



# 2019 Illinois LSAMP Symposium 25 Years of Building STEM Pathways

**FEBRUARY 22nd & 23rd, 2019**

Hilton Lisle, 3003 Corporate West Drive, Lisle, IL 60532

Sponsored By: The Illinois Louis Stokes Alliance for Minority Participation Program and the Center for STEM Education and Research

## Call for Abstracts

**Submission Deadline: Friday, February 8, 2019 at 6:00 p.m. CST**

An abstract (no more than 250 words) of the work to be presented must be submitted after conference registration at <https://lsamp.ilsampspringconference.com/en/abstract-submission/>. Both poster and podium (oral) presentations will use the same submission platform. Please provide enough detail to enable the program committee to evaluate the work for placement within the conference program.

\*\*\*Be sure to have your abstract approved by your respective ILSAMP coordinator before submittal.\*\*\*

## SAMPLE ABSTRACT

**Preparation of Ruthenium Complexes via Microwave Irradiation** *[title-case bold]*

Shamir Fuller, Pablo Guzman and LeRoy Jones II *[presenter(s) underlined]*

Department of Chemistry & Physics, Chicago State University, Chicago, IL 60628

ljones27@csu.edu *[research advisor's e-mail address]*

Schiff-base substituted ruthenium carbon complexes were prepared by treating Grubbs' catalyst with Schiff-base ligand salts that potentially supports chiral substituents. These complexes demonstrated high metathesis activity in organic solvents. The complexes were prepared in three steps in moderate yields but the final step required the use of Schiff-base ligands in the form of their thallium salts (*toxic!*). Using microwave irradiation, our lab prepared the aforementioned organometallic complex in NMR tubes using sodium salts. However, scale-up of the reaction proved difficult. The goal of this study is to determine the best microwave method for producing gram quantities of Schiff-base substituted ruthenium complexes using nontoxic salts. Q-NMR analysis of the complexes' carbene peak was conducted to determine the best microwave method to effect a quantitative reaction. The methodology will provide a nontoxic route into ruthenium Schiff-base catalyst that possesses chiral character, which in turn, opens the possibility for asymmetric catalysis. *Funding: NIH/NIGMS Grant S06 GM 008043 supported this research. [funding sentence italicized]*



# 2019 Illinois LSAMP Symposium 25 Years of Building STEM Pathways

**FEBRUARY 22nd & 23rd, 2019**

Hilton Lisle, 3003 Corporate West Drive, Lisle, IL 60532

*Sponsored By: The Illinois Louis Stokes Alliance for Minority Participation Program and the Center for STEM Education and Research*



## Scientific Poster Guidelines

The goal for your scientific poster is to have an organized and attractively displayed presentation of your research findings. Posters should be self-explanatory and readable within five minutes. When constructing your poster, you must comply with the following guidelines:

### Required Elements

#### 1. Title

At the top of your poster you should have a title that is both short, and very descriptive of your project. For empirical studies, the title should also mention the organism(s) studied. As a rule, the title should be easily readable at a distance of about 4 - 5 feet away (words are approximately 1.5 - 2.5 cm in height).

#### 2. Name and Affiliation

Directly under the title, you should have your name, your faculty sponsor's name, and your University's name. The name and affiliation section are usually about 20 - 30% smaller than the title.

#### 3. The Body of the Poster

##### A. Abstract

The abstract is a brief synopsis of the entire work described in the poster. Most abstracts are one or two paragraphs in length. The abstract should be understandable without reading the entire poster and the reader should be able to decide if she or he would like to read the entire poster based on what they read in the abstract. The abstract should contain the following elements: the purpose of the study; a brief statement about what you did; a concise statement of the major findings; and the major conclusions. Do not include details of the methods.

##### B. Introduction

The purpose of the introduction is to present the question being explored by your research and to place it in the context of current knowledge about the topic. It often works well to start with the general context and work your way down to the specifics, ending with a precise statement of the question or hypothesis being addressed by your study. The introduction should convince the reader of the significance of your study. To do this well in a poster is a challenging requirement. Be brief but include the important points to make sure the reader sees the relevance of your work.

##### C. Methods

In this section you should describe all procedures that you performed. Describe your methods in sufficient detail to allow a reader who works in your field to understand what you did to collect your data. Illustrations are appropriate for complex experimental design.

#### **D. Results**

The purpose of this section is to summarize the data. Report the results of any statistical test here. Present all of your results, whether positive or negative. A table or figure may substitute for a written summary as long as each table or figure has a legend that explains the graphic clearly.

#### **E. Discussion**

In this section you should interpret the meaning of your results with respect to the original question. You should interpret your results without repeating them. The discussion must include your conclusions about the answers to the questions that motivated your research that you described in your introduction. If appropriate, mention any alternative explanations for your results and mention possible explanations for unexpected results.

#### **F. Literature Cited**

This section is optional in the poster, unless citations are used in the text; you may use a unit smaller than 17.5 cm by 20.5 cm. Include only those papers cited in the text. Do not cite a paper unless you have read it yourself. Cite all of your references in the text and list them in the literature cited section using a format from a journal within your discipline.

#### **4. Graphics, Tables, Photos and Others**

Illustrations, tables, figures, photographs and diagrams need to have unique identification numbers and legends. In the text use the numbers to refer to specific graphics or pictures. In your legends, include a full explanation and where appropriate, include color keys, scale, etc.

#### **5. Poster Display**

The available poster space will consist of one poster board, 8' (length) x 4' (width), with each side shared by two students (four students per board). Each student will have a 4' x 4' space to display posters, brochures or any other items of interest. Your poster number will be listed in the program booklet.

##### **A. Specific Guidelines**

One entire poster should take up a space no larger than 4 feet wide by 4 feet high. All posters will be affixed to and displayed on a vertical surface. Thumbtacks will be supplied to secure your poster to the surface. You may build your poster as a single display or it may be made up of several individual components that can be secured to the display board. We encourage you to be imaginative and creative, so long as you follow the guidelines in this document. Remember that the purpose of the poster is to convey information from your work. Use care that the display does not overpower the scientific content. Also, check your text and legends for accuracy. Be sure to italicize Latin works, label graphs and tables, and have several people proofread your poster! If you decide to make each of the above components of the poster a single display, the smallest unit should be no smaller than 17.5 cm by 20.5 cm (approximately 7" by 8") -- except for the "Literature Cited" and for the "Title and Name" sections that are, by necessity, linear in orientation. It is fine to group more than one required element on a single unit as long as your poster is clear and readable and does not look cluttered. Unless otherwise directed in the above sections, the text font size is to be no smaller than ~ 3 - 4 mm in height for an upper-case letter (*for example, 12-point font in Helvetica/Times New Roman/Arial*).

##### **B. Poster Set-Up**

Set up time for the poster session will be Friday, February 22<sup>nd</sup> from 3:00 p.m. – 7:00 p.m. The reception will begin promptly at 7:00 p.m. The formal poster presentation session is on Saturday from 10:30 a.m. to 12:00 p.m., during which time authors are to be present at their posters to answer questions and receive feedback during the sessions.