

Selective, Photochemically Promoted Functionalization of Indoles and Related Heterocyclic Systems

PROJECT DESCRIPTION

This is a new project based on results recently discovered in our group. Simple, readily available iron(III) salts in the presence of visible light (blue LEDs) permits the high-yield alkylation of indoles at the 3-position. These products are generally useful as building blocks for the chemical synthesis of bioactive natural products and synthetic drugs. We now seek to expand the scope of this novel process and design experiments to elucidate its mechanism.

An intern working on this project will gain experience in experimental design, chemical characterization, reaction optimization, and ideally participate in the preparation of a scientific manuscript describing the results of this work.

FACULTY-DEPARTMENT

Science-Chemistry

DESIRED FIELD OF (STUDENT) STUDY

Advanced undergraduate organic chemistry laboratory experience is necessary

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

1

INTERNSHIP START DATE

July 4, 2017 (Flexible)

INTERNSHIP END DATE

3 months after start date

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
University of Alberta International
intern@ualberta.ca

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.