ASX Announcement
Metals of Africa Ltd

27 July 2015

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MTA Capital Structure

Shares on Issue: 129,663,742

Listed Options: 57,854,396
($0.15, 07/01/2017)

Unlisted Options 12,171,833
(various price, expiry)

Market Cap. @ $0.063; A$8.2m

MTA Board

Gilbert George
Non Executive Chairman

Cherie Leeden
Managing Director

Brett Smith
Non Executive Director

Steven Wood
Company Secretary

ASX Code: MTA

www.metalsofafrica.com.au

Outstanding Graphene Test Results at Montepuez Central Project

Graphene successfully produced from MTA's Mozambique graphite

Highlights

- Graphene oxide (GO) and graphene successfully produced from graphite at MTA's 100% owned Montepuez Central Project in Mozambique.
- Three processes were tested with the thermal method producing the best results. This simple process is scalable.
- Quality of MTA's prepared graphene was comparable with synthetic graphene.
- Work is part of the Company's ongoing graphite evaluation which includes lab analysis, petrology and metallurgy.
- The ability to produce a quality graphene product further enhances the potential of MTA's Montepuez Central Project as a high value asset.
- The Company's resource definition drilling program at Montepuez Central will finish at the end of August.

Metals of Africa Limited (ASX: MTA) (the Company) is pleased to announce outstanding results from its graphene test work at the Montepuez Central Graphite project, in Mozambique.

The results illustrate that the graphite mineralisation contained within the Montepuez Central project may be utilised to extract graphene of a quality comparable to that of synthetic graphene.

Metals of Africa's Managing Director Cherie Leeden said:

"The fact that our graphite can produce both graphene oxide and graphene is extremely exciting. Laboratory tests have verified that the quality of our graphene is comparable to synthetically derived graphene, which is a very high value material with an ever increasing number of applications, particularly in the battery and energy space."

About Graphene

Graphene has been labeled as a 'wonder material' and a 'potentially disruptive technology' by many scientists. The fascination with graphene stems from its remarkable physical properties and the potential applications these properties offer for the future. Although scientists knew one atom thick, two-dimensional crystal graphene existed, no-one had worked out how to extract it from graphite. That was until it was isolated in 2004 by two researchers at The University of Manchester, Prof Andre Geim and Prof Kostya Novoselov, who won the Nobel Prize in Physics for their pioneering work.

Graphene boasts several 'super power' properties:

- It is 200 times stronger than steel, yet is incredibly flexible
- It is the world's first 2D material
- It is ultra-light and thin yet immensely tough
- It is extremely conductive - much more so than copper
- It can act as a barrier – not even helium can pass through it
- It is fire resistant yet retains heat

Globally, it is estimated that several hundred million dollars per annum is currently being spent on graphene research and development, with graphene technologies and applications just starting to leave the laboratories.

Further information on graphene is available at: http://www.graphene.manchester.ac.uk/

Direct preparation of graphene from MTA's graphite

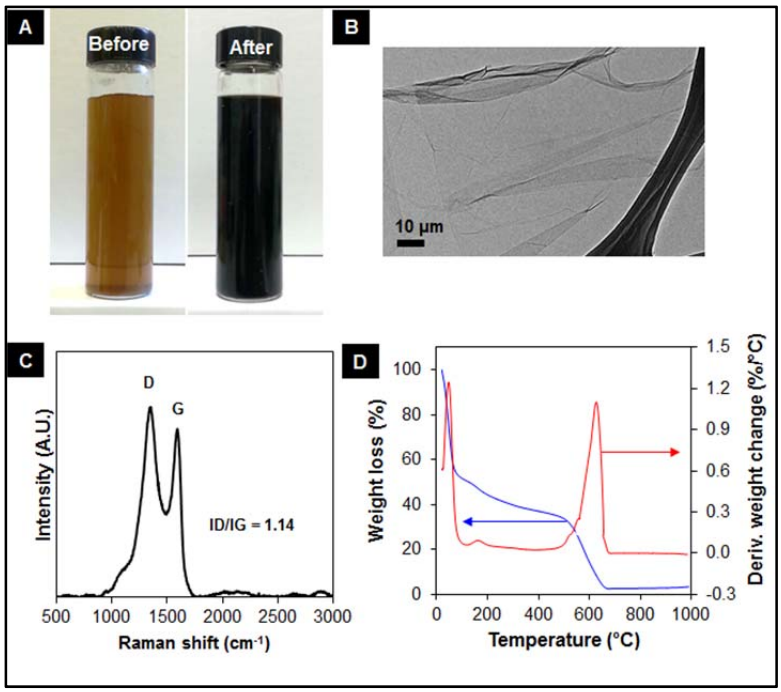

Figure 1. A) Images of graphene oxide (GO) before and after the reduction process, B) TEM image of a reduced graphene oxide (rGO) sheet, C) Raman, and D) TGA plots of rGO reduced from GO using amino acid.

