

ISTE STUDENTS CHAPTER (TN 217)

Academic year 2024-25 (ODD)

Guest Lecture Report

Topic :Surface Engineering and its Characterization

Resource Person :Dr.S. Sundaraselvan M.E., Ph.D.,

Associate Professor,

Department of Mechanical Engineering,

Arasu Engineering College, Kumbakonam, Tamilnadu, India

Date &Session : 05.11.2024& 11.00 A.M. to 12.00 NOON

Venue : Smart Class Room - Mechanical
Co-Ordinator :Mr. S. Nelson Raja, AP/MECH

Convener :Mrs.T.Gnanajeya, Co-Ordinator, ISTE Chapter

Objectives of the Event:

To enlighten the students about the theoretical and practical aspects.

- To bring conceptual knowledge, corporate experience and help students choose the right career path according to their skills and interest.
- To make the students aware about the latest trends in surface engineering.
- To provide a forum for students to interact with subject experts.

ISTE Students Chapter (TN217), Kings College of Engineering (Autonomous), Punalkulam, organized a Guest Lecture on "Surface Engineering and its Characterization" for ISTE students members from Mechanical Engineering department on 5th November 2024. There were 51 students actively participated in this guest lecture and gained information on the surface engineering and their characterizations. The guest lecture began with welcome address by Dr.H. Agilan, AP/MECH. He has introduced and welcomed Dr. S. Sundaraselvan, who has resource person to deliver the lecture. The session was then continued by Dr. S. Sundaraselvan. It was organized with the focus to transfer the knowledge directly to the students.

The session provided an in-depth exploration of surface engineering, emphasizing its significance in modern engineering and technological applications.

The lecture also covered various methods of surface characterization which are crucial for understanding and optimizing surface properties.

Key Aspects of Surface Engineering Discussed:

- ✓ Techniques to improve resistance to wear and abrasion such as hard coatings and surface treatments.
- ✓ Methods to prevent degradation of materials exposed to harsh environments, including electroplating, anodizing and surface coatings.
- ✓ How surface engineering can reduce friction in mechanical components leading to greater energy efficiency and longevity.

- ✓ The role of surface engineering in providing not only functional benefits but also improving the appearance of materials.
- ✓ The speaker elaborated on various surface modification techniques.
- ✓ The lecture also emphasized several real-world applications of surface engineering.

In his speech he presented the scope of those technologies in current situation and talked about the opportunities in surface engineering area for young engineers. He also suggested & encouraged to students to do projects in the field of surface engineering.

The session ended with hearty thanks delivered by Mr. S. Nelson Raja, AP/MECH. Dr.S. Sundaraselvan thanked the ISTE Chapter& College Management for providing the platform to organize guest lectures on Surface Engineering and its Characterization. He appreciated Faculty members, students for the successful completion of the guest lecture. After the session participants gave their feedback through feedback link. Ecertificates were issued to all the participants.



Guest Lecture Brouchure









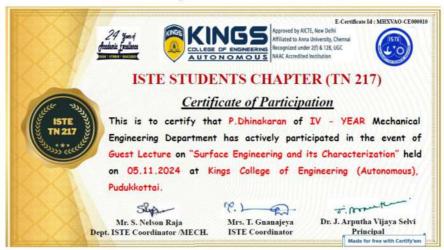








Glimpses of the event



Sample Participation Certificate

Feedback Analysis:

How engaging was the speaker's presentation?



Was the speaker knowledgeable about the subject?



How relevant was the topic to your interests or academic/professional goals?



Did you gain new insights or learn something valuable?



Was the event well organized?



Was the technology (audio & video) working properly throughout the event?



Overall, how satisfied were you with the guest lecture?



Outcomes of the Event:

- Interactive elements encouraging students to actively participate.
- Students interacted with the external subject expert.
- Know the various opportunities regarding the area of surface engineering.

Dept. ISTE Co-Ordinator Co-Ordinator / ISTE Chapter

Principal