

# Nitro radical anion formation from nimodipine

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Voltammetric studies of nimodipine using a mixed aqueous dimethylformamide (DMF) solvent have allowed us to generate the one-electron reduction product, the nitro radical anion  $\text{RNO}_2^-$ . The cyclic voltammetry technique has been employed to study the tendency of  $\text{RNO}_2^-$  to undergo further chemical reactions. This subsequent chemical reaction corresponds to a second-order process, a dismutation reaction which is initiated electrochemically. Data for rate constants and half-lives at pH 8.2 were determined in aqueous DMF media. A method which is able to generate selectively the  $\text{RNO}_2^-$  species electrochemically and to study its in-situ reactions is proposed. © 1993.