<u>AAVARTAN</u>



1.CORROSION MINIMIZATION AND EVALUATION

The secret of effective engineering lies in controlling rather than preventing corrosion, because it is impossible to eliminate corrosion. Come up with optimization in electrorefinning techniques and electrodeposition of metals, alloys and metal matrix composits.

2.ENVIRONMENTAL CLEANING

Propose ideas for separation of metallic granules from waste streams containing industrial effluents which would prove beneficial for controlling water pollution.

3.GREEN ENERGY

For sustainable development, environmental protection must be focussed along with technological enhancement. Develop novel materials for green energy applications.

4. Methods to reuse the metal powder obtained from metal cutting

Waste metal powder obtained from metal cutting commonly disposes. Hence there are many challenges in using the waste metal powder which is powder mixed with oil and it is needed to obtain in small size of metal powder.

5.Energy efficient household in rural areas with layout and cost effective storage of energy without batteries using water as a medium

Innovative ideas that can be applicable in rural areas which will provide valuable energy with a good economy for the family and the society.

The ideas should possess features like installing renewable energy or green technology, implementing advanced methods that will include feasible and reasonable solution for the efficient, cost effective, eco friendly and reliable energy in a rural household. We also need new emerging technologies to store the energy in cost effective manner (e.g-using various processes like electro chemical and biological etc) so that energy can be used depending upon necessity in future.

<u>6.PRODUCTION OF COST EFFECTIVE AND EFFICIENT MATERIAL</u> <u>FOR AIRCRAFTS</u>

Since air transport is very costly mainly due to its costly production process, therefore it is very essential to replace the current composition of aluminium to a fiber metal laminate called "CENTRAL REINFORCED ALUMINIUM" which is quite cheap with high tensile strength and light weight.