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## ASX Announcement

### **Graphene production patent awarded to Lanka Graphite research partner, National Taiwan University of Science and Technology**

Lanka Graphite (ASX: LGR), (the Company) is pleased to report a further milestone achievement in its strategic collaboration with the National Taiwan University of Science and Technology (NTUST) with the recent granting of a new graphene production patent in Taiwan.

This granted patent relates to a method of producing graphene via Liquid Phase Exfoliation (LPE) method in particular, via the use of intercalating molecules to produce a modified graphene from the vein graphite that has historically been mined from workings found within Lanka Graphite's exploration licences in South West Sri Lanka. From trials and research conducted by researchers at NTUST, results have shown that the graphene produced via this patented technology is suitable for application in thermal management, electrical devices, energy storage and conversion and for battery anodes.

Emily Lee, the Managing Director of Lanka Graphite commented, "Lanka Graphite is very pleased that research undertaken on samples sourced from the Company's exploration tenements in Sri Lanka, is showing such technological success in the ongoing graphene research at NTUST. The very high grade nature of this unique vein graphite ensures that our product will have ready-made markets in the field of graphene research and production for advanced technology application where NTUST is at the forefront."

The project leader Dr W.H. Chaing said, "The goal of this project is to develop a scalable production method to produce high quality graphene using the raw vein graphite samples supplied by Lanka Graphite. The specification of the high purity graphite was a key element in producing high quality graphene during this research."

#### **About National Taiwan University of Science and Technology (NTUST)**

NTUST is a public/national technological university located in Taipei, Taiwan. Established in 1974, as the first and the leading higher education institution of its kind within Taiwan's technical and vocational education system. The university is ranked 353 among world universities in the Times Higher Education-QS World University Rankings 2013. The university is also ranked 52 among Asian universities in the Times Higher Education-QS World University Rankings 2013. NTUST Taiwan was also ranked as Asia's 10th best institute in science and technology.

#### **Professor Wei-Hung Chiang, NTUST**

Professor Chiang is the Assistant Professor of the Department of Chemical Engineering at the National Taiwan University of Science and Technology. His research specialty areas are plasma processing, catalytic reaction, and nanomaterials science and technology. His work has been recognised by scientific publications in high impact journals such as Nature Materials, ACS NANO, and Advance Materials, by mainstream media such as Forbes Magazine and Science Daily, and by international conferences (Materials Research Society, and American Institute of Chemical Engineers).

## **Graphene**

Derived from very high purity graphite as a 2D sheet of pure sp<sup>2</sup> -bonding carbon atoms, one atomic-scale layer thick, has exceptional mechanical, electrical, thermal and chemical properties. Early research shows that the one-atom thick Graphene is one of the strongest and most electrical conductive materials explored in the world with a wide range of industrial applications in the fields of electronics, energy, medical, aerospace and various technology.

## **About Lanka Graphite**

Lanka Graphite Limited (ASX: LGR) is an ASX listed graphite exploration company that is focused on exploration of a number of historic and new mining tenements in Central and South Western Sri Lanka. Historic mining at several of the granted tenements produced very high grade 'lump' or vein style graphite with grades >95%C. High purity vein graphite was historically produced from Lanka's tenements at a grade that is also well suited to graphene derivation. Lanka Graphite will commence exploration of its granted tenements with the intention to develop high grade graphite production that can supply nearby Asian end user companies particularly focused on new technology graphene applications.

**Justyn Stedwell**

**Company Secretary**

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