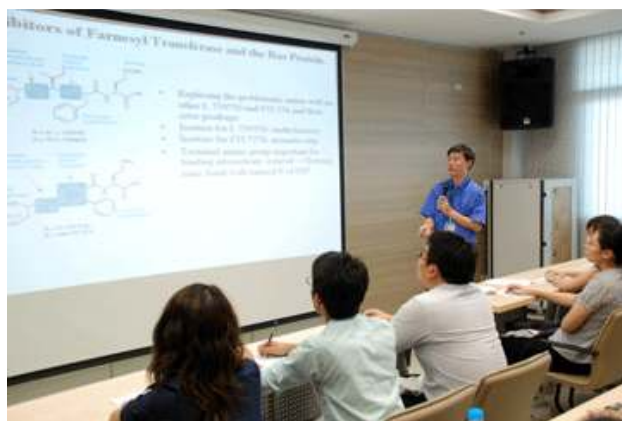


The First Ever Organic Chemistry Article from Thailand in Chemistry, A European Journal

CGI Faculty Members Successfully Devised a Synthetic Route for the Potential Anticancer Agents

Development of human resources, especially for research in science and technology, has received national attention as it plays an important role in creating the knowledge-based society and provides the competitive edge for the country at the international level. Thus, **Chulabhorn Graduate Institute (CGI)** was established, with one of its continuing missions, to provide the modern knowledge and training at the graduate levels for the development of highly qualified personnel in research for future leaders in science and technology. Since 2007, three multidisciplinary programs in Environmental Toxicology, Applied Biological Sciences: Environmental Health, and Chemical Biology have been offered. At present, there are 21 Ph.D. and 50 Master's students enrolling in the three programs at CGI.



The program in Chemical Biology focuses on utilizing chemistry, particularly organic chemistry, as tools to study biological problems and provide better understanding for some biological processes. In addition, the importance of organic chemistry has been realized as it is central to the advancement not only in its own field but also in polymer, nanotechnology, and pharmaceutical/medicinal industries. Thus, it marks a significant step for the scientific community, especially in organic chemistry, in Thailand, when the first ever research article for the work entirely completed in Thailand by a research group at the Laboratory of Medicinal Chemistry, Chulabhorn Research Institute (CRI) and Program in Chemical Biology, Chulabhorn Graduate Institute (CGI), has been accepted for publication in one of the world's most highly regarded and coveted international peer-reviewed journal—the Chemistry, A European Journal.

The Chemistry, A European Journal serves as a forum for the rapid scientific dissemination of outstanding research work in all aspects of chemistry and related fields. Established 15 years ago, the journal has continuously improved as

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indicated by the increasing impact factors over the years (5.454 in 2008) and has its rank among the top five of the primary chemical literatures.

The research work accepted for publication in the Chemistry, A European Journal features the use of immobilized acid on silica to affect some chemical steps in a more efficient and environmentally benign way due to much simpler experimental techniques, mild reaction conditions, and high selectivity of the product over other by-products. More importantly, the product flavanoids of the described chemistry are structurally related to those



reportedly exhibiting their potential use as new designed drug candidates for some cancers primarily because of their selective interactions with estrogen receptor β , which has been implicated in some forms of breast cancer.

In addition, the chemistry reported in the article is very challenging because it has not been studied or performed before, thus, making an impact on and contributing critically to the existing knowledge pivotal to the advancement of organic chemistry not only nationally but also globally.

It is noteworthy that the milestone achieved here is only in the third full year of CGI, exemplifying the high quality of the faculty members who are jointly appointed at CRI as research staffs. It should be emphasized that one important aspect of this landmark publication in the Chemistry, A European Journal is the completion of the entire work only in Thailand.

In addition to the abovementioned publication in the Chemistry, A European Journal, a research article from the same group was published in ChemMedChem, in 2009, on the structure-activity relationships of the potential anticancer drug candidates in the lamellarin family. Because of the highly favorable reviews from the referees, the article was highlighted on the frontispiece (inside cover) of the issue publishing the article.



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