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## Poly(hydroxamic acid) palladium catalyst for heck reactions and its application in the synthesis of Ozagrel



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### ABSTRACT

Bio-waste corn-cob cellulose supported poly(hydroxamic acid) palladium complex was synthesized and it is characterized using some different techniques such as FTIR, FESEM, HRTEM, EDX, XPS, UV-vis, TGA and ICP-AES analyses. The cellulose supported heterogeneous palladium complex showed high stability and catalytic activity toward Mizoroki-Heck reaction of aryl/heteroaryl halides and arenediazonium tetrafluoroborate with a variety of olefins to give the corresponding coupling products in up to 97% yield. The palladium complex was also applied to the synthesis of Ozagrel a thromboxane A<sub>2</sub>-synthetase inhibitor with excellent yield. The complex was separated from the reaction mixture by simple filtration and repeatedly used up to seven times without significant loss of its catalytic performance.

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