

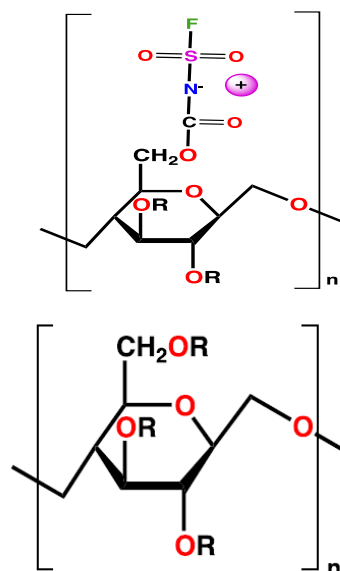
SOLID POLYMER ELECTROLYTE BASED ON MODIFIED CELLULOSE AND ITS USE IN LITHIUM OR SODIUM SECONDARY BATTERIES

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Researchers at CIC energigUNE have developed a method for preparing a solid polymer electrolyte with single ion-conducting properties based on modified cellulose for Li and Na batteries.

The resulting electrolyte is greener, safer, and more cost-effective. It allows the use of green, cellulose-based composite materials to improve the single ion-conducting properties, ionic conductivity, and mechanical properties of the resulting solid polymer electrolyte. Besides, this increases the cost-effectiveness of the electrolyte, since it avoids the need for adding any expensive lithium/sodium-based salts to the polymer electrolyte. Another characteristic of the invention is the non-use of any liquid plasticizer hence improving the safety aspect associated with the use of liquid electrolytes.



ADDED VALUE

- Greener: Abundant natural material.
- Safer: Higher electrochemical stability >4.3V (and excellent mechanical stability).
- More efficient: Single-ion conducting properties (TNa⁺ =0.6) and design flexibility.

APPLICATION OF THE TECHNOLOGY

- Lithium and sodium secondary batteries

LICENSING CONTACT

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