

## **Design, Analysis and Development of Micro Gas Turbine for propulsion of Micro UAVs**

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Micro gas turbines or simply micro turbines are very promising technology for propelling micro unmanned aerial vehicles. These micro turbines vary in size and power. They can be hand held producing a fraction of wattage to large ones producing 100s of kilowatts. Because of their numerous advantages over internal combustion engines with their higher power to weight ratio and low emissions, and reduced size and number of moving parts, they have replaced internal combustion engines in Rover electric motor car. They have also been used to generate electricity in commercial power grid. The objective of this project is to design, analyse and develop a model of micro turbine for the propulsion of micro UAV. Two cases may be considered for the flapping wing micro turbine: should the design employ micro gas turbine or use the micro turbine to power an electric motor to propel the UAV.