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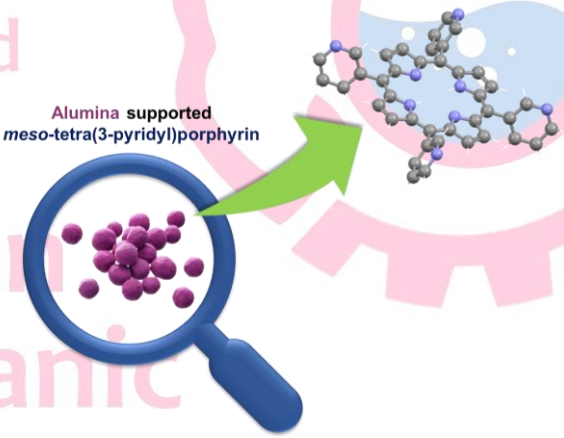
Photocatalytic activity of alumina supported *meso*-tetra(3-pyridyl)porphyrin

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In order to design a new heterogenous porphyrin photosensitizer, in the present study, *meso*-tetrakis(3-pyridyl)porphyrin was immobilized on alumina and its photocatalytic activity for the aerobic photooxidation of organic substrates was studied. It is noteworthy that due to the advantages of heterogeneous catalysts over the homogeneous counterparts [1,2] including higher stability and ease of catalyst separation, the former is of great interest in improving the performance of catalyst and photocatalysts [3,4]. Very rapid oxidation of 1,3-diphenylisobenzofuran as a specific quencher of singlet oxygen [5] in the presence of the hybrid compound showed the involvement of singlet oxygen as the main reactive oxygen species.



Keywords: *meso*-Tetrakis(3-pyridyl)porphyrin, Singlet oxygen, Aerobic photooxidation, Alumina

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