

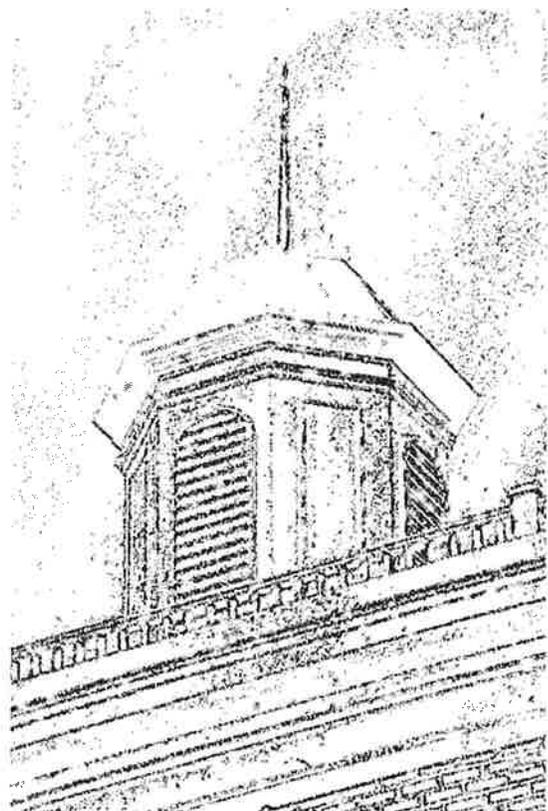
# STUDENT RESEARCH SYMPOSIUM

MARCH 29, 1995

COLLEGE OF NATURAL  
SCIENCES & MATHEMATICS

UNIVERSITY OF CENTRAL  
ARKANSAS

LEWIS SCIENCE  
CENTER  
ROOM 009  
3:00 P.M.



**College of Natural Sciences and Mathematics**  
**Spring Student Research Symposium**  
**March 29, 1995**

The papers below are scheduled to be presented at the first Student Research Symposium of the College of Natural Sciences and Mathematics. The symposium will consist of poster presentations. The names of the student presenters are underlined.

**BIOLOGY**

Does alanine absorption increase apical membrane capacitance in *Aplysia* intestine? Derek Boahene, and William Moran, Department of Biology.

Effect of alanine absorption on exocytosis in *Aplysia* intestine. Jerod Denton, and William Moran, Department of Biology.

Expression of the Baculovirus Apoptotic Repressor, p35, in Murine Fibroblasts and Lymphoma Cells. Brent D. Chavis, and Steven W. Runge, Department of Biology.

Analysis of the involvement of intracellular acidification in fibroblast apoptosis. K. M. Boyle, and Steven W. Runge, Department of Biology.

**CHEMISTRY**

Mixed-ligand Nickel Complexes as Models of Hydrogenase Active Sites. Dale Rimmer, and Patrick Desrochers, Department of Chemistry.

Photodissociation of Pesticides: an RRKM Approach. Brian Taylor, Micheal Sullins, and Jeffrey Draves, Department of Chemistry.

Optical Remote Sensing of the Biogenic Emissions Isoprene and  $\alpha$ -Pinene. Neal Yowell, James Price and Jeffrey Draves, Department of Chemistry.

Analysis of Indoor Air in Office Buildings. Lori Kerbel, Bill Moorer, John Noel, and Jeffrey Draves, Department of Chemistry.

DNA Preparation for Studies of Antitumor Drug-DNA Interactions. Cheryl Redden, Janice Williams, and Patricia H. Draves, Department of Chemistry.

Histone Core Particle Preparation and DNA Sequencing for Studies of Drug Binding to Chromatin. Nicole Clark, Jennifer Havens, Jason Skinner, and Patricia H. Draves, Department of Chemistry.

**A Comparison of the Rates of Reverse Diels-Alder Reactions of Syn- and Anti-7-methylnorbornenes.** Darrin Gainer, and Jerry Manion, Department of Chemistry.

**X-ray Fluorescence Analysis of Paper Coatings.** Donnie Golden, and M. W. Rapp, Department of Chemistry.

**Evidence of Excited State Ion Production in a Sputtering Glow Discharge.** W.S. Taylor, D.F. Barnas, and B.K. Alexander, Department of Chemistry.

## **PHYSICS AND MATHEMATICS**

**Minimizing the Energy of the Hopf Link.** Wesley T. Davis, and Fred Hickling, Department of Mathematics and Computer Science; Heather Woolverton, Department of Physics.

**Rutherford and Non-Rutherford Scattering Using a Proton Beam.** Christopher Paul Sheesley, and Rahul Mehta, Department of Physics.

**Nuclear Reaction Studies using Protons on Lithium Fluoride and Carbon Targets.** William Victor Slaton, and Rahul Mehta, Department of Physics.