Australian Securities Exchange Notice

21 February 2014

INVESTMENT IN NEW TECHNOLOGY FOR TITANIUM METAL POWDER PRODUCTION

Iluka Resources Limited (Iluka) has concluded an Investment Agreement with the private, UK based, Metalysis Limited (Metalysis or the Company) for an interest of 18.3 per cent of the Company. The transaction remains subject to usual conditions precedent.

Metalysis has demonstrated that it is able to produce titanium powder directly from Iluka's main high grade titanium feedstock products of rutile.

According to Iluka's Managing Director, David Robb: "Iluka's involvement as a major shareholder and funding partner provides Iluka shareholders with access to a new, potentially disruptive technology which is close to commercialisation, and the potential benefits of a new source of high grade titanium dioxide feedstock demand, as well as a commercial involvement in a potential new growth pathway for high value metals and alloys and new manufacturing processes such as 3D printing."

Metalysis, Chairman, Tony Pedder, added: "Iluka coming in as a funding partner to Metalysis is an important part of the company's journey. Iluka's expertise in titanium dioxide as a feedstock, process engineering experience and access to global markets can make a significant impact on Metalysis' development. The Metalysis process has applications across metals in the periodic table including: titanium, tantalum and rare earths and with Iluka's access to titanium dioxide feedstock there is the potential to produce titanium powder with much greater efficiency and at a much lower cost than is currently possible."

For a consideration of £12.2 million (approximately A$22.5 million), Iluka's investment in Metalysis provides the following:

- a 18.3 per cent interest, on a fully diluted basis (19.6% on an undiluted basis), which would make Iluka the largest shareholder;
- a right to increase its shareholding to between 20 to 24.9 per cent in the event of an Initial Public Offering;
- a pro-rata first right of refusal over any transfers of existing shares or issues of new shares;
- one Board seat – with full voting rights and one observer;
- a non-exclusive world-wide licence over the Metalysis technology to produce titanium powder in return for a revenue royalty on normal commercial terms; and
- right of first offer over future titanium metal licences, excluding current negotiations the Company undertaking with respect to two specific licences.

In addition, Iluka and Metalysis have entered into a term sheet outlining technical services and titanium dioxide feedstock supply agreements.

Strategic Rationale for Iluka

David Robb stated: "Iluka has referred to its willingness to invest counter cyclically and to also explore alliance and new venture opportunities, both in areas adjacent to its main business and also where step out growth options may be available."

"This investment represents an opportunity for Iluka to utilise its understanding of the titanium industry, specifically the high grade and very high grade titanium dioxide feedstock sectors, and its strength in product

development, to help bring a potentially game-changing technology to market. This early stage positioning investment is representative of a number of such opportunities Iluka is evaluating."

"Metalysis represents an opportunity to invest in a technology which may have a material impact on the growth of various metals, but particularly titanium metals. The successful commercialisation of the Metalysis process could create significant value, and potentially result in a material increase in demand for Iuka's high grade chloride feedstocks."

"The technical services and supply agreements will facilitate a close working relationship between Iluka and Metalysis. Specifically Iluka will provide technical support in relation to feedstock product specification options; as well as process engineering and project management expertise during both the feasibility and construction phases of a commercial scale plant."

Information on Metalysis

Metalysis is a Venture Capital funded technology company established in 2001 which is based near Sheffield in the United Kingdom.

Metalysis has developed a patented process for the production of high value metals and innovative alloys (Metalysis Process). An extensive patent portfolio provides global protection to this potentially transformational technology. The Metalysis Process offers both economic and environmental benefits over traditional metal production methods.

Metalysis views titanium metal (Ti metal) as its key market, and believe the Metalysis Process has the potential to be a disruptive technology, producing titanium powder (Ti powder) for significantly less than typical industry production costs currently. Metalysis recently enhanced the Process by successfully producing Ti powder directly from rutile at a pilot scale using a batch process. This is considered critical to the process' ability to reduce the cost structure of titanium metal sufficiently to be disruptive, is the area of main interest to Iluka and is the area around which the licences have been focused. The production of a relatively low cost Ti powder could significantly expand the use of this material in a number of areas of growing demand, including the rapidly growing 3D printing industry.

Ti metal is conventionally produced in a non-powder form using the expensive Kroll process. The Metalysis Process is used to obtain titanium in metal powder form at a significantly lower cost than the Kroll process. Refer Appendix 1 for a brief review of the Kroll and Metalysis process for producing titanium powder.

