

Industrial Affiliates

Associate Patron \$2,000 level
Touchstone Energy

Associate Member \$100 level
Wood Hudson Cancer Research
Laboratory, Inc.

Institutional Affiliates

Fellow \$1,000 level
University of Kentucky

Sustaining Member \$500 level
Eastern Kentucky University
Murray State University
Northern Kentucky University

Member \$250 level

Berea College
Campbellsville University
Centre College
Pikeville College

Associate Member \$100 level
Jefferson Community College
Thomas More College
Transylvania University

Middle and High Schools
Taylor County High School

Recruitment...

One of the first activities of the incoming President of the Academy each year is the establishment of standing committees as required by the Constitution. As I performed that task my attention was especially drawn to the Committee on Membership. It seems to me that this is one of our most important committees and I suspect that the writers of our Constitution had this in mind when they placed it as the first of eleven standing committees described in Article VIII.

This year I have asked Dr. Robert Barney, President-Elect, to chair the Membership Committee. I have asked Dr. Barney to place special emphasis on industrial and institutional membership. My personal goal is to have every institution of higher education in the Commonwealth become a member of the Academy. When you look at the membership list on the front page of the KAS Newsletter you will see that names of many institutions are missing.

According to figures from the Kentucky Department of Education there are 252 public high schools within the state. Chances are that all of these schools have math/science departments yet only one is listed as an institutional affiliate of the KAS. Only a handful of these schools, both public and private, have students who are members of the Kentucky Junior Academy of Science and who participate each year in the paper competition of the Junior Academy. It is a shame that we do not play a bigger role in the development of the future scientists of the Commonwealth.

Kentucky has many potential industrial affiliates, companies or corporations whose products or services have a scientific basis, within its borders yet only two are listed on our Newsletter. I ask for your help in making improvements in this area.

In the Constitution we state the following: "The objectives of the Academy shall be to encourage scientific research, to promote the diffusion of scientific knowledge, and to unify the scientific interests of the Commonwealth of Kentucky." For these objectives to be accomplished we need to broaden our membership to cover all of the areas mentioned above and we need the help of the entire membership in order to do it. Please don't sit back and wait for the officers of the Academy to do it. I challenge each of you to respond to Dr. Barney's message that follows.

Jerry Warner, KAS President

In the list to the left there are only two names under Industrial Affiliates. What are "we" going to do about this? Think how much better KAS would be if we had 10 industrial affiliates and 30 more KAS members from industry. And what if we had sponsorship for a reception, or 30 vendors exhibiting at the annual meeting?

So what do we do? I would like each of you to think about what contacts you already have with industries in Kentucky. Do you have a colleague at that car manufacturer in Georgetown? Do you receive some funding from that oil company in Ashland? Does your neighbor work for a chicken grower in western KY? Do you collaborate with a biotech company in the Bluegrass? Do you purchase supplies from a company that should be exhibiting at the KAS meeting? Do you have a student doing an internship with a company or agency?

If your answer to any of these questions is yes, and I think for many KAS members the answer is yes, please e-mail me the name of the company and a contact person. I will compile a database of industrial contacts and potential vendors and exhibitors. With your help, future newsletters will list many more supporters of science in Kentucky.

Robert J. Barney, KAS President-Elect
Chair, Committee on Membership
rbarney@gwmail.kysu.edu

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2002 SECTIONAL OFFICERS

Agricultural Sciences

Chr. Todd Willian, Western Kentucky University
Sec. George Antonious, Kentucky State University

Anthropology & Sociology

Chr. Don Ball, Louisville Corps of Engineers
Sec. T. D. Murphy, Northern Kentucky University

Botany & Microbiology

Chr. Carol Wymer, Morehead State University
Sec. Landon E. McKinney, Environmental Quality Mgt.

Chemistry

Chr. Eric Conte, Western Kentucky University
Sec. Richard Reznik, Asbury College

Cellular & Molecular Biology

Chr. Steve Asmus, Centre College
Sec. Eric Hugo, Wood Hudson Cancer Research Lab.

