

Showcasing research from Esteban Mejía's laboratory at the Leibniz Institute for Catalysis (LIKAT) in Rostock, Germany.

Highly active heterogeneous hydrogenation catalysts prepared from cobalt complexes and rice husk waste

In an alchemist's laboratory, a mischievous Kobold (German word for "goblin" and root of the element's name Cobalt) plays with a nitro-containing molecule while sitting on a pile of rice husk, achieving its selective hydrogenation. In the back of the scene, the depiction of the serpent Ouroboros eating its own tail serves as a reminder of the cycling nature of a catalyst. In the present contribution, we describe the preparation of highly active heterogeneous catalysts by pyrolysis of rice husk waste impregnated with cobalt complexes followed by base-treatment. The catalysts show high selectivity in the hydrogenation of nitro compounds and a broad substrate scope.





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Felix Unglaube, Janina Schlapp, Antje Quade, Jan Schäfer and Esteban Mejía* *Catal. Sci. Technol.,* **2022**, *12*, 3123. (https://doi.org/10.1039/D2CY00005A) **Highly active heterogeneous hydrogenation catalysts prepared from cobalt complexes and rice husk waste.**