Wind Turbine

Material needed:

Wind turbine blade (3d printed)

DC Motor

Voltmeter (or multimeter)

Crocodile clip

Fan

Experimental procedure

1. Connect the motor terminal with a multimeter using crocodile clip.
2. Use a fan as a source of wind, record the voltage generated by wind turbine.
3. Repeat the measurement with different size of blades and speed of fan.

Discussion

1. Which one affects the voltage generated by the wind turbine more, size of blades or speed of fan? Why?
2. Why does the turbine rotate when there is wind?
3. Why does the blades have varied angle?