Available online at www.joac.info

ISSN: 2278-1862



Journal of Applicable Chemistry



2018, 7 (4): 949-957 (International Peer Reviewed Journal)

Oxone Catalyzed Amination of 2-naphthol/substituted 2-naphthol Analogous as Bio-active Compounds *via* C-O Activation and C-N Bond Formation

Arvind Kumar Pandey¹, Narsingh Verma², Manoj Kumar Shrivash³, Akhilesh Kumar¹ and I.R. Siddiqui¹*

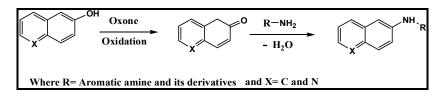
 Department of Chemistry, University of Allahabad, Allahabad-211002, INDIA
Central Institute of Medicinal and Aromatic Plants (CIMAP) Lucknow-226015, INDIA
Centre of Biomedical Research, SGPGIMS, Lucknow-226014, INDIA Email: arvind010pandey@gmail.com

Accepted on 7th July, 2018

ABSTRACT

The hydroxyl groups of 2-naphthol/ substituted 2-naphthol analogous are replaced by arylamine derivatives via oxone catalyzed coupling reaction. Oxone exhibits important catalytic activity in the reaction and products of reaction generated in good yields. The reaction proceeds by the intermediary of the keto tautomer of naphthol and nucleophilic addition to the carbonyl group followed by elimination of water and give the desired product. The present methodology provides the aminated product, can be further transformed to pharmaceutically important.

Graphical Abstract



Keywords: Bio-active, Oxone, Aryl amine, 2-naphthol/substituted 2-naphtholanalogous.