Graphene, from single to several layers, with excellent quality and low defects (confirmed by Raman spectroscopy, details below) is able to be produced directly from MTA's raw graphite from the Montepuez Central project via a combined thermal and mechanical process without performing the GO process. It is important to note that **the quality of graphene prepared by this method is comparable with graphene prepared by the synthetic method.**

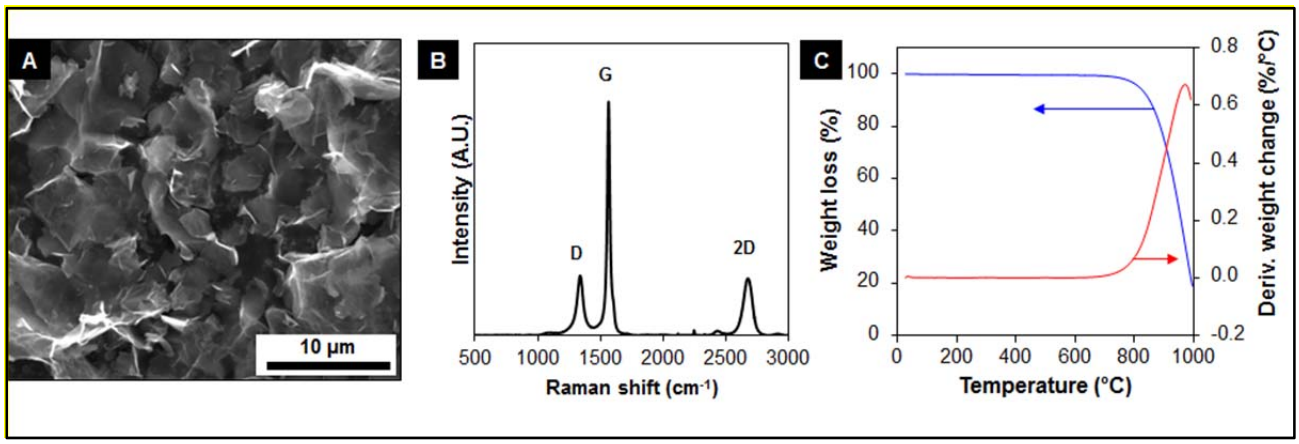

Figure 2. A) SEM image of graphene sheets, B) Raman and C) TGA plots of graphene prepared from the developed method.

Summary of characterisation and graphene exfoliation methods

Raman spectroscopy ("Raman") is recognised as the most powerful and accurate method used to measure the quality of graphene. This is based on an indication of the defects (D band) and graphitic structure (G and 2D bands) in the graphene sample. It is important to have minimal defects in the structure to enable the graphene to be used for high quality applications, such as; super-capacitors or batteries.

Figure 3 summarises the Raman spectra of graphene prepared by the two different methods, including GO. The results show that the chemical reduction process produces slightly more defects in the graphene structure compared with the thermal and electrochemical methods. The chemical method is also not practical for scalable production of graphene for several reasons such as, the many steps involved (preparation of GO to the reduction process), the use of harsh chemicals and toxic wastes - which means that expenses to meet the environmental standards can be significant.

By comparison, the thermal treatment of raw graphite is much more efficient in producing bulk graphene as it is a fast process, without the use of toxic chemicals. This minimises waste and, more importantly, produces graphene with very good quality (as confirmed by Raman).

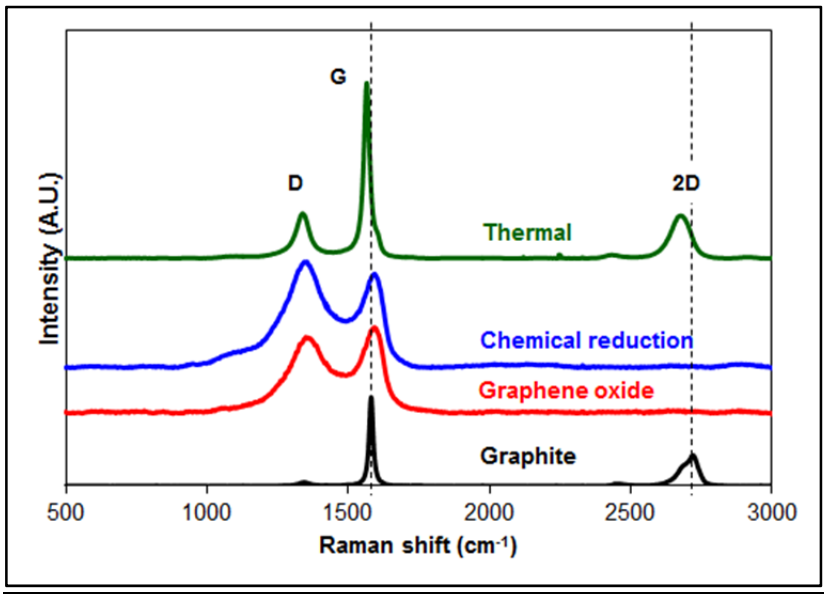

Figure 3. Comparative Raman spectra of graphene and GO prepared by the two methods confirming the quality and integrity of its structure.

On behalf of Board of Directors Metals of Africa Ltd

For further information please contact

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About Metals of Africa Limited

Metals of Africa (ASX: MTA) is a diversified minerals exploration company dedicated to exploring for world class deposits in Africa. The Company's core commodity targets are: zinc and graphite. During 2015 the Company will maintain a dual focus: on its graphite assets (Montepuez and Balama) located in Mozambique and on its zinc asset (Kroussou) located in Gabon.

Metals of Africa is conducting a series of research and development activities and trials in both Australia and Africa in establishing the best process methodology in mineral exploration, mining and processing. This activity is for the benefit of the company's holdings and in the licensing of intellectual property as a means of bringing these ideas to the market.