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NMR spectroelectrochemistry in studies of hydroquinone oxidation by polyaniline

thin films

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**Abstract:** 

In this paper, we developed a direct way for the study of hydroquinone oxidation

through in situ electrochemistry-combined nuclear magnetic resonance (EC-NMR).

Electro-polymerization-induced nano-polyaniline film was utilized as the catalyst in

the process of electrochemical oxidation of hydroquinone. In situ EC-NMR provides a

powerful tool to probe products distribution and reaction rate, which could be useful

to investigate electro-catalytic mechanism and evaluate the electro-catalytic capacity.

To study the influence of both protic and aprotic media in the electrocatalytic process,

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