

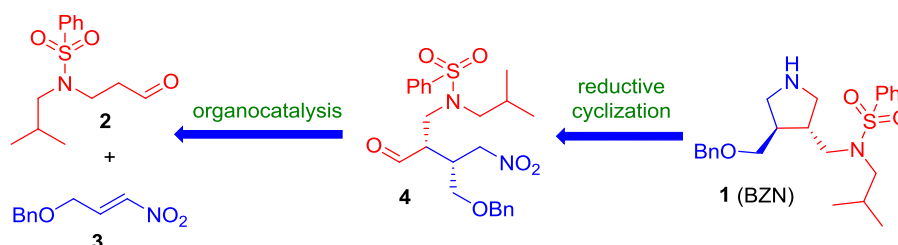
# Solid Supported Hayashi-Jørgensen Catalyst as an Efficient and Recyclable Organocatalyst for Asymmetric Michael Addition Reactions.

*Piotr Szcześniak<sup>a</sup>, Olga Staszewska-Krajewska<sup>b</sup>, Bartłomiej Furman<sup>b</sup>, and Jacek Mlynarski<sup>a,b</sup>*

<sup>a</sup> Faculty of Chemistry, Jagiellonian University, Gronostajowa 2, 30-387 Krakow, Poland; <sup>b</sup> Institute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw, Poland

*alchemik\_84@tlen.pl*

A comparison of three different catalytic systems for the efficient, asymmetric synthesis of compound **1** (BZN) is described. (BZN) exhibits interesting binding to HIV-1 protease. The presented strategy is based on organocatalytic Michael addition of aldehyde **2** to *trans*-nitroalkene **3**, and subsequent reductive cyclization. High yields, enantio-, and diastereoselectivities were achieved in the Michael addition by application of a POSS- or Wang resin-supported Hayashi-Jørgensen catalyst.



Piotr Szcześniak, Olga Staszewska-Krajewska, Bartłomiej Furman, Jacek Mlynarski; *Tetrahedron Asymmetry*, **2017**, 28, 1765-1773

The author is grateful to Polish National Science Center for financial support of the research (*Fuga 4* Grant No. DEC-2015/16/S/ST5/00440).