GUESTLECTURE SERIES

On

RAMAN EFFECT: REMARKABLE BREAKTHROUGH IN THE HISTORY OF SCIENCE



The Department of Physics of Keshav Memorial Institute of Commerce and Sciences organized a Guest lecture for the students of B.Sc. (M.P.C&M.P.Cs) I,II,III years on 16th September 2017 at Swamivivekananda hall. The Guest speakers were Prof. Dr. G. Upender working in Nizam college, Prof. Dr. D. Chinnikrishna HOD of physics in Bhavans New science college.



The guest lecture was preceded by a short talk by the Principal-

Dr. J. Nageshwara Rao. In his talk he emphasized the importance of physical science in research field with specific examples and motivated the students towards practical knowledge.



First session of guest lecture started around 10:30a.m and completed around 11:40a.m.

He delivered the lecture on the topic "Raman effect a Remarkable breakthrough in history of science"

The session was made interactive by thought provoking questions posed by Dr. Upender to the students.

The session went on by addressing the various topics of Raman effect like

- 1. Glimpses of Raman life how he selected for Noble prize for his hard work.
- 2. Electromagnetic spectrum and their range of frequencies, wavelengths.
- 3. What ideas led Raman to introduce Raman effect.
- 4. Explained the phenomena of scattering, reflection in between earth atmosphere and sunrays.
- 5. Highlights of Raman spectroscopy
- 6. How invention of laser makes Raman experiment quite useful.
- 7. Applications of Raman effect.
- 8. Spectra of air, oxygen, nitrogen molecules.
- 9. Life history of Raman.

10. Opportunities in physics for U.G students



His emphasis was more on applications of electromagnetic theory in real life situation.

The sessions went on by addressing the various topics like

- 1. Discoveries of electricity and magnetism.
- 2. Need of studying electromagnetism
- 3. Coulombs law, Gauss law,
- 4. How the magnetic field will be produced from electricity.
- 5. He also discussed Faradays law and about transformers.
- 6. About transmission of electric power
- 7. He explained in detail about self-inductance intensity of EM radiations

He concluded the session by presenting video show casing the target in reality by motivating the students to join in research field by writing IIT-JAM.

The lecture was proven to be very inspiring and informative for the students.

After a short break two of our students presented power point presentation on the topic outer space.

The event ended with honorarium to the guests Dr.Upender & Dr. Chinnikrishna by presenting memento and shall.



