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### Original Research Article

## Removal of methylene blue by mesoporous CuO/SiO<sub>2</sub> as catalyst

Ali Reza Rahmani<sup>1</sup>, Hossien Rahmani<sup>2\*</sup> and Afsaneh Zonouzi<sup>1\*</sup>

<sup>1</sup>School of Chemistry, College of Science, University of Tehran, Tehran 14155-6455, Iran

<sup>2</sup>Department of Chemical Technologies, Iranian Research Organization for Science and Technology (IROST),  
Tehran 3353-5111, Iran

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### ABSTRACT

Among a wide range of pollutants, organic pollutants have given rise to major environmental concerns. Various methods have been considered to mitigate the damage, including catalytic reduction to less hazardous compounds. Catalysts that benefit from high surface area and suitable surface sites for various steps of the catalytic reaction have shown outstanding results in performing such duties. Mesoporous CuO/SiO<sub>2</sub> has been synthesized and characterized here and it showed excellent results for catalytic removal of methylene blue as a model organic pollutant. Several control samples were also studied to postulate a possible mechanism for activity enhancement.

**Keywords:** Reduction, Organic Pollutant, Nanoporous