



Department of Electrical and Electronics Engineering

Category: Guest Lecture

Report on *MODELLING AND ANALYSIS OF WELDING*

Date: 12.02.2020

Time: 2:20pm to 3:10pm

Venue: E32

Resource Person: Mr. PANDIYAN, AP/ Mechanical Department, LICET

Audience: IV EEE /Batch : 2016 – 2020.

The lecture titled “*Modelling and analysis of Welding*” gave an insight on the different types of welding techniques and their applications with current researches. Initially he gave an elaborate explanation about what welding process and gave input for other specific aspects of the process for different welding techniques. He gave a brief introduction to manufacturing, basic joint and fusion welding process. He briefly explained the resistance welding and arc welding.



In arc welding, he discussed, how arc is formed between two similar or dissimilar metals and also at what distance the electrode must be placed in order to get high strength arc between the two metals. In resistance welding, how high resistance is created for welding was explained by him in depth. He shared the NPTEL on line course slides for the topic.

He insisted about the failure of welding by explaining a case study on the failure of TITANIC SHIP. It is due to the process of rapid quenching followed during its manufacturing. From this he concluded that metal after welding process should be allowed to cool until its heat gets vanished. He gave us the guide lines to approach the topic as per the regulations and dealt in detail the way the presentation to be done. As on the whole, the class was very interesting and informative.

