ElectraMet Awarded Grant for Electrolytic Metal Recovery from Photovoltaic Waste



Lexington, Kentucky Jul 31, 2023 (Issuewire.com) - ElectraMet, a leading provider of sustainable metal recovery solutions, has been awarded a \$1.27 million grant for Electrolytic Metal Recovery from Photovoltaic (PV) Waste. The project sponsorship focuses on maximizing silver recovery from PV modules while minimizing the environmental impact faced by solar panel recyclers.

Alan Rassoolkkhani, PhD., the principal investigator on the grant, shared "Solar panel (PV) recyclers have evaluated hydrometallurgy-based processes to recover silver from the front contacts, known as "fingers," on the top of PV modules. However, traditional hydrometallurgy processes are not selective in what they dissolve, resulting in a complex slurry containing silver (Ag), copper (Cu), lead (Pb), tin (Sn), aluminum (Al), cadmium (Cd), and other metals. ElectraMet's breakthrough technology utilizes specific voltage settings to target and speciate metals for removal and recovery using an electrolytic process, allowing for the selective extraction of pure silver and other metals from this complex slurry. This grant enables the development of novel cathodes designed to further optimize bulk recovery of silver and copper metals from this slurry waste stream."

This grant is funded through the U.S. Department of Energy's Small Business Innovation Research (SBIR) program and recognizes ElectraMet's commitment to advancing clean energy technological

breakthroughs and strengthening America's global scientific leadership. The project aligns with the current administration's vision of a carbon-free grid by 2035 and net-zero emissions by 2050.

"We are honored to receive this SBIR grant recognizing our current contribution to sustainability and circularity. This grant will accelerate further optimization of our innovative dissolved metal recovery technology and drive better outcomes for PV recyclers and adjacent industries" said Keith Jacobs, CEO at ElectraMet. "Our solution addresses critical needs for compliance and asset recovery while delivering on sustainability by allowing for more efficient recovery of valuable metals from industrial process and waste streams and minimizing environmental impact."

ElectraMet's technology is a step-change in dissolved metal recovery processes, contributing to a more sustainable and circular economy. By efficiently extracting valuable metals like silver and copper, ElectraMet enables solar panel recyclers to increase their recovery rates, reduce waste, and minimize their environmental footprint. ElectraMet accomplishes this in a small footprint with a real-time affirmation of metals removal and recovery.

To learn more about ElectraMet's best-in-class metal recovery technology and its potential impact on your facility, visit our <u>website</u>. For media inquiries or further information, please contact Mike Lewis at (859) 600-1857

About ElectraMet

ElectraMet is a leading provider of sustainable metal recovery solutions driving asset recovery and ensuring compliance for various industries, including semiconductor manufacturing, PV recycling, EV battery recycling, and many more. With a focus on innovative and eco-friendly technologies, ElectraMet helps its clients optimize metal recovery processes while promoting sustainability and circular economy practices. For more information, visit ElectraMet.com.

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