

Locksley Resources Ltd. And Rice University Announce Strategic Collaboration for Antimony Processing Technology

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R&D Agreement Provides Potential for Future Licensing Opportunity

[Locksley Resources Ltd.](#) (ASX: LKY; OTCQB: LKYRF) announced it has formally signed a strategic Research & Development Agreement with Houston-based Rice University, to develop domestic processing of U.S. sourced antimony. The agreement represents Locksley's initiation of its U.S. Critical Minerals and Energy Resilience Strategy to accelerate "mine-to-market" deployment of antimony in the U.S. More information is found here:

<https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02982925-6A1279871&v=4a466cc3f>

The strategic collaboration with Rice University is centered around maximizing the potential of Locksley's Mojave Project and aims to develop pathways for domestic processing of U.S.-sourced antimony to meet existing domestic demand in the U.S. defense and other industries as well as advance its application in next generation energy storage systems. "This addresses a critical supply chain gap at a time when no commercial scale antimony processing exists in the U.S.," said Nathan Lude, chairman of Locksley.

He added: "This strategic collaboration with Rice, formalized in our agreement, marks a pivotal step for Locksley and provides a first-mover advantage. We are both advancing our upstream strategy while helping rebuild downstream capacity through materials innovation that America urgently requires. Fast-tracking our two research Thrusts allows us to unlock value from our Mojave Asset and play a direct role in the U.S. move to secure critical supply of antimony for its defense, energy and AI infrastructure sectors."

Professor Pulickel M. Ajayan of Rice University's Department of Materials Science & Nanoengineering at the Rice Advanced Materials Institute, said, "Rice University has a long tradition of advancing materials science from the laboratory into real-world applications, and this partnership with Locksley represents an important step in that journey. Developing scalable, domestic pathways for antimony processing is both a scientific and engineering challenge and a national strategic priority. By combining Rice's expertise in advanced materials with Locksley's resources, we can address a critical supply chain gap, accelerate commercialization and build global collaborations that strengthen both U.S. energy resilience and the future of sustainable technologies."

The agreement calls for a dual initiative (Thrusts):

- Thrust 1: Green Hydrometallurgical Extraction of Antimony from Mining Feedstocks

Development and testing of low energy, environmentally benign solvent extraction processes for U.S.-sourced antimony ores and concentrates from Locksley's Mojave Project and other sources. This work is aimed to support the re-establishment in of U.S. based antimony processing capacity, which is currently limited in the U.S. despite rising strategic demand.

- Thrust 2: Exploration of Antimony Based Materials for Energy Storage Applications

Applied research on advanced electrode materials and composite architectures for lithium-ion and sodium-ion batteries, super capacitors and hybrid power modules using antimony as a core component.

"The integration of upstream development with downstream innovation provides a rare opportunity to build a domestic mine-to-materials supply chain aligned with U.S. strategic needs, while positioning the Company to access a wide range of government funding opportunities," said Lude. He added that the two Thrusts of the Locksley-Rice University Collaboration Agreement aim to address two major systemic challenges in the U.S. critical minerals and energy sectors, specifically related to antimony.

About Rice University

Rice University in Houston, Texas, is a global leader in materials science, nanotechnology and energy innovation. The George R. Brown School of Engineering, the Department of Materials Science and NanoEngineering and the Rice Advanced Materials Institute have pioneered transformative research in solid-state batteries, green chemistry and advanced energy and defense materials.

Professor Pulickel M. Ajayan, a distinguished professor at Rice, is a pioneer in nanotechnology and advanced materials, with more than 1,200 publications and 230,000 citations. His expertise includes energy storage, batteries, solid electrolytes, nanocomposites and green extraction. A Fellow of the Royal Society of Chemistry, the American Association for the Advancement of Science and the National Academy of Inventors, Ajayan has a strong record of translating research into industry applications, making him an invaluable partner for Locksley's antimony-based materials platform.

About Locksley Resources Limited

Locksley Resources is an Australian-based explorer focused on critical minerals and base metals, with assets in both the United States and Australia. The company is actively advancing exploration of its US asset, the Mojave Project in California, targeting rare earth elements (REEs) and antimony. Located in the Mojave Desert, the Project comprises more than 250 claims. The North Block area directly abuts claims held by MP Materials, while El Campo lies along strike of the Mountain Pass Mine and is enveloped by MP Materials' claims. In addition to rare earths, the Mojave Project hosts the historic "Desert Antimony Mine," which last operated in 1937. Despite the United States currently having limited domestic antimony production, demand for the metal runs high due to its essential role in defense systems, semiconductors and metal alloys. Locksley's position is strengthened by rising geopolitical urgency to diversify supply chains away from China, the global leader in both REE and antimony production. The Company's Mojave Project is uniquely positioned to align with U.S. strategic objectives around critical mineral independence and economic security. More information is available at the company's website: <https://www.locksleyresources.com.au>.

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