

METHODOLOGY 2- DR. YU' PATENT- WO 2014094180



Graphite Ore

Manual
Grinding



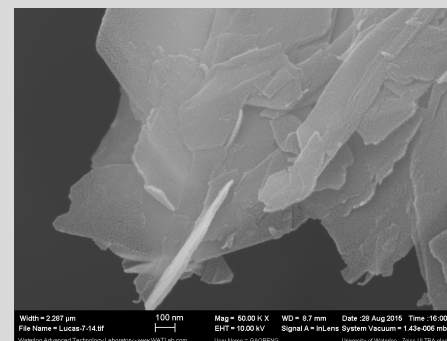
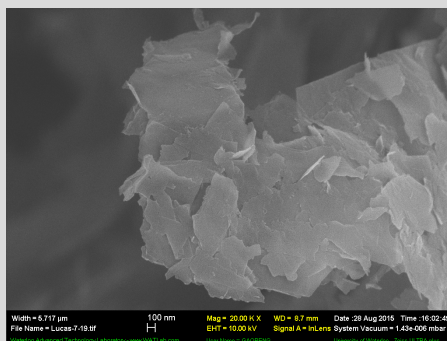
Graphite
Flakes

- Grind graphite into ~2-3 millimeter size flakes, followed by sonication in water
- Sonicate with Gum Arabic;
- Remove Gum Arabic
- Dry

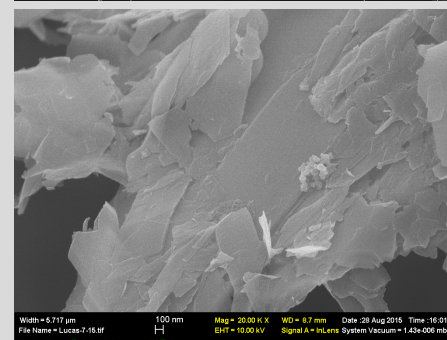
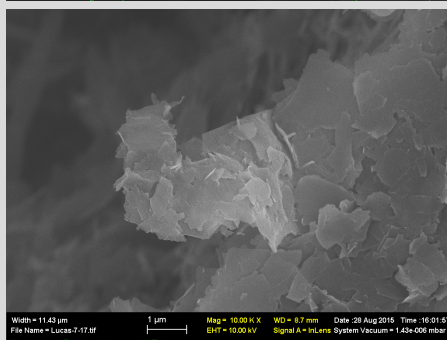


CHARACTERIZATION - SEM

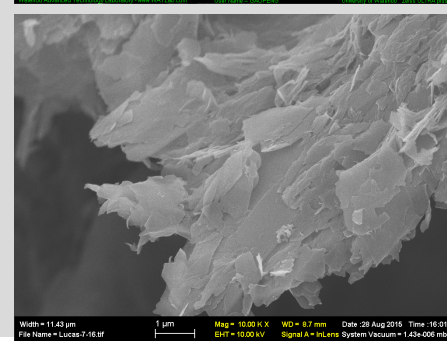
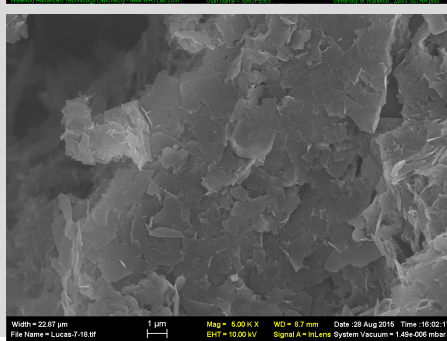
20k



