

Polymer-supported palladium (II) complex of pyridine-oxazoline as a recyclable catalyst for an asymmetric addition of arylboronic acids to conjugated cyclic enones

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Swellable pearl-like copolymers of (*S*)-4-(*tert*-butyl)-2-(4-(4-vinylphenyl)pyridin-2-yl)-4,5-dihydrooxazole with styrene and various cross-linkers were designed and prepared. Catalytic activity of palladium (II) complexes of the prepared copolymers was tested on addition of various arylboronic acid to 3-methyl-2-cyclohexenone. It was possible to use the catalyst at least 6 times and their catalytic activity was comparable with homogenous conditions. Such system was the very first recyclable catalytic system for palladium-catalysed asymmetric addition of arylboronic acids to conjugated cyclic enones.

Figure 1. 1,4–addition of arylboronic acids to cyclic enones catalysed by polymer-supported palladium (II) complex of pyridine-oxazoline.

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References:

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