

# RESEARCH PROPOSAL

Heat Source of any welding technique can be simulated for research by using different types of heat equation. This is currently using worldwide for research purposes for simulation of welding and other heat using engineering techniques. This heat equations contains certain heat source parameters which indicates the shape of the welding area and position. The value of these parameters had been developed with certain empirical relations. But to avoid complexities, assumed values are used currently for simulation. Recent researches had proved that, this cannot give accurate results during simulation and can deviate from the actual weld conditions and will lead to inaccuracy of simulation. The heat Source parameters can vary from material to material, input conditions, velocity of weld etc. So, for ensuring accuracy of simulation, accurate Weld parameters have to be used.

In this research, I am focusing to find the accurate heat source parameters of a range of materials such as dissimilar metal welding process. so as to find the relation of heat source parameters with its material properties, size or thickness of the specimen, input voltage and current.

The Welding method proposing is a hybrid technique incorporating Conventional TIG Welding with arc welding. The combination of the above will give a hybrid Welding technique with can be expected to give high thermal efficiency and position so the dissimilar metals depth to width ratio. The research will give light to improve the accuracy of the current research methods by overcoming the thermal efficiency losses