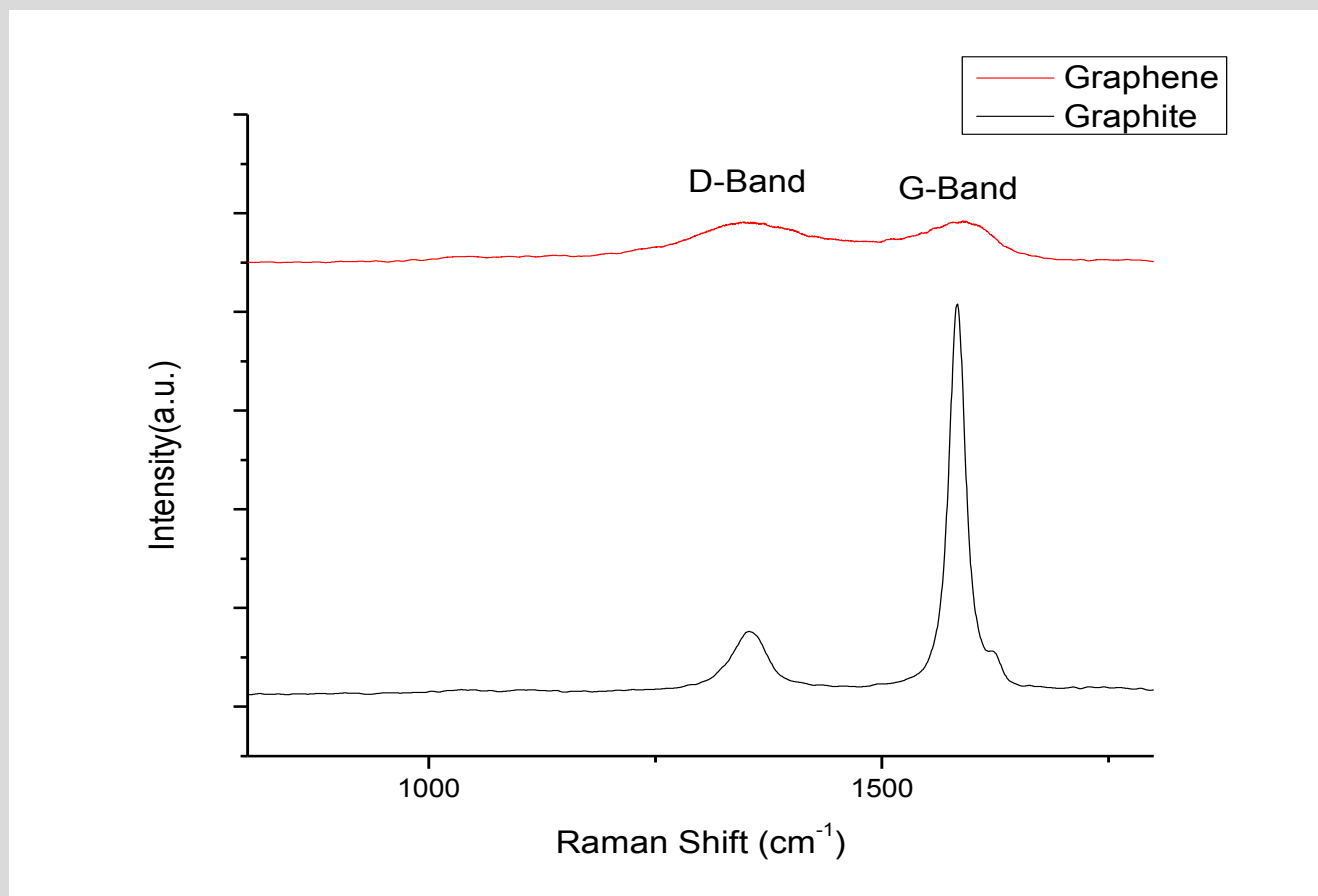
10k



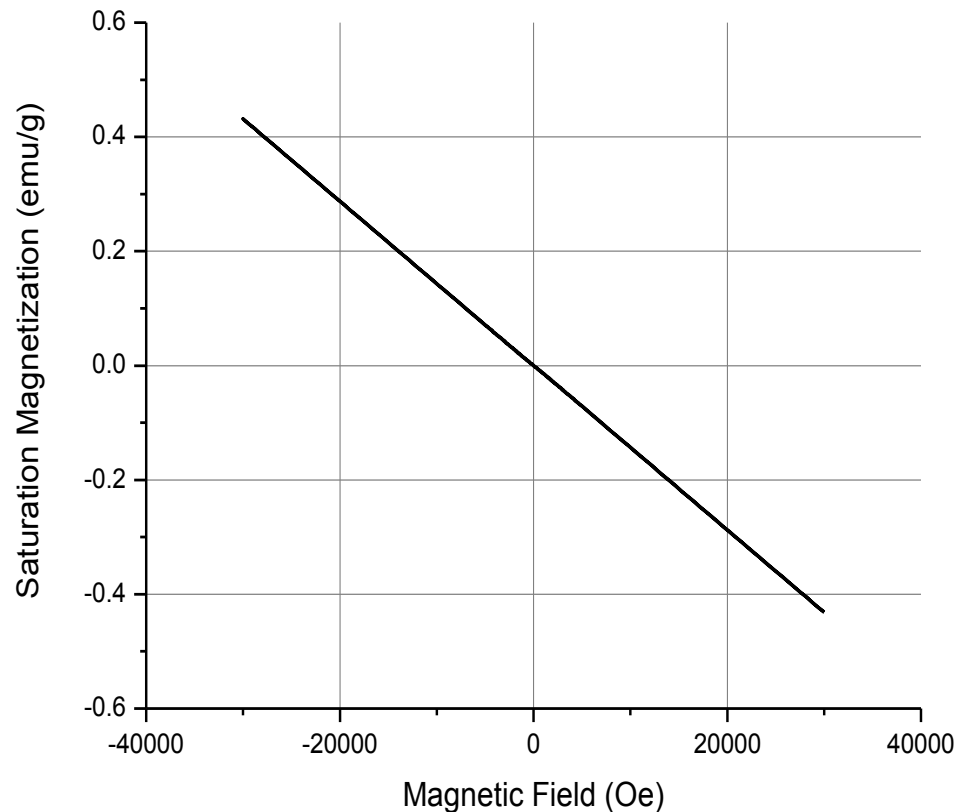
5k



CHARACTERIZATION - RAMAN



CHARACTERIZATION – HYSTERESIS CURVE (GRAPHITE)



- Mass Susceptibility, $X_m = -1.44 \cdot 10^{-5}$
- Highly diamagnetic as shown by the negative, linear relationship between magnetization and increasing field
- Mass susceptibility value comparable to other pyrolytic carbon samples ($1.5 - 2 \cdot 10^{-5}$)

