Effect of the Dispersing Agent on the Electrochemical Response of Glassy Carbon Electrodes Modified with Dispersions of Carbon Nanotubes

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The electrochemical response of a glassy carbon electrode modified with carbon nanotubes (CNT) dispersed in two solvents, water and DMF, and two polymers, chitosan and Nafion is reported. The films were homogeneous when the dispersing agent was water or DMF. In the case of polymers, the surfaces present areas with different density of CNTs. A more sensitive electrochemical response was obtained when CNTs are dispersed in the solvents. In the case of CNT dispersed with polymers, the nature of the polymer demonstrated to be a critical parameter not only for dispersing the nanotubes but also for the electrochemical activity of the resulting electrodes. © 2012 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.