

# Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

**Benzimidazolylidene Carbene Ligated Palladium Catalysis of the Heck Reaction in Aqueous Media**

İsmail ÖZDEMİR<sup>1</sup>, Yetkin GÖK<sup>1</sup>, Nevin GÜRBÜZ<sup>1</sup>, Bekir ÇETİNKAYA<sup>2</sup>

<sup>1</sup>Inönü University, Faculty Science and Arts, Department of Chemistry,  
44280 Malatya-TURKEY

<sup>2</sup>Ege University, Department of Chemistry, 35100 Bornova, İzmir-TURKEY

 [Keywords](#)  
 [Authors](#)



[chem@tubitak.gov.tr](mailto:chem@tubitak.gov.tr)

[Scientific Journals Home](#)  
[Page](#)

**Abstract:** A highly effective, easy to handle and environmentally benign process for a palladium mediated Heck reaction was developed. The in situ prepared 3-component system, Pd(OAc)<sub>2</sub> / 1,3-dialkylbenzimidazolium chlorides (LHX = 1a-g) and Cs<sub>2</sub>CO<sub>3</sub>, catalyzes quantitatively the Heck coupling of aryl bromides under mild conditions in aqueous media.

**Key Words:** Heck coupling, palladium, benzimidazolin-2-ylidene, benzimidazolium, N-heterocyclic carbene

---

Turk. J. Chem., **31**, (2007), 397-402.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Chem., vol.31, iss.4.](#)