

**Supplementary information for:**

**Highly dispersed Mo-doped graphite carbon nitride: Potential application as oxidation catalyst with hydrogen peroxide**

Diogo A. F. Gonçalves<sup>a</sup>, Raquel P.R. Alvim<sup>a</sup>, Hudson A. Bicalho<sup>a</sup>, Anderson M. Peres<sup>b</sup>, ildefonso Binatti<sup>a</sup>, Pablo F. R. Batista<sup>a</sup>, Leonel S. Teixeira<sup>a</sup>, Rodrigo R. Resende<sup>c,d</sup>, Eudes Lorençon<sup>a\*</sup>

<sup>a</sup> Centro Federal de Educação Tecnológica de Minas Gerais, Departamento de Química, Av. Amazonas, 5253, Belo Horizonte, MG, Brazil

<sup>b</sup> Centro de Desenvolvimento da Tecnologia Nuclear, Serviço de Nanotecnologia, Av. Antônio Carlos, 6627, Belo Horizonte, MG, Brazil.

<sup>c</sup> Universidade Federal de Minas Gerais, Departamento de Bioquímica e Imunologia, Av. Antônio Carlos, 6627, Belo Horizonte, MG, Brazil

<sup>d</sup> Instituto Nanocell, Rua Sto. Antônio, 420, Divinópolis, MG, Brazil

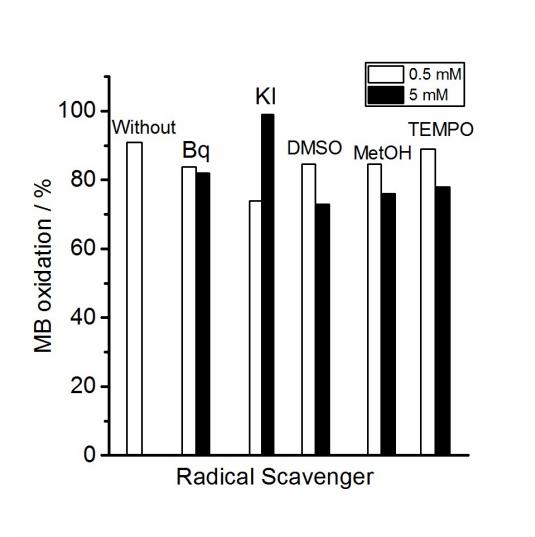


Figure S1. Percentage of MB degradation in the presence of each radical scavenger.

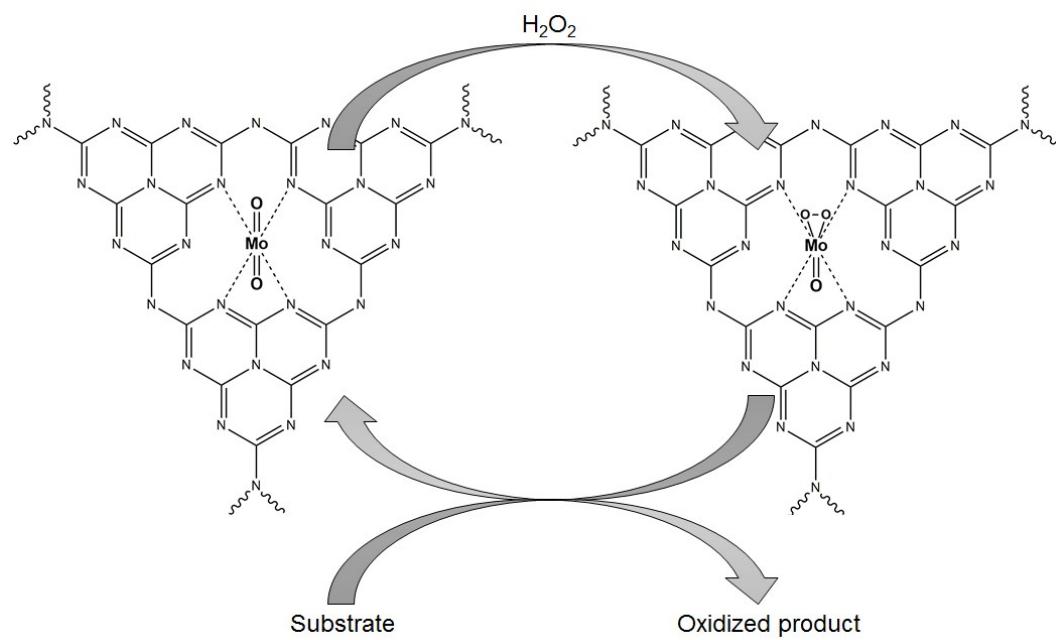


Figure S2. Formation of active peroxy species in Mo/g-C<sub>4</sub>N<sub>3</sub> catalyst by H<sub>2</sub>O<sub>2</sub>.

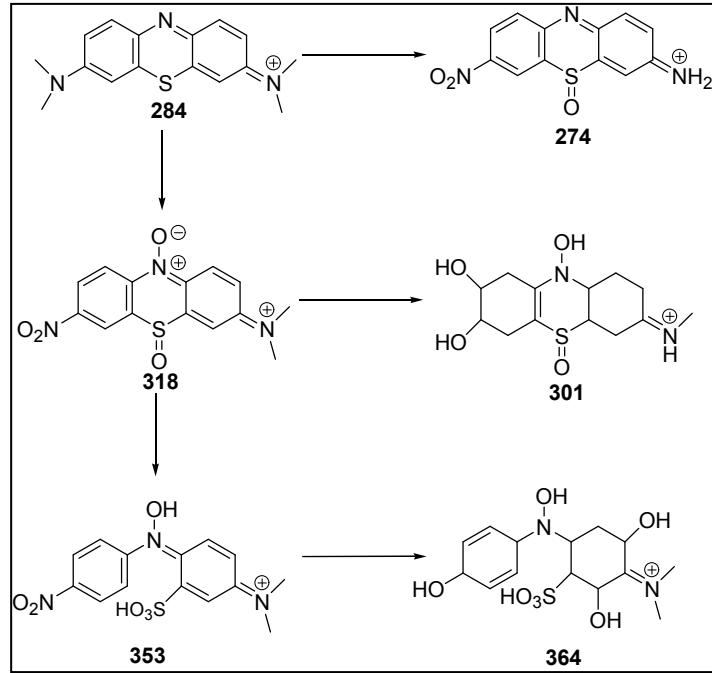


Figure S3 Proposed route for the oxidation of MB by the Mo/g-C<sub>4</sub>N<sub>3</sub> catalyst.

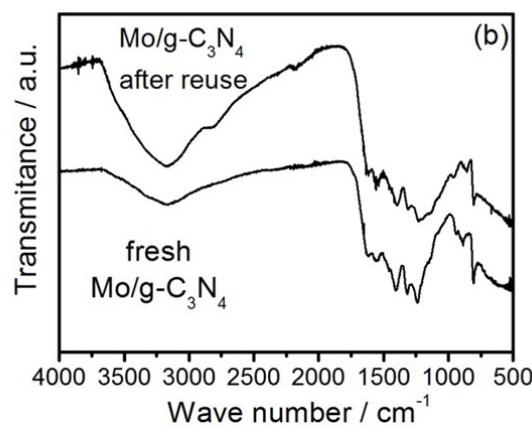


Figure S4. FTIR analysis for Mo/ g-C<sub>3</sub>N<sub>4</sub> before and after MB oxidation.