



## INTERNSHIP PROGRAM FOR INTERNATIONAL STUDENTS

### INTERNSHIP SUBJECT FORM

Name of the Host Laboratory	Laboratory of Organic Synthesis (LSO)
Website of the Host Laboratory	<a href="http://lso.polytechnique.fr/">http://lso.polytechnique.fr/</a>
Research Group	Six Team <a href="https://yvansix7.wixsite.com/sixteam">https://yvansix7.wixsite.com/sixteam</a>
Internship Supervisor	Dr Yvan Six
Internship Subject	Synthesis of natural product analogues for anti-cancer applications
Student's level	<input checked="" type="checkbox"/> Advanced Undergraduate Students (3 <sup>rd</sup> or 4 <sup>th</sup> year) <input checked="" type="checkbox"/> Master's students (1 <sup>st</sup> or 2 <sup>nd</sup> 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. Strong background and good theoretical knowledge in Organic Chemistry. Good communication skills.
Internship description (max. 15 lines)	<p>In this internship, the student will work with one of our PhD students, whose research goal is the synthesis of a series of simplified analogues of kingianins.</p> <p>Kingianins are natural products isolated from a Malaysian tree. Their pentacyclic skeleton is highly original and they are attracting interest in the context of the development of new anti-cancer therapies. An efficient and cheap route towards these molecules has been investigated in the laboratory. It is totally different from the few already described syntheses and represents a significant improvement over those, both in terms of originality and flexibility.</p> <p>Keywords: natural products, multistep synthesis, bioactive compounds, antitumor compounds.</p>

The boxes marked with cross implies eligible