



# 10<sup>TH</sup> ANNUAL UIS SCIENCE RESEARCH SYMPOSIUM

UNIVERSITY OF ILLINOIS AT SPRINGFIELD 

## CALL FOR ABSTRACTS

**ABSTRACT SUBMISSION DEADLINE: MARCH 26, 2010**

AWARDS WILL BE GIVEN FOR THE TOP THREE POSTERS  
AND TOP THREE ORAL STUDENT PRESENTATIONS

SYMPOSIUM DATE:

**FRIDAY, APRIL 16<sup>TH</sup>, 2010**  
**9:00 A.M. TO 4:00 P.M.**

THIS YEAR'S KEYNOTE SPEAKER WILL BE  
**DR. ANDREW GEWIRTH,**  
DEPARTMENT OF CHEMISTRY,  
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

DR. GEWIRTH'S TOPIC:

**“BEHAVIOR OF SUPPORTED  
PHOSPHOLIPID BILAYERS”**

ORGANIZED BY THE  
BIOLOGY, CHEMISTRY, & CLINICAL LAB SCIENCES DEPARTMENTS, THE NATURAL  
SCIENCE DIVISION AND THE STUDENT SCIENCE CLUBS

## **GUIDELINES FOR POSTER AND ORAL PRESENTATIONS**

**Poster:** 4 ft x 4 ft. only. To qualify for awards, underline the name of the first author, if a student.

**Oral presentations:** 20 minutes (15 min. presentation + 5 min discussion/questions)

### **GUIDELINES FOR PREPARATION OF ABSTRACTS**

Abstracts should be *submitted electronically by March 26 to [jpatt2@uis.edu](mailto:jpatt2@uis.edu)* following the instructions below. Abstracts that do not conform to the format specified below **will not be accepted**.

- \* Limit your abstract to 250 words or less, not counting title, name (or names if co-authors), and affiliation information. The abstract should consist of a single paragraph.
- \* Left-justify the text, including the title.
- \* Use New Times Roman, font 12.
- \* Type the title of the abstract in capital, bold letters.
- \* The author/affiliation information, typed in bold, should include full name of the author(s) and their affiliations (department, school, city, state, zip code).
- \* Underline the name of the presenter for both oral and poster presentations. Put an asterisk (\*) behind the name of the student presenter, to ensure the eligibility for awards.
- \* Traditionally, an abstract includes the following items:
  - *Introductory statement* – introduces the general subject matter of the study.
  - *Justification* – comments on the ultimate importance of looking at the phenomenon in question.
  - *Objectives* – specifies the objectives of the study (1-2 sentences).
  - *Methods* – principal methods employed, no detail; a couple of sentences.
  - *Results and Discussion* – list most important, specific findings and add an interpretive comment (“discussion”) to each.
  - *Summary and significance* – In one sentence summarize the major take-home message of the observations and comment on their significance. (Note that the focus of “significance” is narrower, more specific, than that of justification.)
- \* Abstract guidelines can also be found at the Biology website: <http://www.uis.edu/biology/> Click on News & Scholarship.

**Abstracts that fail to conform to the above format will not be accepted.**

### **SAMPLE ABSTRACT**

#### **Preparation Of Lithium-Intercalated Cobalt Vanadates**

**Redwood, Patrick H.\* and Keenan Dungey.** Chemistry Program, University of Illinois at Springfield, Springfield, Illinois 62703

We are interested in improving the lithium ion batteries used in portable devices by preparing a bimetallic oxide cathode material, which allows more efficient charge transfer than current cathode materials. We have prepared samples of cobalt vanadates through coprecipitation under basic conditions and ultrasound under acidic conditions. Two new compounds were produced: a cobalt hydroxy pyrovanadate and a layered polyoxyvanadate intercalated with cobalt ions. The samples were characterized through elemental analysis, infrared spectroscopy, and powder X-ray diffraction. We have also investigated the thermal decomposition patterns of the samples. We have explored several chemical routes (LiI, *n*BuLi, LiOH, various pH and thermal programs) for intercalating lithium ions into these materials. The resulting lithium-inclusion compounds were structurally compared with commercial and prepared lithium cobaltate. We are currently working to increase the lithium ion storage capacity of the cobalt vanadates.

