

ABSTRACT

Charles University in Prague
Faculty of Pharmacy in Hradec Králové
Department of Inorganic and Organic Chemistry

Candidate: Zuzana Rania Hrušková

Supervisor: Prof. RNDr. Milan Pour, PhD

Title of diploma thesis: Preparation and oxidative coupling of 1,5-disubstituted tetrazoles.

Following the established protocol developed for the preparation of 1,5-disubstituted tetrazoles employing Pd-catalyzed cross-coupling reactions with activated the C5-H bond we have been able to extend the existing library of tetrazoles. 1,5-Disubstituted tetrazoles were used as substrates for oxidative coupling reactions which would result to formation of tetrazolo[1,5-*f*]phenathridine core. However, all of the common methods we used for this reaction lead only to the traces of the desired product.