Geography

Chr. David J. Keeling, Western Kentucky University
Sec. Scott Dobler, Western Kentucky University

Geology

Chr. Frederick D. Siewers, Western Kentucky University
Sec. Michael May, Western Kentucky University

Health Sciences

Chr. Susan Templeton, Kentucky State University
Sec. Melissa Box, Kentucky State University

Mathematics

Chr. Mark Robinson, Western Kentucky University
Sec. Dan Seth, Morehead State University

Physics & Astronomy

Chr. James L. Meeks, Paducah Community College

Physiology & Biochemistry

Chr. Brian Shepherd, University of Kentucky
Sec. Changzheng Wang, Kentucky State University

Psychology

Chr. Dale Dickson, Morehead State University
Sec. David Olson, Morehead State University

Science Education

Chr. Susan E. Godbey, Eastern Kentucky University
Sec. Wheeler Conover, Southwest Community College

Zoology & Entomology

Chr. Victoria R. Bishop, Paint Lick, KY
Sec. Richard D. Durtsche, Northern Kentucky University

Contact information is available on the KAS web site.

Annual Meeting Reminder

The 88th Annual Meeting of the Kentucky Academy of Science will be held November 7-9, 2002, at Northern Kentucky University. Nobel Laureate Dr. Phillip Sharp will be the banquet speaker.

Guideline Changes for Undergraduate Research Competition

There will be a significant change in the Undergraduate Research Competition at the annual meeting this year. The URC will be held ONLY on Friday. While undergraduate students may still present on Saturday they will not be able to enter the URC. This change will mean that sections that have previously met only on Saturday will now have a session scheduled for Friday in an effort to make certain that undergraduates in those sections have an opportunity to participate in the URC. This will provide the opportunity for the winners to be recognized at the awards banquet on Friday evening. It will also provide greater consistency in the judging of the presentations. Please encourage your students to give an oral or poster presentation on Friday and then to attend the banquet that evening. A note that should be of interest to all young scientists is that a Nobel Laureate, Dr. Phillip Sharp, will be the banquet speaker.

Changes adopted for the Undergraduate Research Competition last year include:

The poster competition will be broken down into three sections: biological sciences, physical sciences, and social sciences.

Oral and poster sections having two or more competing undergraduate presenters will be provided \$100 in prize money to be awarded as the section desires; sections with only one undergraduate participating will be provided \$50 for prize money.

A student may have more than one presentation but only one may be entered into the Undergraduate Research Competition.

Calendar



Due Dates

<u>September 29, 2002</u> Nominations for KAS Superlative Awards	<u>October 1, 2002</u> Proposals for KAS Special Research Program
<u>October 4, 2002</u> Paper Abstracts for KAS Annual Meeting	<u>November 15, 2002</u> Proposals for Undergrad. Research Supply Grants Summer Undergrad. Research Grants
<u>December 1, 2002</u> Paper Abstracts for Publication in the KAS Journal	<u>February 15, 2003</u> Athey Fund Botany Fund

Send additions to the calendar to stempleton@gwmail.kysu.edu.

PAPER SUBMISSION FORM

KENTUCKY ACADEMY OF SCIENCE

88th ANNUAL MEETING

November 7-9, 2002

Northern Kentucky University

Highland Heights, Kentucky

Title of Paper (Please type) _____

(An abstract must be submitted with this form. See reverse side for guidelines for preparation of abstract.)

Author(s) (check presenter) (one author must be a KAS member)	KAS		Institutional Affiliation	Position (circle)			
	Member			High School	Ugrad	Grad	Professional
_____	Yes	No	_____	H	U	G	P
_____	Yes	No	_____	H	U	G	P
_____	Yes	No	_____	H	U	G	P
_____	Yes	No	_____	H	U	G	P

*Sponsor _____

*All undergraduate or high school students who are not members of KAS must be sponsored by a member of the Academy. There is not a limit on the number of papers a member may sponsor.

