

First Phosphate and Sun Chemical Forge Strategic MOU for Lithium Iron Phosphate Cathode Material (LFP CAM) Production in North America

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Yesterday (November 29, 2023), First Phosphate Corp. (CSE: PHOS) and Sun Chemical Corporation [announced](#) a pivotal memorandum of understanding (MOU) to develop intermediates crucial for manufacturing lithium iron phosphate-based cathode active material (LFP CAM) in North America. This collaboration marks a significant step towards enhancing the North American battery market's capabilities.

The key objective of this MOU, as outlined by First Phosphate's CEO, John Passalacqua, is to create a robust LFP manufacturing business in North America. By integrating First Phosphate's prowess in phosphate material and Sun Chemical's extensive experience in inorganic pigments, the partnership aims to develop a low capital expenditure and rapidly deployable manufacturing model. "Much of the machinery used in the pigment industry is similar to that required for the production of iron phosphate and iron-oxide which are key intermediates for LFP CAM," said Passalacqua, emphasizing the synergy between the two industries.

Sun Chemical, a subsidiary of the DIC Group, will utilize its North American facilities to manufacture iron phosphate using materials from First Phosphate. This strategic move will leverage Sun Chemical's existing local factory capacities in

North America and Europe, which already align with the processes, domain knowledge, and equipment required for LFP CAM production.

The partnership also plans to explore the best sources of iron for iron phosphate and lithium iron phosphate synthesis, with a focus on integrating Sun Chemical's iron oxide precursors and First Phosphate's magnetite recovery. This collaboration could potentially extend to developing a multi-party U.S. Department of Energy grant application, showcasing a shared commitment to sustainable technology and clean energy.

Russell Schwartz, CTO of Sun Chemical, highlighted the significance of this collaboration in the context of cleaner energy and electronic vehicles. "The expansion in cleaner energy from increased reliance on electronic vehicles and renewable energy will benefit from more accessible locally produced batteries," Schwartz noted.

First Phosphate Corp. is a mineral development company dedicated to extracting and purifying phosphate for the Lithium Iron Phosphate battery industry. The company's commitment to high-purity production and low carbon footprint aligns seamlessly with the broader goals of sustainable technology and clean energy. With over 1,500 sq. km of land claims in Quebec, Canada, First Phosphate is set to become a major player in the North American LFP battery producers' supply chains.

Sun Chemical Corporation, part of the DIC Group, is a leader in various sectors, including packaging, graphic solutions, and electronic materials. The company's commitment to sustainable solutions is evident in its participation in this MOU, which not only aligns with its goals but also leverages its substantial R&D capabilities and global resources.

This partnership between First Phosphate and Sun Chemical is

poised to significantly influence the North American battery market. By utilizing existing resources and facilities, the collaboration presents a new model for LFP CAM production, distinct from the traditional Gigafactory approach. This innovative, ground-up strategy promises to accelerate the transition to cleaner energy and more sustainable battery technologies in North America.