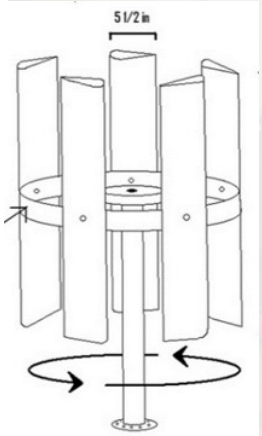
Wind It Up!

Aim

To devise a machine to utilize wind energy for electrical consumption of CresPion Hall.

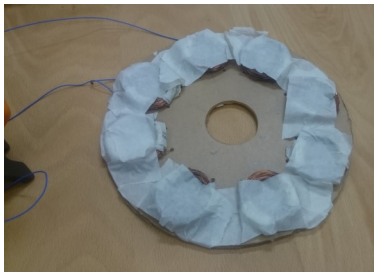


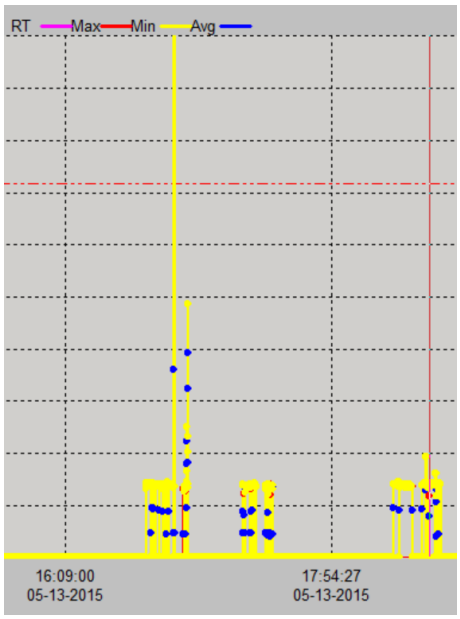
General Plan

- Vertical Axis Wind Turbine (VAWT)
- Suitable for low wind speeds in Singapore
- Generation of voltage via electromagnetic induction
- Inducing current in secondary circuit as the form of electricity

Current Findings/Work Done

- Maximum voltage of 7mV generated when a stack of 8 neodymium magnets are moved around manually on top of the coils.
- Attempted to build first prototype
- Wind speeds are observed to higher intensity in the afternoon





NO. 4990 Max: 4.08 Avg: 2.72 Min: 0.00
RT: 4.08 Time: 18:33:03

Future Works

- VAWT Design
  - Sturdier Base
  - Better rotation mechanism and blade design
- Improving electrical circuit
  - Increasing voltage
  - Electrical Storage Grid

Done by:
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