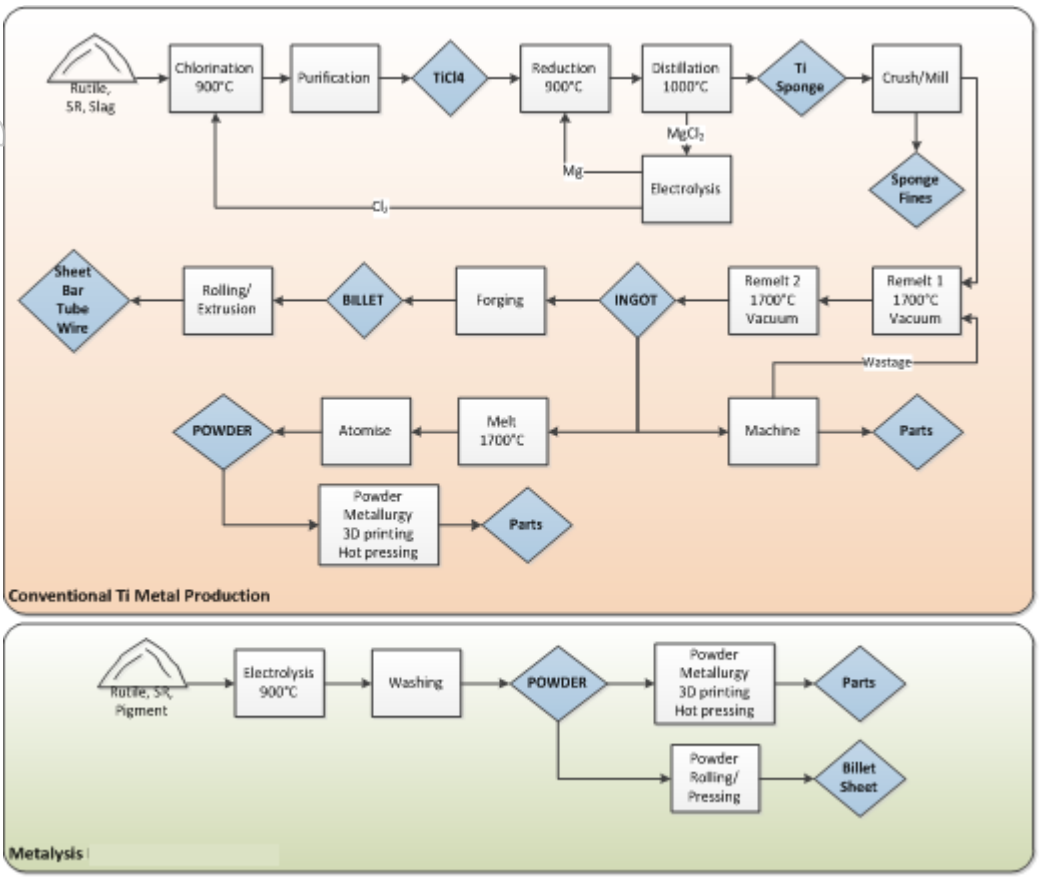
Iluka will provide further updates on its involvement, subject to commercial and confidentiality considerations.

Further information on Metalysis can be found on the company's website www.metalysis.com.

Investment market and media enquiries:
Dr Robert Porter
General Manager, Investor Relations
Phone: + 61 (0) 3 9225 5008
Mobile: +61 (0) 407 391 829
Email: robert.porter@iluka.com

Metalysis media enquiries
Tom Nutt
The Communication Group plc
Phone: +44 20 7630 1411
Mobile: +44 7775 686 706
Email: tnutt@thecommunicationgroup.co.uk

Appendix 1: Kroll Process Compared with Metalysis Process



Source: Metalysis, Iluka,

There are several commercial advantages offered by producing metal powder directly via the Metalysis process, including the ability to tailor the powder size, purity, morphology and alloying elements. Metalysis has demonstrated production of titanium powders of various sizes from 1-2 mm beads down to 100 µm. The flexibility of product form allows Metalysis to target a range of advanced powder metallurgy manufacturing methods that reduce material wastage.

A particular strength of the Process is that alloys can be produced without melting the feedstock. Metalysis has demonstrated that its process can alloy metals that are traditionally incompatible due to melting point differences between metals (e.g. tungsten and titanium). This provides two significant opportunities for Metalysis. First, the process can produce master alloys or pre-alloyed feed for conventional ingot producers. Second, it allows for the development of novel alloys with improved performance that will expand the current market for titanium products. For example, a material reduction in production costs could enable an industrial grade titanium metal to compete with and potentially displace some high performance alloys and stainless steels used for their corrosion resistance and strength.