Name of the Host Laboratory | Laboratory of Organic Synthesis (LSO)  
Website of the Host Laboratory | http://lso.polytechnique.fr/  
Research Group | Six Team  
Website | https://yvansix7.wixsite.com/sixteam  
Internship Supervisor | Dr Yvan Six  
Internship Subject | Synthesis of natural product analogues for anti-cancer applications  
Student's level | □ Advanced Undergraduate Students (3rd or 4th year)  
□ Master's students (1st or 2nd year)  
□ PhD students  
Proposed Duration | □ 3 months  
□ 4 months  
□ 5 months  
□ 6 months  
Prerequisites | High motivation. Strong background and good theoretical knowledge in Organic Chemistry. Good communication skills.  
Internship description (max. 15 lines) | 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. 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.  
Keywords: natural products, multistep synthesis, bioactive compounds, antitumor compounds.