Effect of Ignition Timing On Exhaust Gas Temperature

- **Claim:** The time utilized by an engine is inversely proportional to exhaust gas temperature.

- **Experiment:** Exhaust Gas Temperature measured at
  1. Steady RPM and Frequency value, Crank angle varied in intervals of 10° BTDC
  2. Value of RPM varied in intervals of 1000 RPM to repeat above step

- **Validation:** Ignition timing should be retarded during cold start operation to heat up catalytic converter faster resulting in reduced emissions and can aid to supply cabin heat faster.

![Graph showing Exhaust Gas Temperature vs. Ignition Timing Angle vs. RPM]

- **J-Type Thermocouple**
- **DAQ Software**
- **Honda Flashpro**