

20 July 2021

TITANIUM INDUSTRY LEADERS JOIN HYPERION ADVISORY BOARD

- Hyperion has strengthened its Scientific & Technical Advisory Board with the appointment of leading titanium metal executives Dr. Eliana Fu and Mr. Tom Witheford
- Dr. Fu is a renowned additive manufacturing professional with a focus on titanium metal and powders with experience at TIMET, SpaceX, Relativity Space and is a member of both the SAE and ASTM additive manufacturing communities
- Mr. Witheford is a highly experienced specialty metals executive with over 30 years experience in executive leadership roles at ATI, GKN Power Metallurgy and Special Metals (Precision Castparts Corp)
- These executives will widen and accelerate Hyperion's discussions with customers for low carbon, and low cost titanium metal products, including potential technology partnerships and sales agreements

Hyperion Metals Limited (ASX: HYM) is pleased to announce the appointment of Dr. Eliana Fu and Mr. Tom Witheford to Hyperion's Scientific and Technical Advisory Board.

Dr. Eliana Fu, PhD, is a materials scientist with extensive industry experience in aerospace additive and traditional manufacturing at Titanium Metals Corp (TIMET). She also had roles with SpaceX and Relativity Space, who are global leaders in the application of 3D printing for rocket production for space exploration. She participated in former Los Angeles Mayor Eric Garcetti's Advanced Manufacturing Committee and is Ambassador for the Las Vegas Chapter of Women in 3D Printing.

Mr. Tom Witheford is a highly experienced specialty metals executive, having spent 30 years in leadership roles including as President of Allegheny Technologies (ATI) Specialty Materials division, Managing Director Europe & Asia for GKN Powder Metallurgy, and President of Precision Castparts Corp's Special Metals division. He has deep experience across the production of metal alloys, titanium, alloy applications and 3D printing.

Dr. Fu and Mr. Witheford will assist Hyperion with expertise, knowledge and contacts across the titanium supply chain, from the production of primary titanium metal to the development of high value products such as titanium alloy powders for additive manufacturing.

Hyperion anticipates that the appointment of Dr. Fu and Mr. Witheford will accelerate the advanced discussions with customers for low cost, low carbon titanium metal products.

Anastasios (Taso) Arima, CEO and Managing Director of Hyperion Metals said:

"Dr. Eliana Fu and Tom Witheford are recognized leaders in their respective fields and are highly valuable additions to our world class team. Today's appointment is part of our strategy to ensure we have the leading experts in this field assisting us as we make progress towards our goal of commercial production of low cost, low carbon titanium metal and powder."

This announcement has been authorized for release by the CEO and Managing Director.

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Appendix I: Existing Scientific and Technical Advisory Board Member Profiles

Dr. Zak Fang

Dr. Zak Fang currently serves as a Program Director at the Advanced Research Projects Agency-Energy (ARPA-E). His focus at ARPA-E is on advanced materials and manufacturing technologies for energy production, storage, and efficiency applications.

Prior to joining ARPA-E, Dr. Fang served as a Professor in Metallurgical Engineering at the University of Utah. There, he led a number of innovative research projects and was recognized with an R&D 100 Award for his efforts. He has founded two small technology businesses and is the sole or co-inventor on more than 50 U.S. patents. Prior to joining the faculty at the University of Utah, he held various technical and management positions in a number of industrial corporations, including Smith International.

Dr. Fang earned a B.S. and M.S. in Materials Science and Engineering from the University of Science and Technology Beijing and a PhD in Materials Science and Engineering from the University of Alabama at Birmingham. He is a Fellow of the National Academy of Inventors, ASM International and APMI International.

Dr. Fang is the Founder and Chief Technology Officer of Blacksand Technologies, LLC.

Dr. Kesh Keshavan

Dr. Kesh Keshavan, PhD, is a pre-eminent materials scientist with a background in industry and a track record of inventing and commercializing new technologies. Dr. Keshavan has 30 years of experience in the field of Superhard materials, holds over 200 patents and is the recipient of "Most Cited Author; The Institute for Scientific Information".

Dr. Keshavan is currently the President of Blacksand Technology LLC and the Director of Development for SuperMetalix, Inc., an R&D company that created and commercialized the synthetic superhard material Tetrade, a tungsten boride composite 10x harder than steel. Dr. Keshavan previously served as a Director, Materials Engineering for Smith Bits (a Schlumberger company); Technology Advisor for Schlumberger's Drilling Group; Vice President for the Advanced Materials Group at SII Mega Diamond and Vice President for GeoDiamond Engineering & Manufacturing.

He earned a Bachelor of Science degree from Bangalore University, a B.S. in Metallurgy from the Indian Institute of Science, and a Masters and PhD in Materials Science from the University of Kentucky. Dr. Keshavan is a Member of the American Society for Metals, the American Society for Testing and Materials, the Society for Petroleum Engineers International and is the Director of the R&D Technical Committee – Society of Petroleum Engineers.

Dr. Ali Yousefiani

Dr. Ali Yousefiani, PhD, is a distinguished materials scientist and inventor with a track record of leading strategic investment decisions and commercializing new and disruptive technologies. Dr. Yousefiani has over 30 years' of experience in the field of material science and is the holder of 22 patents.

He is a Technical Fellow and the Chief Scientist for Metallic Materials Technology for Boeing Research & Technology. Boeing is the world's largest aerospace company and leading manufacturer of commercial jetliners, defense, space and security systems, and is one of the world's largest consumers of titanium metal and products.

Dr. Yousefiani is responsible for insertion of advanced metallic-based material technologies into current and future Boeing product platforms. He leads a wide range of cutting edge programs aimed at the maturation of durable, manufacturable, and commercially deployable metallic airframe structures. Dr. Yousefiani currently leads the research and development of extreme environment heat exchangers and ultra-high performance turbine blades made from novel high entropy alloys produced using additive and traditional manufacturing methods.

Dr. Yousefiani earned his PhD in Materials Science and Engineering from the University of California, Irvine in 1999 and continues to lecture at the university's School of Engineering.

About Hyperion Metals

Hyperion's mission is to be the leading developer of zero carbon, sustainable, critical material supply chains for advanced American industries including space, aerospace, electric vehicles and 3D printing.

The Company holds a 100% interest in the Titan Project, covering over 6,000 acres of titanium, rare earth minerals, high grade silica sand and zircon rich mineral sands properties in Tennessee, USA. The Titan Project is strategically located in the southeast of the USA, with low-cost road, rail and water logistics connecting it to world class manufacturing industries.

Hyperion has secured options for the exclusive license to produce low carbon titanium metal and spherical powders using the breakthrough HAMR & GSD technologies. The HAMR & GSD technologies were invented by Dr. Z. Zak Fang and his team at the University of Utah with government funding from ARPA-E.

The HAMR technology has demonstrated the potential to produce titanium powders with low-to-zero carbon intensity, lower energy consumption, significantly lower cost and at product qualities which exceed current industry standards. The GSD technology is a thermochemical process combining low cost feedstock material with high yield production, and can produce spherical titanium and titanium alloy powders at a fraction of the cost of comparable commercial powders.

Hyperion also has signed an MOU to establish a partnership with Energy Fuels (NYSE:UUUU) that aims to build an integrated, all-American rare earths supply chain. The MOU will evaluate the potential supply of rare earth minerals from Hyperion's Titan Project to Energy Fuels for value added processing at Energy Fuels' White Mesa Mill. Rare earths are highly valued as critical materials for magnet production essential for wind turbines, EVs, consumer electronics and military applications.