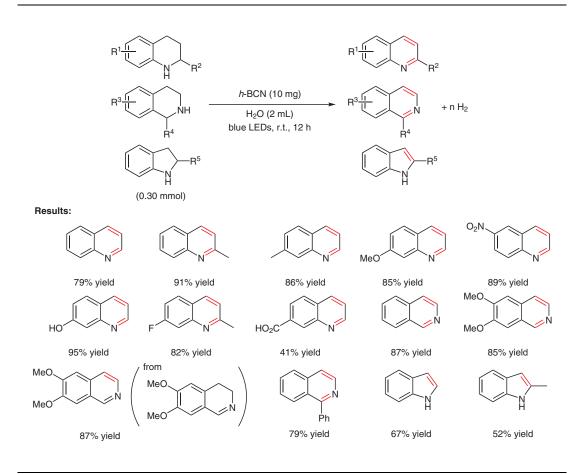
M. ZHENG, J. SHI, T. YUAN, X. WANG\* (FUZHOU UNIVERSITY, P. R. OF CHINA) Metal-Free Dehydrogenation of *N*-Heterocycles by Ternary *h*-BCN Nanosheets with Visible Light *Angew. Chem. Int. Ed.* **2018**, *57*, 5487–5491.

## Photodehydrogenation of N-Heterocycles with Hexagonal Boron Carbon Nitride



**Significance:** Hexagonal boron carbon nitride (*h*-BCN) catalyzed the acceptorless dehydrogenation of hydroquinolines, hydroisoquinolines, and indolines in water at room temperature under visible-light irradiation to give the corresponding aromatic N-heterocycles in 41–95% yield (14 examples).

**Comment:** The authors previously reported the preparation of *h*-BCN and its application to the oxidative dehydrogenation of ethylbenzene (*Angew. Chem. Int. Ed.* **2017**, *56*, 8231). Under dark conditions, the dehydrogenation with *h*-BCN did not proceed. In the dehydrogenation of 1,2,3,4-tetrahydroquinoline, the catalyst was recovered by simple filtration and reused four times with slight loss of its catalytic activity.

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## Category

Polymer-Supported Synthesis

## Key words

hexagonal boron carbon nitride

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**N-heterocycles** 

visible light

