

A Report on Virtual Guest Lecture on "Physics for Engineering and Technology: Content and Tools for study" Organized by Department of Physics on 20.04.2024



Report Submitted by: Dr. Agnibha Das Majumdar, Asst. Professor, Department of Physics Resource Person: Dr. Arvind G Kulkarni, Retd. Professor, AMC College, Bangalore, Convenor, Artificial and Quantum Computing Cell, IAPT Report Received on 20.04.2024 Mode of Conduct: Online Attendance: 120 participants (Internal)

The event was started at 12:00 PM, Dr. P. Ramanathan, Vice Principal (Academics), along with Dr. M Chandra Sekhar, Associate Professor & Head of the Department of Physics, presided the Guest Lecture conducted by Department of Physics, followed which programme was organized by the Convener Dr. Agnibha Das Majumdar, Assistant Professor, and welcome address was delivered to the gatherings by him, The resource person of the event Prof. Arvind G Kulkarni, was introduced by Dr. Agnibha Das Majumdar, Assistant Professor, Department of Physics.

The resource person of the event Dr. Arvind G Kulkarni, **. Professor, AMC College, Bangalore, Convenor, Artificial** and Quantum Computing Cell, IAPT joined through online (Microsoft Team).

The resource person started the session by extending his hearty thanks to the participants, organizing members, HOD, Principal and Management for giving him opportunity to share his knowledge and experience in **the correlation of basic Physics and Engineering**.

PROGRAMME OBJECTIVES:

The objective of this guest lecture was to motivate the students towards the basic knowledge of physics and its application to the field of engineering. Also, the purpose was to explore the opportunity for the students to attend any workshop, seminar or training programme conduct by the Indian Association of Physics Teachers (IAPT).



PROGRAMME OUTCOMES:

He has introduced about the various branches of the physics and introduced Physics for Engineering Students, which is a foundational course that aims to provide engineering students with a solid understanding of fundamental physical principles and their applications in engineering contexts. It typically covers topics such as classical mechanics, electromagnetism, thermodynamics, optics, and waves. He briefly explained about the followed topics,

- Understanding Classical Mechanics: Foundations for Engineering
- Exploring Electromagnetism: Principles and Applications in Engineering
- Unravelling Thermodynamics: Principles and Applications in Engineering
- Exploring Optics: Principles and Applications in Engineering
- Waves and Vibrations: Understanding Dynamics in Engineering
- Engineering Applications: Bridging Theory and Practice

After briefly discussing all those points he has concluded with the opportunities for the engineers with the knowledge of basic science especially Physics.

Finally, he concluded the session by giving the information to the students about the scope for engineers to attend various conferences, workshops and webinars that is conducted by Indian Association of Physics Teachers IAPT), as he is the convener for the same.

The lecture was then followed by a question & answer session. Students have been interacting with the speaker. They have cleared their doubts about their knowledge and actual need of basic science in their engineering branch.



The session was concluded at 01:00 PM followed by a vote of thanks, given by Dr. K Chandrakanta, Assistant Professor, Department of Physics, MITS, Andhra Pradesh.