_____ Check if entering the Undergraduate Research Competition. The URC presentations will be given ONLY on Friday.

Check Section in Which Paper will be Presented

_____ Agricultural Sciences	_____ Health Sciences
_____ Anthropology and Sociology	_____ Industrial Sciences
_____ Botany and Microbiology	_____ Mathematics
_____ Cellular and Molecular Biology	_____ Physics and Astronomy
_____ Chemistry	_____ Physiology and Biochemistry
_____ Computer Science	_____ Psychology
_____ Engineering	_____ Science Education
_____ Geography	_____ Zoology
_____ Geology	

Type of Presentation (Check one)

_____ Oral Presentation (15 minutes max.) - each room will have an overhead projector and a 2x2 slide projector.

_____ Power Point Presentation

_____ Poster Presentation - a 4' x 6' poster board will be provided.

Session Time Preference for Oral Presentation (1 = first preference; program requirements may restrict honoring preferences)

_____ Friday a.m. _____ Friday p.m. _____ Saturday a.m. _____ Saturday p.m.

Name and Mailing Address of Contact Person (undergraduate student use mentor as contact person)

_____ Phone _____

_____ Fax _____

_____ E-mail _____

Return this form and a single spaced abstract by October 4, 2002 to: Robert Creek, KAS Program Coordinator, Dept. of Biology, Eastern Kentucky University, Richmond, KY 40475. Phone (859)623-6646; Fax (859)622-1399; e-mail: rcreek@chpl.net

GUIDELINES FOR PREPARATION OF ABSTRACTS FOR PAPER AND POSTER PRESENTATIONS

1. Text of abstracts must be 250 words or less.
2. Abstracts must be on white, good quality paper (8.5 x 11 in.). They must be single spaced throughout and have a margin of 1 inch all around.
3. Use a type size of 12 point (10 cpi) and the same font throughout: do not use bold. Italics should be used only for the scientific names of the organisms and other expressions that conventionally appear in italic type.
4. Do not justify the right-hand margin.
5. The address should contain the capitalized name(s) of the author(s), department, university or company, name of the city, name of the state (use two-letter abbreviation, e.g. KY, IN, OH) and the zip code.
6. In multi-authored abstracts, the name of the presenter of the paper will be indicated by an asterisk.
7. Use standard, well-known abbreviations when the use of abbreviations is necessary.
8. When using abbreviations for chemical compounds, spell out the name in full at the first mention and follow with the abbreviation in parentheses; use the abbreviation thereafter. Do not abbreviate chemical compounds in the title of the abstracts.
9. Any special symbols not on your word processor must be carefully drawn in by hand with fine pen and black ink.
10. Scientific names of organisms should be in italics (not underlined). Spell out generic names the first time they are used; afterwards these names should be abbreviated to first letter (plus a period) when followed by a specific epithet unless confusion may result with another abbreviated generic name in the abstract.
11. In the upper right hand corner of the abstract, type in CAPITALS the name of the section in which your paper or poster is being presented.
12. The following is an example of a portion of a proper abstract.

BOTANY AND MICROBIOLOGY

Taxonomic status of the varieties of Seneca snakeroot, *Polygala senega* (Polygalaceae). AMY E. TRAUTH* and ROBERT F. C. NACZI, Department of Biological Sciences, Northern Kentucky University, Highland Heights, KY 41099.

Seneca snakeroot, *Polygala senega* (Polygalaceae), is an uncommon plant ranging throughout most of eastern North America. Two varieties have been described for the species: variety *senega* and variety *latifolia*. The taxonomic

13. The abstract must be sent with your Paper Submission Form to the Program Coordinator listed at the bottom of the form.

PUBLICATION OF ABSTRACTS IN THE *JOURNAL*

If you would like to submit your abstract for publication in the *JOURNAL*, the guidelines are the same as above except you need to send a hard paper copy and a disk or e-mail version in WordPerfect or Word. Please include with your abstract a check for \$15.00 made payable to the Kentucky Academy of Science to cover publication costs (invoices will not be sent). Abstracts for publication must be received by the Abstract Editor by December 1.

