



Contribution ID: 4

Type: **not specified**

COBALT-CATALYZED C(sp²)-H BOND ALLYLATION

Friday, 17 March 2023 12:20 (20 minutes)

In the last couple of decades, high-valent cobalt catalysis has been used as a valuable tool for C-H bond activation and functionalization.¹ The use of cobalt(II) salt catalysts in combination with bidentate directing groups has proven to be an effective strategy for various C-H bond transformations.^{2,3} With cobalt being less expensive alternative to noble metals, it also displays unique reactivity and regioselectivity.⁴

Allyl- functional groups are important in organic synthesis as they open the door to many further modifications of the substrate. Employing cobalt catalyzed C-H bond allylation on amino acid derivatives **1**, it is possible to utilize cheap reagents to obtain useful building blocks for other synthetic applications. Using optimization of cobalt catalysts, solvents, oxidants, additives and allylation reagents we were able to obtain diallylated phenylalanine derivative **2** in good yield.

Primary author: BAŠĒNS, Emīls (Latvian Institute of Organic Synthesis)

Presenter: BAŠĒNS, Emīls (Latvian Institute of Organic Synthesis)

Session Classification: Organic chemistry session