

Text: Showcasing research from the Graduate School of Engineering, Kyoto University, Japan.

Title: Highly selective phenol production from benzene on a platinum-loaded tungsten oxide photocatalyst with water and molecular oxygen: selective oxidation of water by holes for generating hydroxyl radical as the predominant source of the hydroxyl group

Particles of tungsten oxide loaded with nano-particulate platinum photocatalytically produced phenol from benzene with high selectivity in water containing molecular oxygen; the selectivity for phenol was much higher than that of conventional titanium oxide photocatalysts that generated carbon dioxide as a main product.



