

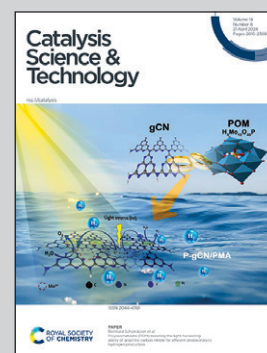
## Hydrogenation with Biomass instead of $H_2$ gas

Showcasing research from Assistant Professor Imamura laboratory, Department of Chemistry and Biochemistry, Kochi University, Kochi, Japan.

Photocatalytic hydrogenation of acetophenone over  $Pd-TiO_2$  using saccharides as hydrogen sources

Acetophenone was hydrogenated to 1-phenylethanol over a  $Pd-TiO_2$  photocatalyst using various saccharides without the use of  $H_2$  gas. This photocatalytic system shows wide applicability of saccharides; 15 kinds of saccharides including 3 kinds of polysaccharides could be used as hydrogen sources. The results indicate the possibility of utilizing biomass for hydrogenation instead of  $H_2$  gas.

### As featured in:



See Kazuya Imamura *et al.*,  
*Catal. Sci. Technol.*, 2024, **14**, 2139.