



ADHI

COLLEGE OF ENGINEERING & TECHNOLOGY

No.6, MunuAdhi Nagar, Sankarapuram, Near Walajabad,
KanchipuramDist – 631 605. Ph: 044 – 2729 0096

REPORT OF ONE DAY WORKSHOP ON “ADVANCED METAL JOINING PROCESS FOR SMART MATERIALS”

Date: JULY 17 th, 2017

Venue: DR.RADHAKRISHNAN CONFERENCE HALL,

Organizer: DR. D.PALANISAMY

Attending students: Mechanical 2nd , 3rd ,4th Year.

Indian Welding Society (IWS) and Department of Mechanical Engineering, ADHI college of Engineering and Technology Organized IWS inaugural Function and one day workshop on “Advanced Metal Joining Process for Smart Materials” on 17.07.17 (Monday) in Dr.Radhakrishnan Conference Hall and it was started at 10.20am. The Chief guest and speaker of the session was Dr.P.Sathiya PhD, Associate Professor, NIT Trichy. In the modern world, Science and technology have made astonishing developments in the design of electronics and moving parts using standard materials. The vision range of possibilities for special materials that have desirable properties is very high. Such materials have the ability to alter shape or size simply by adding a petite bit of heat, or alter from a liquid to a solid. Everyday items are already incorporating smart materials such as coffeepots, cars, eyeglasses etc and their applications are growing progressively. So we had arranged this workshop to gather some information about it.

ABOUT THE WORKSHOP

The chief Guest delivered the lecture about various metal joining process and chemical composition of materials before and after welding process. Different welding process such as forge formation, Arc welding and Laser welding were analyzed with various metal alloys of smart materials. The research papers which clearly describe about the grain structure and how it changes itself based on the recrystallization temperature were discussed. Mostly the smart materials increase their life and improve the various mechanical properties after welding. The following points were also discussed in the session ,

- SEM Analysis for different materials
- TEM Analysis for different materials
- Micro & Macro Analysis
- Grain size comparison
- Grain structure comparison

- Grain flow comparison
- Types of Joining process
- Bonding & Strength Characteristics of welding
- Applications of Smart materials

The workshop provided awareness about smart material joining process and Techniques.



Chief guest delivering his lecture



Participants of the workshop