


## Centre of Excellence Joining Technology (COEJT)

Faculty In charge: <b style="color: blue;">Dr. Ajay Kumar Kaviti</b> <b style="color: orange;">PhD, LMIE, LMISTE, SAE</b> <b style="color: green;">Associate Professor</b>			
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### About the Lab:

**Year of Establishment: 2011**

**Room No.** : D-319

**Lab Area** : 110.25 Sq.m.

**Projects Completed** :

<b>R &amp; D Projects: 02</b>	
<b>1</b>	<b>AICTE Project:</b> Experimental Study of Influences of Pulsed Current and Non-Pulsed Current Gas Tungsten Arc Welding on 6082 Aluminium Alloy weldments <b>Project Grant:</b> 15.7 Lakhs <b>Duration:</b> 3 Years(2013-16)
<b>2</b>	<b>DRDO Project:</b> Comparative Study of Weld Characteristics of IS: 65032A Aluminium Alloy by Two Processes- Friction Stir welding and Gas Tungsten Arc Welding <b>Project Grant:</b> 9.91 Lakhs <b>Duration:</b> 2 Years(2013-15)
<b>M.Tech Projects: 05</b>	
S.No	Project Title
1	Comparative study of weld characteristics of 5083 Aluminum Alloy during the GTAW process
2	Experimental study of effect of filler wire at various weld parameters of GTAW
3	Experimental Investigation of weld characteristics of Titanium Alloy using Gas Tungsten Arc Welding
4	Study of weld characteristics of dissimilar Aluminum Alloy using GTAW
5	Experimental investigation of weld characteristics of Stainless steel during GTAW process

<b>B.Tech Projects: 03</b>	
<b>S.No</b>	<b>Project Title</b>
1	Experimental investigation of effect of Tool Pin Profiles on dissimilar Aluminum Alloy (AA 6082 + AA 5083) during Friction Stir Welding Process
2	Experimental Study of effect of Tool Pin Profiles on Aluminum Alloy 6082 during Friction Stir Welding Process
3	Experimental Study of Mechanical Properties of SS316L weldments using Gas Tungsten Arc Welding Process

**Projects in Progress:**

<b>Ph. D. Projects : 03</b>	
<b>S.No</b>	<b>Project Title</b>
1	Comparative Study of Welding Characteristics of Aluminum Alloy (5052) and Alloy Steel EN19 using TIG Welding
2	Experimental Study of Weld Characteristics during Friction Stir Welding (FSW) of Aluminum alloy
3	Experimental investigation to Study the weld characteristics of dissimilar weldments of aluminum alloy and alloy steel

**Facilities Available:** 1. Lincoln Electric Precision TIG 375 Welding Machine (Rs. 6,56,825/-)

2. Microscope with Image Analyzer (Rs. 2,91,975/-)

3. Vicker's Micro Hardness Tester (Rs. 4,69,450/-)

4. Ultrasonic Flaw Detector (Rs. 2,23,938/-)

5. Laptop and Laser Printer (Rs. 45,300/-)



**Lincoln Electric Precision TIG 375 Welding Machine**



**Vicker's Micro Hardness Tester**



**Microscope with Image Analyzer**



**Ultrasonic Flaw Detector**