Dr. Robert J. Barney
Abstract Editor
Community Research Service
Kentucky State University
Frankfort, KY 40601
rbarney@gwmail.kysu.edu

Proposal Guidelines and Eligibility Requirements

General Information

Questions regarding research proposals should be addressed to:

Dr. Bruce A. Mattingly
Psychology Department
UPO 972
Morehead State University
Morehead, KY 40351
Phone: (606) 783-2983
E-mail: b.mattin@morehead-st.edu.

Marcia Athey and Botany Funds

The Kentucky Academy of Science Foundation makes available through the Marcia Athey Fund and the Botany Fund moneys for research in science. The funds are for research planned and conducted by students of Kentucky secondary schools, colleges, and universities under the supervision of a faculty member. In the event that funds permit, consideration will also be given for support of faculty research projects. Faculty sponsors/researchers must be members of the Kentucky Academy of Science.

Awards normally are in the several hundred dollar range, though in extraordinary circumstances some higher awards may be possible. All awards are made to the institution of the faculty supervisor/researcher.

Detailed information is available on the KAS web site at <http://kas.wku.edu/kas/athey.asp>.

Proposal deadline: February 15, 2003.

Special Research Program

Proposals should be as brief as possible, consistent with the following guidelines and restrictions. The program of KAS special research awards is directed particularly to faculty in Kentucky higher education institutions, public or private, involved primarily in undergraduate education; i.e., institutions which do not award the Ph.D. degree.

Proposals may be for work related to the subject matter of any of the sections of the Kentucky Academy of Sciences.

Awards are for one year and do not cover indirect overhead costs. Funding for an additional year may be requested by reapplying the following year and competing with newly submitted proposals. Two awards of up to \$10,000 will be available.

Detailed information is available on the KAS web site at http://kas.wku.edu/kas/spe_research.asp.

Proposal deadline: October 1, 2002.

Undergraduate Research

The Kentucky Academy of Science makes available funds for research planned and conducted by undergraduate students of Kentucky colleges/universities under the supervision of a faculty member. Faculty sponsors/researchers must be KAS members. The two undergraduate research grant programs are:

Undergraduate Research Supply Grants. These grants are intended to provide modest support for supplies and expendables necessary for student research not normally available from the host institution. This fund does not provide salary support or travel. Ten awards of up to \$500 each will be available. Students are expected to present their research at the annual meeting of KAS, and submit a final report by December 31st the following year.

Summer Undergraduate Research Grants. These grants are intended to provide support for students engaged in faculty-supervised research during the summer months. Allowable budget items include supplies, equipment, travel directly related to the research project, and a summer stipend for the student. Two awards of up to \$3000 each will be available. Students are expected to present their research at the annual meeting of KAS, and submit a final report by May 15th the following year. All awards are made to the institution of the faculty supervisor/researcher. Institutional cost-sharing and support are encouraged.

Detailed information is available on the KAS web site at <http://kas.wku.edu/kas/Undergrad.asp>.

Proposal deadline: November 15, 2002.

2002 Undergraduate Research Grant Awards

The Undergraduate Research Program Grants have been awarded for 2002. The recipients of the awards are:

Undergraduate Research Supply Grant: *Enis Rosic and Debra Pearce*, Northern Kentucky University, "Effect of HMB (β -hydroxy- β -methylbutyrate) supplementation on muscle mass gain in male rats", \$500

Summer Undergraduate Research Grant: *Casey Barrier and Christopher Poole*, University of Kentucky, "The role of feasting in the Puuc Region: a comparative modal analysis of the terminal classic Cehpech Sphere at Kivic", \$2,340

The Research Awards Committee would like to urge more students to avail themselves of the Academy's grant opportunities.

