

# Oxidation-Induced Acyl Group Transfer from Hydroquinone Esters to Nucleophiles

Gerald Reischl<sup>a</sup>, Medhat El-Mobayed<sup>a</sup>, Rudolf Beißwenger<sup>a</sup>, Klaus Regier<sup>a</sup>,  
Cäcilia Maichle-Mössmer<sup>b</sup>, Anton Rieker<sup>\*,a</sup>

<sup>a</sup> Institute of Organic Chemistry, University of Tübingen, Auf der Morgenstelle 18,  
D-72076 Tübingen

<sup>b</sup> Institute of Inorganic Chemistry, University of Tübingen, Auf der Morgenstelle 18,  
D-72076 Tübingen

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Bivalent oxidation of 3,5-di-*tert*-butyl-hydroquinone monoesters leads to phenoxenium ions, which can transfer an acyl group to nucleophiles. Based on this principle, dipeptides, glyco-amino acids and *N*-sulfonyl-amino acids were synthesized from hydroquinone esters of amino acids and *p*-toluenesulfonic acid. For this reaction, direct anodic and indirect mediated oxidation, as well as chemical oxidation with NBS or trisarylammoniumyl salts, was used. The mechanism of the acyl transfer is discussed in terms of a direct and/or a mediated process. A spirocyclic key intermediate was isolated and its molecular structure determined by X-ray crystallography.

\* Reprint requests to Prof. Dr. A. Rieker.