## **Applications of Graphene-based Materials**

## Gary Economo, CEO and President Dr. Gordon Chiu, Vice President

## Grafoid Inc., 912-130 Albert Street, Ottawa, Canada <u>gary@grafoid.com;</u> <u>dr.chiu@grafoid.com</u>

Chemistry, and the optimization of graphene processes when combined with the world's best graphite feedstock are leading Grafoid towards a benchmark global standard for economically scalable, mass produced graphene.

Hummer's method resolves the scalability issue for graphene oxide but sacrifices quality. Growing graphene via chemical vapor deposition produces high quality graphene, but fails on economics. The challenge for scientists today is to produce pristine graphene for fifty cents per pound or less – down from its current cost of \$20,000 per pound.

Our research is leading us towards that goal. As applications in the scientific, medical, consumer, military and industrial sectors flourish and multiply, the need for a standardized, scalable process grows ever greater.

As a wonder material, graphene's role in energy storage - as the next anode material for lithium ion batteries to its role in ultra capacitors – is well known.

Eliminating costs is the key to commercial success. Universal market acceptance by the investment community will come once mass producers of automobile, electronics and infrastructural components are assured of a sustainable, low-cost, viable graphene source.

Dr. Gordon Chiu February 28, 2012