KAS Governing Board 2001 Election Results

The membership of Kentucky Academy of Science elected the following individuals to serve on the Governing Board:

Vice President: Robert Kingsolver

Biological Sciences Representative: Tom Rambo

Social Sciences Representative: David Hogan

At-Large Representative: Ralph Thompson

At the January meeting of the Kentucky Academy of Science Governing Board, Guenter Schuster was reassigned from At-Large to Biological Sciences Representative.

Call for Nominations to KAS Governing Board

The Kentucky Academy of Science Nominations and Elections Committee is seeking assistance from the KAS membership in our effort to identify a ballot of quality candidates to assume leadership roles within the Academy for next year. KAS members interested in nominating colleagues for these vacant positions, or individuals willing to volunteer to be placed on the ballot, should forward the name, e-mail address/phone number for each candidate, and indicate the leadership position of interest. Then Nominations and Elections Committee will contact each candidate to request the necessary information to be included on the ballot. This is an extremely important responsibility for the members of KAS and the committee needs your assistance in identifying candidates for these vacancies. The membership is being contacted at this time for nominations for the following three offices:

Vice President

Secretary

Division Representative, Physical Sciences.

Any member may nominate another member for the Vice President and Secretary. However, for Physical Sciences, the nominator must identify with that Division. Please send nominations to:

Dr. Gerald DeMoss
College of Sciences and Technology
Morehead State University
Morehead, KY 40351
g.demoss@morehead-st.edu

Need information?

If you are looking for information on how to make use of the KAS resources, see the HOW TO section on the web at <http://kas.wku.edu/kas/>. We have been experiencing some difficulty getting the Newsletter to all members. To inquire about membership status, lost Newsletter or Journal issues, please contact the Kentucky Academy Office.

The Kentucky Academy of Science
Science Outreach Center
University Drive
University of Kentucky
Lexington, KY 40536-0078
Phone: (859) 257-7364
e-mail: dfrazie@pop.uky.edu

To submit an article for publication in the Journal of the Kentucky Academy of Science, contact the editor of JKAS or see the information at <http://kas.wku.edu/kas/Transactions.html#instructions>:

Dr. Raymond Sicard
Editor, Journal of the Kentucky
Academy of Science
PCSOM
147 Sycamore Street
Pikeville, KY 41501
Phone (606) 218-5426
e-mail: RSICARD@pc.edu



To submit an item for publication in the Newsletter, contact:

Susan B. Templeton, Editor
Atwood Research Bldg.
400 East Main Street
Kentucky State University
Frankfort, KY 40601
Phone (502) 597-6030
FAX (502) 597-6381
e-mail: stempleton@gwmail.kysu.edu

Submission deadlines for the Newsletter are December 1, February 15, and July 15. If your membership is current, expect to receive a Newsletter in January, May, and September.

Request for Nominations for Superlative Awards

The Board of Directors encourages all members of the Academy to submit nominations for the following awards presented annually to outstanding and distinguished members of the Academy. Members of all Sections for the Academy are eligible to be considered for each award. The deadline for nominations is September 29, 2002. All nominations and supporting materials should be sent to:

Dr. Robert Kingsolver
Department of Biology
Kentucky Wesleyan College
Owensboro, KY 42302
E-mail: kingsol@kwc.edu

Outstanding Academy Service Award

Qualifications: The recipient shall have been a long time member of the Kentucky Academy of Science and shall have made significant contributions to the growth and development of the Academy. Contributions should be interpreted broadly to mean contribution directly to the leadership of the Academy that has resulted in significant enhancement of the image of the organization and has led to its growth and recognition throughout the Commonwealth. The recipient will also be a scientist and/or teacher who has been recognized for significant contributions to his or her discipline as a researcher and/or teacher. The recipient should be or should have been a resident of Kentucky during the time contributions were made.

Nomination packet should include: an abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications; documentation of special contributions to the Academy; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's contributions to the Academy and with his or her qualifications for this award.

Distinguished College/University Scientist Award

Qualifications: The recipient shall have made some significant contribution to academic research in Kentucky. Contributions should be interpreted broadly to mean contribution directly to the Commonwealth, or to the improvement of the quality of life in the Commonwealth, or to intellectual growth in the Commonwealth. The recipient normally should be a resident of Kentucky and shall be a member of KAS.

