# Photoredox coupling of N-containing heterocycles with anisole and veratrole

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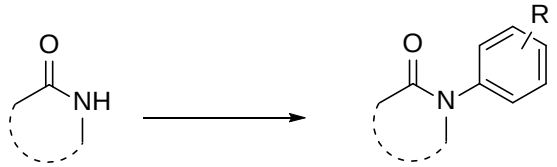
C-N coupling reaction are of interest and importance in chemistry. Besides the classic and most widespread coupling methods, the development of photoredox driven reactions has become more significant since it allows other synthetic paths and often milder conditions. With this goal in mind, this thesis was performed to investigate a specific light-driven C-N coupling reaction. The aim was to couple a cyclic amide and an arene, bearing functional groups, to form this specific C-N-Bond. Since the yields were low by using a cyclic amide as substrate, reactions with pyrazole were investigated in this work. The yields were indeed higher than those obtained with the initial substrate. These higher yields allowed us to observe and quantify the results more accurately.

Many screenings were performed in order to progress towards the understanding of the mechanism and/or inhibition of these photoinduced C-N coupling reactions. Several visible/near-visible absorbing photoredox catalysts, bases, other substrates and/or arenes were tested. So far, the pyrazole derivatives remained the best substrates.

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