# In Case You Missed It: BUSINESS NEWS FROM THE FIELD



## New Nanoscale 3D Printing Material Developed at Stanford

Stanford, California, USA: Researchers at Stanford University have designed a new material for nanoscale 3D printing. This material has the ability to absorb two times as much energy as materials of similar density and could potentially be used to make better lightweight protective lattices. To design this material, the Stanford engineers included metal nanoclusters in their printing medium. These were found to be a good catalyst for the two-photon lithography printing method. The combination of the metal nanoclusters with acrylates, epoxies, and proteins were successful. The combination with proteins yielded a print rate of 100 millimeters per second, about 100 times faster than other nanoscale protein printing. This material was then tested with several different lattice structures and with the nanocluster-polymer composite all the structures showed an ability to absorb energy, impressive strength, and remarkable recoverability.

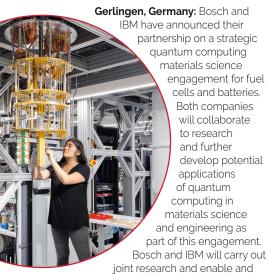
#### Green Aluminum Used in Motorcycles

Iwata, Japan: Yamaha Motor Co. reached an agreement with a supplier of aluminum ingot to procure green aluminum and began to use it as a raw material for Yamaha motorcycle parts in February 2023. Green aluminum is refined using renewable energy sources which emit less carbon dioxide during the manufacturing process. For the first time, green aluminum is being used in Japanese motorcycles and Yamaha has plans to expand its use in other models in the future. As aluminum accounts for 12% to 31% of the total motorcycle weight, utilizing green aluminum is one method for reducing carbon dioxide emissions for the manufacturing part of the product's life cycle. Do you have business or industry news of interest to the minerals, metals, and materials community?



Submit your announcement or press release to Kelly Zappas at kzappas@tms.org.

**Raleigh, North Carolina:** Aja Labs, a venture-backed materials innovation company, has raised \$2.5 million in a seed round of funding to use for the development and commercialization of biomaterial hair fibers made from plant material. Under the consumer brand Nourie, these patent-pending hair extensions have a time-release function to deliver a nutrient complex to natural hair during wear time. Black scientists and inventors make up the team at Aja Labs and with this product they hope to change the hair extension industry, which is dominated by costly low-quality, irritant-laden petrochemical-based plastics. (*Photo Credit: Aja Labs*)



execute case projects for fuel cells, electric engines, or advanced sensor materials. (*Pictured: IBM Quantum scientist Maika Takita in lab. Photo Credit: IBM*)

### Large Lithium Deposit Discovered in Iran

Hamedan, Iran: Officials from Iran's Ministry of Industry, Mines, and Trade have announced the discovery of a massive lithium deposit in one of the country's western provinces. The deposit is believed to hold 8.5 million tons of lithium. If accurate, this would make this deposit the second-largest in the world. Lithium is a crucial component for lithium-ion batteries used in electric vehicles and in rechargeable batteries.

#### Steppe Gold Plans to Acquire Anacortes Mining

Ulaanbaatar, Mongolia: Steppe Gold Ltd announced that it has entered a binding letter of intent with Anacortes Mining Corporation in order to acquire all shares of Anacortes in an all-share transaction. This proposed transaction would transform Steppe Gold into a leading junior producer of gold. The board of Anacortes recommended the agreement to the shareholders unanimously. Steppe Gold officials hope the transaction will increase Steppe Gold's diversity and increase their assets.