**Note:** The name of the presenter is underlined and the student presenter is identified with an asterisk\*.

## **GUIDELINES FOR PREPARATION OF POSTERS**

### **Format and Layout For Posters: Suggestions For Students**

Use the conventional heading for your discipline. Those suggested below are commonly used in the fields of biology and chemistry. In general, for efficient reading, paragraphs should not exceed 15-20 lines. The size of the poster should not exceed 4x4 feet.

**Title:** A legible title is the key to attracting the audience to a poster. Poster title should be readable from 10-15 feet away. Use letters about 1.5 inches tall. The names of authors and their affiliation can be slightly smaller.

**Abstract:** Including an abstract in the poster is a good practice. The upper left corner is a good placement for the abstract.

**Introduction:** Introduce the most relevant background subject matter in one to two short paragraphs.

**Objectives:** Specify general and/or specific aims of the study, or state the hypothesis tested. Focus on clarity and brevity.

**Methods:** Keep this section brief, providing sufficient information to understand how the study was done. Methodology and sequence of procedures is sometimes most efficiently addressed in the form of a flowchart.

**Results:** This is the most important part of the poster. Use tables, graphs and illustrations to present the data. They should be self-explanatory. All written information that accompanies the illustrations should be brief and coherent.

**Discussion:** This section should be limited to interpretation of the most important observations. It is often sometimes efficient to include it with the results under the heading "Results and Discussion".

**Conclusions:** This brief but highly important section is best handled as a list of major conclusions in relation to each specific objective of the study.

**References:** It is desirable to provide a short bibliography (three to five references) listing the work most relevant to the subject under investigation. It is a good practice to also cite these references in the text of the poster.

### **REGISTRATION INFORMATION**

FILL OUT OUR REGISTRATION FORM AND MAIL WITH **REGISTRATION FEE\*** TO:

JO PATTERSON  
UNIVERSITY OF ILLINOIS SPRINGFIELD  
BIOLOGY DEPARTMENT, HSB 223  
ONE UNIVERSITY PLAZA  
SPRINGFIELD, IL 62703-5407

**MAKE CHECKS PAYABLE TO: "UIS - SCIENCE RESEARCH SYMPOSIUM".**

\* NO REGISTRATION FEE IS REQUIRED FOR STUDENTS THAT ARE MEMBERS OF UIS BIOLOGY, CHEMISTRY, OR CLINICAL LABORATORY SCIENCE STUDENT CLUBS.



**REGISTRATION FORM**  
**UIS SCIENCE RESEARCH SYMPOSIUM**  
--- APPLICATION DEADLINE MARCH 28, 2010 ---

Name of presenter: \_\_\_\_\_

**TYPE OF PRESENTER:**  STUDENT  FACULTY  STAFF

**PROPOSED TITLE:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**TYPE OF PRESENTATION:**  POSTER  ORAL

**HAS ABSTRACT BEEN SUBMITTED ELECTRONICALLY?**  YES  NO

**HOME MAILING ADDRESS OF PRESENTER:**

\_\_\_\_\_

**PHONE:** HOME \_\_\_\_\_ WORK \_\_\_\_\_ EMAIL: \_\_\_\_\_

**PLEASE INDICATE IF YOU HAVE ANY SPECIFIC EQUIPMENT REQUIREMENTS:  
(POSTER BOARDS WILL BE PROVIDED):**

35 MM SLIDE PROJECTOR  PC PROJECTION SYSTEM  
 OVERHEAD PROJECTOR  OTHER (EXPLAIN)  
 VIDEO

**HAVE YOU INCLUDED A \$10.00 REGISTRATION FEE?**  YES  NO

**PLEASE MAKE CHECKS PAYABLE TO "UIS - UIS SCIENCE RESEARCH SYMPOSIUM"**

**AND MAIL TO:**

**JO PATTERSON**

**UNIVERSITY OF ILLINOIS SPRINGFIELD**

**BIOLOGY DEPARTMENT, HSB 223**

**ONE UNIVERSITY PLAZA**

**SPRINGFIELD, IL 62703-5407**

**ABSTRACTS AND COMPLETE ORAL PRESENTATIONS SHOULD BE SUBMITTED  
ELECTRONICALLY TO**

**[JPATT2@UIS.EDU](mailto:JPATT2@UIS.EDU)**

**ORAL PRESENTATION FILES SHOULD BE EMAILED BY APRIL 5, 2010.**