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**Zeon's New Method for Manufacturing Electrodes for Lithium-Ion Batteries
—Eliminating the Extensive Drying Process Reduces CO₂ Emissions**

Zeon Corporation

Zeon Corporation (Zeon; head office: Chiyoda-ku, Tokyo; President and CEO: Tetsuya Toyoshima) has established a new technology that replaces the conventional method for producing electrodes for lithium-ion batteries, and has set a target for commercializing relevant materials.

The steady expansion of the lithium-ion battery market, driven by the rising prevalence of electric vehicles, has generated demand for the development of a low-cost battery production method with less environmental impact. Zeon has been developing the technology for a dry forming method, an innovative way to produce lithium-ion battery electrodes.

Unlike with the conventional wet coating method*¹, an extensive electrode drying process is not required with the new dry formation method*², so it is therefore expected to reduce CO₂ emissions with a lower capital investment.

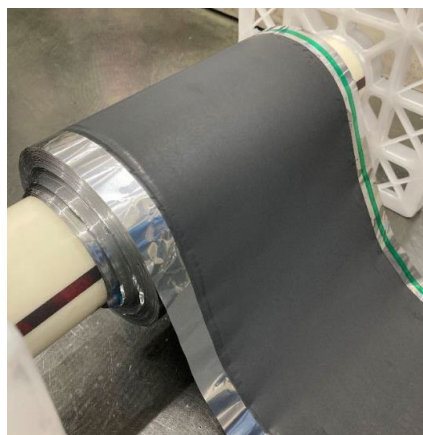
While some commercial production processes already incorporate dry formation, the dry formation method Zeon has been developing can be applied to both the cathode and anode at a formation speed equal to or faster than wet coating. The method also enables manufacturing electrodes free from contamination of per- and polyfluoroalkyl substance (PFAS), making it the world's first*³ low-environmental-impact technology that complies with the anticipated stricter PFAS regulations.

Zeon will contribute to the field of energy by developing materials and technologies while taking into account the recent tightening of environmental regulations.

*1 Currently the most common electrode fabrication method, which uses a wet coating process in which active materials and conductive agents are coated

*2 Unlike the wet coating method, this method enables producing electrodes without the use of water or organic solvents.

*3 Based on Zeon's survey



Electrodes prototyped by the new method

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