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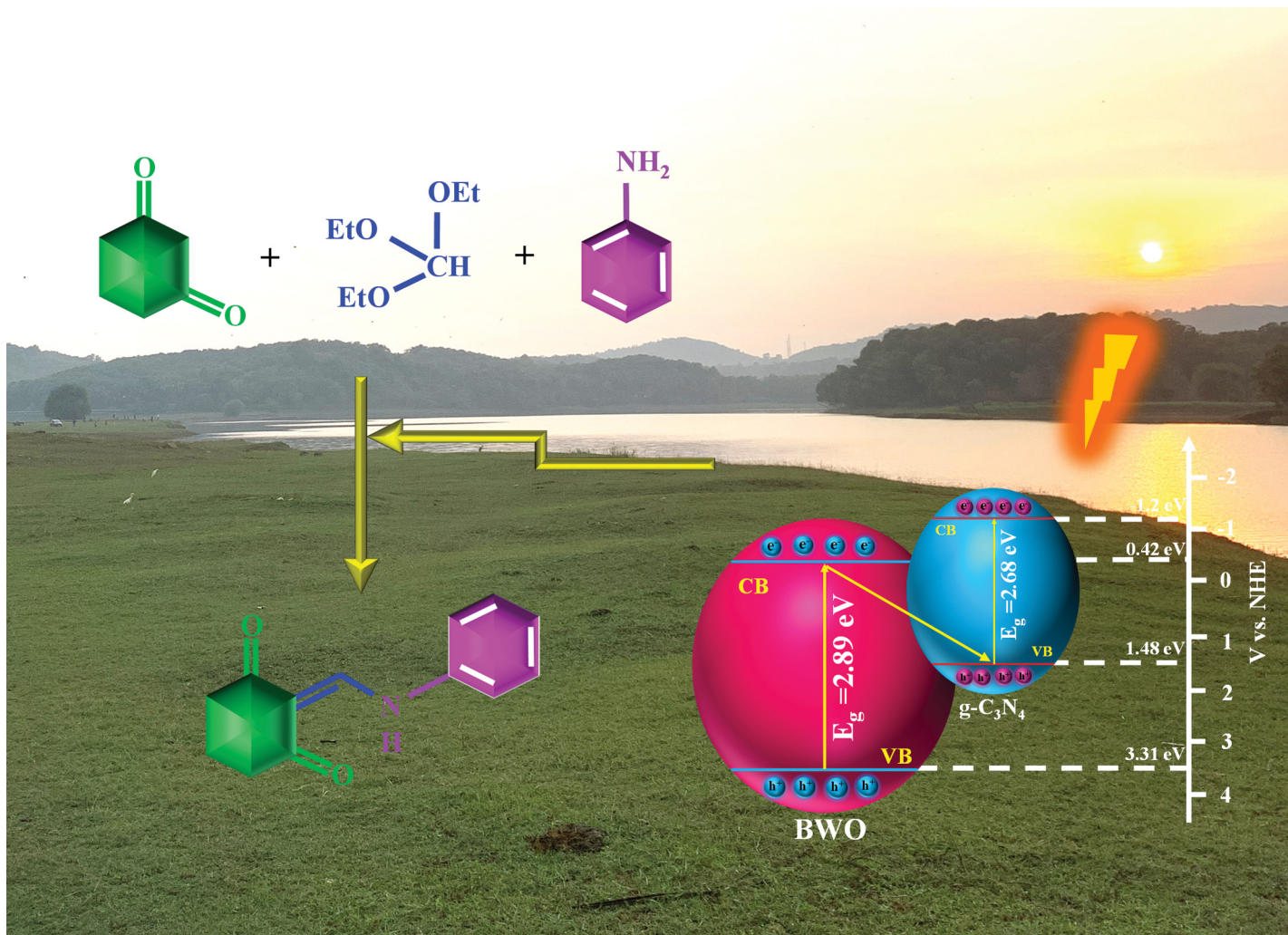
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Fundamental questions
Elemental answers



Showcasing research from Professor Selvaraj Mohana Roopan, Chemistry of Heterocycles & Natural Product Research Laboratory, Department of Chemistry, Vellore Institute of Technology, Vellore 632014, Tamil Nadu, India.

Enhanced visible-light-active photocatalysts: incorporating bismuth tungstate into graphitic carbon nitride for an efficient condensation reaction

We developed a 20 wt% $\text{Bi}_2\text{WO}_6/\text{g-C}_3\text{N}_4$ photocatalyst activated by visible light for condensation reactions. This novel catalyst achieves high yields quickly using blue LEDs and reduces undesired by-products compared to conventional methods. Traditional approaches, reliant on homogeneous catalysts and heat, face challenges in catalyst recovery and reproducibility. Our visible-light-activated, heterogeneous catalyst simplifies product formation and enhances reproducibility, making it a more efficient and reliable alternative.

As featured in:



See Murugesan Shobika and Selvaraj Mohana Roopan, *New J. Chem.*, 2024, **48**, 14145.