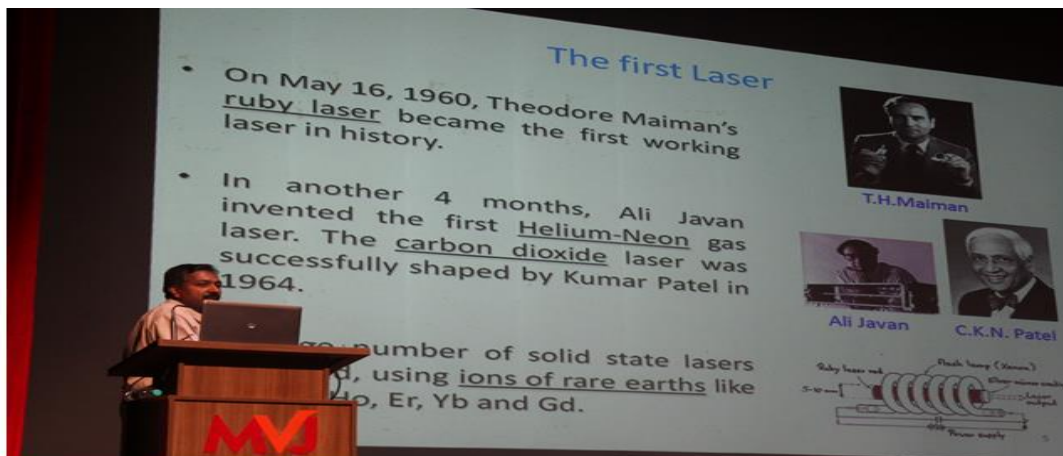
The Department of Physics, MVJCE, organized a Guest Lecture on ‘LASER’, as a part of the Lecture series for the students of 1st year, at Dr. M V Jayaraman auditorium, on 5th October, 2019.



Mrs. Uma Praveen, HOD Physics, introducing the Guest to the students.

The Resource Speaker was **Dr. REJI PHILIP**, who is presently working in Raman Research Institute, Bangalore, as a Professor. She has specialized in ultrafast laser-induced plasmas, ultrafast dynamics, and nonlinear optical properties of nanostructured materials. Mrs. Uma Praveen, HOD, Department of Physics, introduced the Speaker and the topic of the Lecture to the students.

In his Lecture, **Dr. Philip** discussed the basics of LASER, types of Laser and their working principles. He also introduced the students to the problems that can be solved using the laser method, providing exclusive examples. He shared his own experiences on working with laser, the challenges and risks he has faced, and the expensive R&D projects, and the rigid, highly structured innovation processes.



Dr. Reji Philip delivering the lecture on LASER

The following topics were covered in this Guest Lecture:

Laser:

1. What is a laser?
2. Principles of working of a laser
3. Population Inversion - Methods of achieving Population Inversion
4. Characteristics of laser
5. Laser Construction
6. Types of lasers: Ruby laser, Nd:YAG laser, Helium-Neon laser
7. Applications of lasers



Guest Lecture organized by the Department of Physics

Mr. Nagaraj Sitaram, Principal, MVJCE, addressed the students. Finally, the vote of thanks was given by Ms. Krutika L Routray, Asst. Professor, Department of Physics. We are immensely grateful to **Dr. Reji Philip** for his support and the valuable knowledge that he shared with our students and faculty. Our students had a very informative and interactive session with Dr. Reji Philip, and they have been motivated to work with LASER related equipment.

Outcome of the Guest Lecture

- Students gained an experience of how real problems can be dealt with, through laser derived sources.
- The Lecture helped in enhancing their working skills.
- The students learnt the latest techniques and embraced ideas of interdisciplinary thinking and performance in projects.
- Students acquired knowledge about LASER and gained ideas to work in a learning environment.
- This lecture motivated the students to enjoy their academic sessions on Laser, as it is a part of their syllabus.