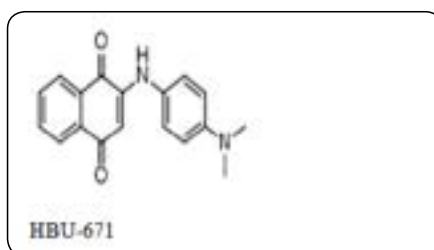


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Naphthalene derivative supported activated carbon composite electrode with enhanced capacitance and potential window for supercapacitor**Jeong H Park and Isheunesu Phir**
Hanbat National University, South Korea

A derivative of 1,4-Naphthoquinone coded HBU671 is synthesized and used in addition to activated carbon as composite electrode for supercapacitor application. From the electrochemical properties analysis, a specific capacitance of about 300 Fg⁻¹, almost double the specific capacitance of activated carbon was obtained for the composite electrode at a scan rate of 100 mV s⁻¹ and a potential window of -0.2~1 V. This improvement is due to the inherent redox reaction in HBU671. Cycle test also proved that this new composite is still stable even after 1000 cycle within the applied potential window and it is highly recommended for practical application.

**Biography**

Jeong H Park has his expertise in Organic Synthesis. He synthesizes novel organic compounds and tries to apply them to electro-material and other fields.

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Notes: