



INTERNSHIP PROGRAM FOR INTERNATIONAL STUDENTS

INTERNSHIP SUBJECT FORM

Name of the Host Laboratory	Laboratory of Organic Synthesis (LSO)
Website of the Host Laboratory	http://lso.polytechnique.fr/
Research Group	Six Team https://yvansix7.wixsite.com/sixteam
Internship Supervisor	Dr Yvan Six
Internship Subject	A novel approach for the synthesis of functionalised indolizidine derivatives
Student's level	<input checked="" type="checkbox"/> Advanced Undergraduate Students (3 rd or 4 th year) <input checked="" type="checkbox"/> Master's students (1 st or 2 nd year) <input checked="" type="checkbox"/> PhD students
Proposed Duration	<input checked="" type="checkbox"/> 3 months <input checked="" type="checkbox"/> 4 months <input checked="" type="checkbox"/> 5 months <input checked="" type="checkbox"/> 6 months
Prerequisites	High motivation and good theoretical knowledge in Organic Chemistry. Good communication skills.
Internship description (max. 15 lines)	<p>Indolizidines constitute an extremely important family of compounds. In particular, an incredibly large number of natural products belong to this class of molecules. Indolizidine alkaloids have been isolated from various sources: plants, insects, fungi etc. Many of them exhibit interesting biological activities that can be used in future applications in fundamental biology, in drug development or in the crop protection industry.</p> <p>This internship project aims at investigating a new approach for the expedient synthesis of functionalised indolizidine compounds, based on the chemistry of cyclopropanes. We are planning to evaluate the biological activities of the products obtained [collaboration with the Institut de Chimie des Substances Naturelles (ICSN) in Gif-sur-Yvette].</p>