

## Names:

1. DHAWAL SONI 110340119091
2. MEET THUMMAR 110340119092
3. JENIL ZALA 110340119104
4. AAKASH BHATIA 110340119110

## Name of Project:

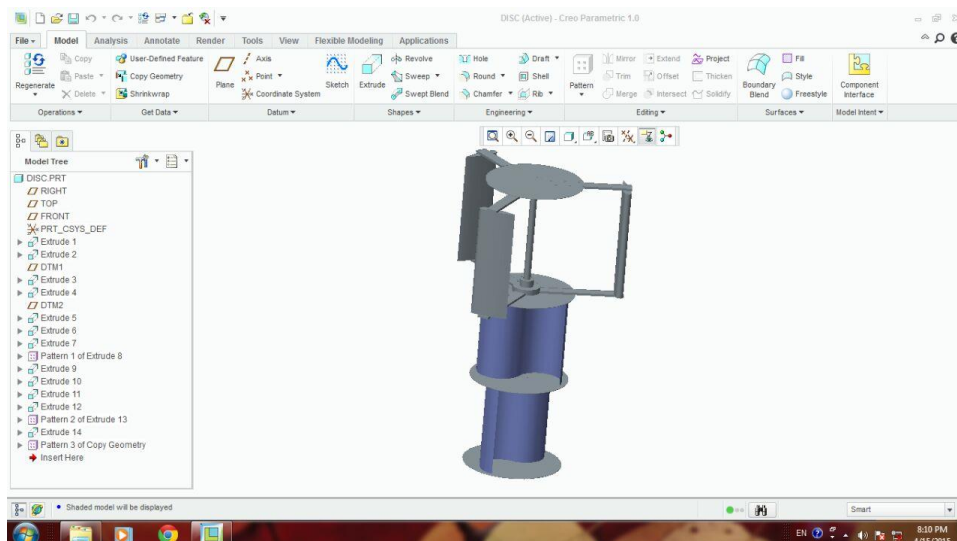
Development of Vertical Axis Wind Turbine

## Working Principle :

The invention refers to the field of wind power engineering particularly to the vertical axis rotor type wind turbine. The wind turbine has three blades each placed at 120 degree and is fastened. This vertical turbine is developed so that it can even perform on low wind speed. The wind energy available in abundance must be harvested by use of VAWT.

This project includes the analysis of a technology enhancement for today's world which is simpler and cheaper. The instantaneous torque output varies significantly when a gust of air is applied to the turbine. The 3D Model of prototype was developed and analysed by computational fluid dynamics. Various parameters were set constant whereas some parameters were varied and different results were recorded.

## Figure:



**Applications:**

Product can be mounted at many places irrespective of wind speed available.

e.g.:

- Building roofs in cities,
- Environment favorable buildings,
- BRTS stations,
- Bungalows or houses surrounded by malls or hospitals
- Dependent small power stations

**Approximate Cost:**

Rs. 15000/\_ (inclusive of 1 year maintenance cost)

**Contact No.:**

Dhawal Soni 9510243799

Meet Thummar 8866161140

Jenil Zala 9725384542

Aakash Bhatia 8866946169

**Project Guide[INTERNAL]:**

Assistant Professor Manish Patel

9824200207

manish\_605@yahoo.co.in