

Publication of a Newsletter and Literature Review

Crystal M. Cendejas

Dr. Jesus Cordova Guerrero

Abstract

Two projects were developed, a newsletter titled "STEM Research at CLU" and a literature review titled "A review of modern methods for the synthesis of alkenes." The newsletter aims to highlight the research achievements of faculty and students over the past year at California Lutheran University. Meanwhile, the literature review will be based on modern methods of alkene synthesis. This article aims to provide useful applications for the synthesis of alkenes and write a review of the unique types of alkenes to better understand how they are formed and behave under different reaction conditions.

Method

Project 1: Research faculty were contacted via email to provide information on their research projects and professional achievements. Afterward, a Zoom meeting was scheduled to gather additional information included in the newsletter. Each article was categorized alphabetically into its corresponding area in research.

Project 2: Literature searches were conducted to find the most up-to-date reports published in the last six years using SciFinder Scholar. Subsequently, reports were reviewed through weekly meetings while using ChemDraw. The reports were organized into four groups according to the type of transformation, including carbonyl, transition-metal catalyzed olefination, elimination reactions, and miscellaneous.

Results

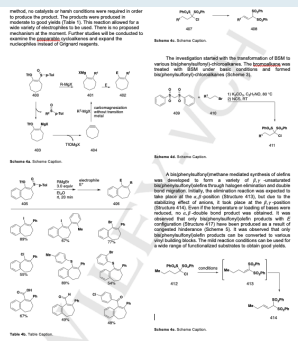
Project 1: The newsletter is expected to include as many research faculties as possible and focus on each project's specifics to be shared with the CLU community. In addition, this newsletter will be published on the CLU website.

Project 2: The publication is planned to be submitted to the European Journal of Organic Chemistry. It is expected to include recent reports on the synthesis of alkenes as a strategy to advance knowledge in the scientific community.

Introduction

Project 1: A newsletter, titled "STEM Research at CLU," was developed to identify the different research projects occurring at CLU, specifically in the STEM field. This project highlights the faculty and students' research accomplishments in the past year at California Lutheran University to provide valuable information for students interested in research.

Project 2: The construction of alkenes in organic synthesis plays a key role in constructing molecular frameworks and universal materials. In collaboration with the PI and two students from the Chemistry Department at the University of Tampa, a literature review, titled "A review of modern methods for the synthesis of alkenes," will be constructed to provide useful applications for the synthesis of alkenes.



A review of modern methods for the synthesis of alkenes

Dr. Allan Knox
By: Crystal M. Cendejas

Dr. Allan Knox is an Assistant Professor in Exercise Science and Vice Chair of the Institutional Review Board at CLU. He received his BSc (Hons) and PhD from the Institute of Clinical Exercise and Health Sciences, University of the West of Scotland. And thereafter, he completed his Postdoctoral Fellowship at Rutgers New Jersey Medical School and East Orange VA Medical Center. Dr. Knox has ten years of experience in the field of Clinical Exercise Physiology and currently serves as the Director of the Office of Undergraduate Research and Creative Scholarship. He plans on providing CLU students from all majors' opportunities to be involved in research and build strong foundations for success in their future.

Dr. Knox is involved in several different projects and is currently mentoring six students this summer conducting research. His main research interests include the influence of aging and the cardiovascular system, exercise and nutritional therapies for the cerebral vasculature, exercise responses in racial groups, the effects of alcohol on the vascular system and potential therapies to reduce the influence of alcoholism on the vasculature.

In one project involves the investigation of potential racial differences in exercise response. Furthermore, his research team observe how the heart reacts or changes as a result of resistance exercise. In addition, a paper on aging and the heart has recently been published in the European Journal of Applied Physiology, focusing on how the heart changes as we age. After the data is analyzed, they anticipate a publication for publication.

In collaboration with Rutgers New Jersey Medical School, they investigated the effects of high-intensity exercise on cerebral blood flow and how different arteries response to the exercise stimulus. They also looked at different types of high-intensity exercise: high-intensity aerobic exercise and high-intensity resistance exercise.

Another student is examining the effects of alcohol on the vascular system. Since large volumes of alcohol are detrimental to the arteries, they are investigating whether the detrimental effects of alcohol consumption can be reduced by a diet that is high in nitrate. The objective is to potentially develop nutritional therapies to reduce the influence of alcoholism on the vasculature.

In collaboration with the University of the West of Scotland and York St. John University, they intend to look at the mechanics of the heart. They are working on a way to detect cardiovascular disease using ultrasound in middle-aged people. More specifically, they are

<https://www.scribd.com/document/54014040/Dr-Allan-Knox>

STEM Research at CLU

Conclusions

The newsletter, expected to be published on the CLU website, includes and emphasizes research projects, accomplishments, and goals from faculty and students from California Lutheran University. A literature review will be written, including up-to-date reports published in the last six years on the synthesis of alkenes.

References

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