Nomination packet should include: an abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications from the last five years; documentation of special accomplishments as a science teacher or academic researcher; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's qualifications.

Outstanding College/University Teacher Award

Qualifications: The recipient shall have made some significant contribution primarily to science teaching but also to research at the college/university level in Kentucky. Contributions should be interpreted broadly to mean contribution directly to the Commonwealth, or to the quality of life in the Commonwealth, or to intellectual growth in the Commonwealth. The recipient normally should be a resident of Kentucky and shall be a member of KAS.

Nomination packet should include: an abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications from the past five years; documentation of special accomplishments as a teacher of science; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's qualifications.

Outstanding Secondary School Science Teacher Award

Qualifications: The recipient shall have made some significant contributions to the teaching of science at the middle and high school level in Kentucky. Contributions should be interpreted broadly to mean contribution to the academic welfare and intellectual growth of secondary students of the Commonwealth, contribution directly to the Commonwealth, or to the quality of life in the Commonwealth. The recipient is not required to be a resident of Kentucky nor a member of the Kentucky Academy of Science, but candidates who meet these specifications will be given special consideration.

Nomination packet should include: an abbreviated current curriculum vitae (5 pages or less) which addresses the professional background, experience, and development of the candidate; documentation of special accomplishment as a teacher of science, especially measures of student success, participation in student development beyond the classroom, and science curriculum development; and letters of recommendation from an administrator or supervisor, a teaching colleague, a student, and a parent, not to exceed five letters.

Industrial Scientist Award

Qualifications: The recipient shall have made some significant contributions to industrial science in Kentucky. Contributions should be interpreted broadly to mean contribution directly to commerce or industry or to the improvement of the quality of life in the Commonwealth. The recipient normally should be a resident of Kentucky and shall be a member of KAS.

Nomination packet should include: An abbreviated curriculum vitae (5 pages or less) containing information pertinent to the award and a list of publications from the past five years; documentation of special accomplishments as an industrial scientist; and letters of recommendation from at least three but not more than five professional colleagues well acquainted with the candidate's qualifications.



Kentucky Junior Academy of Science

The Junior Academy was begun over fifty years ago to foster an interest in science for high school students in Kentucky. KJAS has expanded over the years to include middle school students as well as high school students.

Members of the Kentucky Junior Academy have the opportunity to :

- interact with other high school students across the state who are interested in science and technology,
- apply for money to design and complete science projects,
- present projects at the annual KJAS meeting, and
- publish an abstract in the Journal of the Kentucky Academy of Science.

Two winners from the KJAS annual meeting represent Kentucky at the National American Junior Academies of Sciences meeting each year.

Are you interested in joining the Kentucky Junior Academy of Science or just want to learn more about it? Check out the web site at:

<http://www.campbellsvil.edu/~kjas>

or contact the KAS/KJAS office at:

University of Kentucky Outreach Center for Science & Health Careers
102 Chandler Medical Center Annex 5
Lexington, KY 40536-0078

Yes, I Want to Join the Kentucky Academy of Science

Check appropriate boxes

Individual Membership

(January to December)

- \$25 Active Member
- \$15 Student member (Collegiate)
- \$10 KJAS member
- \$35 Family member
- \$350 Life member

Educational/Industrial Affiliate Membership

- \$5,000 Patron
- \$2,000 Associate Patron
- \$1,000 Fellow
- \$500 Sustaining Member
- \$250 Member
- \$100 Associate Member

Section Choice _____

Payment Enclosed \$ _____

Name _____

Street _____

City _____ State _____ Zip _____

Employer or School _____

Please make checks payable and mail to:

The Kentucky Academy of Science
Science Outreach Center
University Drive
University of Kentucky
Lexington, KY 40536-0078



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University Drive
University of Kentucky
Lexington, KY 40536-0078