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MOVING UP THE VALUE CHAIN FROM MINES TO BATTERIES

By

Celina Mikolajczak (joining virtually)
Andrew Nissan,

Lyten, USA

SUMMARY

The presentation explores the critical role of innovation, sustainability, and strategic partnerships with mining companies into the production of battery raw materials. The need for the mining industry to adopt advanced technologies and sustainable practices to meet the growing demand for battery materials driven by the expansion of global demand for electrification. This talk highlights successful case studies and industry best practices that demonstrate the potential for value creation along the entire supply chain. Overall, the presentation underscores the opportunities and challenges faced by the mining sector in moving up the value chain in partnership with the global battery industry.

BIOS

Education

B.S., Engineering & Applied Science California Institute of Technology (Caltech, USA
MA, Mechanical Engineering Prinston University, USA

Current Position

Celina Mikolajczak is the Chief Battery Technology Officer at Lyten, USA.

Previous Experience

Celina was the Chief Manufacturing Officer at QuantumScape, responsible for bringing QuantumScape's technology to mass production. Previously, Celina was a member of the board of directors at QuantumScape and the Vice President of Engineering and Battery Technology at Panasonic Energy of North America (PENA), which produces Li-ion cells for Tesla at the Gigafactory near Reno, NV. Celina has 20 years of experience in the battery industry which includes filling a variety of roles ranging from developing safety tests and failure analysis techniques, leading cell quality activities, conducting cell materials development, developing battery regulatory frameworks, and leading design of li-ion battery packs at Exponent, Tesla, and Uber.

Education

Ph.D. in Metallurgical and Materials Engineering, Colorado School of Mines, USA
Bachelor of Science in Material Science and Engineering, University of California, USA

Current Position

Andrew Nissan is the Senior Director of Battery Strategic Sourcing at Lyten, USA

Previous Experience

Director of materials engineering at Panasonic Energy of North America (PENA). In this role he led a team of dedicated scientists and engineers to conduct material and supplier development for the largest cylindrical lithium-ion battery manufacturer in the world. PENA produces around 66 batteries per second or about 2-billion cells per year for Tesla at the Gigafactory in Sparks, Nevada. Andrew specialized in material characterization, fracture mechanics, metallurgical engineering, and physical metallurgy. Prior to joining Panasonic, he was a staff metallurgical engineer at Tesla and worked to help drive the mission of accelerating the world's transition to sustainable energy. Andrew had previously held positions at Chevron and Exponent.