

Industrial Affiliates

Associate Patron - \$2,000 level
Touchstone Energy

Associate Member - \$100 level
Hoffman Environmental
Research Institute
Third Rock Consultants
Wood Hudson Cancer
Research Laboratory

Institutional Affiliates

Fellow - \$1,000 level
Morehead State University
University of Kentucky
University of Louisville

Sustaining Member - \$500 level
Campbellsville University
Kentucky State University
Murray State University
Northern Kentucky
University
Western Kentucky
University

Member - \$250 level
Asbury College
Berea College
Centre College
Cumberland College
Eastern Kentucky University
Kentucky Wesleyan College
Madisonville Community
College
West Kentucky Community
& Technical College

Associate Member - \$100 level
Bellarmine University
Pikeville College
Transylvania University

From the President....

I can't believe the semester is almost over! Like you, KAS board members and committees have been working at frantic pace since the beginning of the year. As you will see in this issue, preparations for the 2005 meeting at Eastern Kentucky University are well underway with tentative plans for an exciting symposium and exceptional speakers for the plenary session and the banquet. In addition, the governing board has made a few important changes related to the student research competitions. First, it was decided to change the undergraduate poster competition from a divisional competition to sectional competition, similar to that of the paper presentations. However, unlike the paper competition, only one award (First Place) will be given for each of the 19 sections in the poster competition. Next, we have decided to eliminate the monetary prize associated with all awards. This decision was based upon several factors: First, we felt that the most significant aspect of the student competition was the recognition received for outstanding research; second, the amount money distributed per section after being divided by three or more was insignificant; and third, that the money saved could be used to increase the available funds for undergraduate research grants. We will continue to provide complimentary banquet tickets to all student presenters who pre-register for the meeting and award certificates at the banquet.

On other fronts, the board agreed to fund a request from Thomas More College to help defray the costs of transporting and preserving an important amphibian and reptile collection from the University of Louisville. Many in the Academy are very concerned about the loss of important collections over the last few years due to space constraints and preservation costs. This problem will likely increase in the future, and many believe that the only hope for saving these collections may be in the construction of a Kentucky Natural History Museum. Members of the legislation committee led by Ken Carstens, KAS secretary, are currently trying to revive the state's committee that had been charged with planning such a museum. Apparently, while active for several years this committee has not met in at least the last two years.

Finally, we are trying to update our database on the website. The database currently contains over 2000 incomplete records! We are working from 2004 meeting registration forms and 2005 dues payments to fix these problems, but we need your help! Please log onto the website and check your information including e-mail address. If it is incorrect, incomplete, or missing entirely, please send me or Linda an e-mail with the correct information. We would like to be able to contact all members via e-mail to get you information in a more timely fashion.

I hope you have a fun and productive summer!

Bruce Mattingly

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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 offices:

Vice President Biological Sciences Division Representative At Large Representative

Any member may nominate another member for the Vice President and At Large positions. However, for Biological Sciences Representative, the nominator must identify with that Division. Please send nominations by August 1, 2005 to:

Dr. Robert Barney
Community Research Service
Kentucky State University
Frankfort, KY 40601
(502) 597-6178
rbarney@gwmail.kysu.edu

Invitation to Submit Papers

John Thieret invites submission of papers for the Journal of the Kentucky Academy of Science, a peer-reviewed semiannual publication. Papers should be prepared according to the instructions given in JKAS 63(2) and sent to Dr. Thieret at Biological Sciences, Northern Kentucky University, Highland Heights, KY 41099. Any questions? E-mail the editor at thieretj@nku.edu or visit the Kentucky Academy of Science web at <http://kas.wku.edu/kas/HTJourPub.asp>.

Messages from the Executive Director

After six months of familiarizing myself with KAS and its mission, I continue to take a great deal of pride in being a part of an organization devoted to making a difference in the lives of Kentuckians. I grew up here, attended college here, and then began travels that would take me away for over 20 years. Since my return to the area last August, I am reminded time and again why I was so fortunate to grow up in such a beautiful place.

As Bruce wrote in his message, we have several projects in the works – a new emphasis on encouraging undergraduate research, a possible natural history museum, and updates to our membership database. All exciting projects, but hopefully, just a beginning of an exciting new chapter for KAS.

My hope for my role of KAS director is to help our organization grow and flourish. To do that, I've been greatly reliant on the expertise of our board of directors. But I would also like to hear from our membership – how has your involvement with KAS been of service to you? What has KAS been able to provide for you as a member? And, what role would you be willing to play in our continuing growth?

I'd love to hear from you with any questions or comments. I am most easily reached via e-mail at kasexecutivedirector@yahoo.com. I look forward to hearing from you!

To the KAS membership:

Hello all! I have been busy contacting potential vendors for this year's meeting, and thought that I would ask all of you for input. Are there any companies that you would like to see represented at the 2005 Annual Meeting? Any and all suggestions are welcome! E-mail your response to me at kasexecutivedirector@yahoo.com.

PAPER SUBMISSION FORM
KENTUCKY ACADEMY OF SCIENCE
91st ANNUAL MEETING

Co-Hosted by Eastern Kentucky University and Berea College
 Richmond, Kentucky
 November 10 - 12, 2005

Title of Paper (Please type or print)

(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	Undergrad	Graduate	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 if entering the Graduate Research Competition. (Oral Presentations only)

Check Section in Which Paper will be Presented

- | | |
|---------------------------------------|-----------------------------------|
| _____ Agricultural Sciences | _____ Geology |
| _____ Anthropology and Sociology | _____ Health Sciences |
| _____ Botany and Microbiology | _____ Mathematics |
| _____ Cellular and Molecular Biology | _____ Physics and Astronomy |
| _____ Chemistry | _____ Physiology and Biochemistry |
| _____ Computer & Information Science | _____ Psychology |
| _____ Ecology & Environmental Science | _____ Science Education |
| _____ Engineering | _____ Zoology |
| _____ Geography | |

Type of Presentation (Check one)

- _____ Oral Presentation (15 min. max.) - each room will have an overhead projector and a 2 x 2 slide projector.
 _____ Oral Presentation using Power Point (15 min. max.) - load presentation prior to beginning of session
 _____ 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 7, 2005** to: Robert Creek, KAS Program Coordinator, Department 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 10cp 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 abbreviation 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

PRE-REGISTRATION FORM
KENTUCKY ACADEMY OF SCIENCE ANNUAL MEETING
CO-HOSTED BY EASTERN KENTUCKY UNIVERSITY AND BEREA COLLEGE
RICHMOND, KENTUCKY
NOVEMBER 10 - 12, 2005

Please type or print. Duplicate as needed, but use a separate form for each person.

Name Badge to Read _____

Address _____

City, State, Zip _____

School/Employer _____

KAS Section Affiliation _____

Telephone Number _____ e-Mail _____

(Your e-mail will be used to notify you of receipt of preregistration fees)

PRE-REGISTRATION FEE SCHEDULE

Category	Pre-Registration
-----------------	-------------------------

Current 2005 Dues Paid

Regular Member	\$25.00	_____
Student Member	\$ 5.00	_____
Non-Members		
Professional	\$50.00	_____
Student	\$ 5.00	_____

2006 MEMBERSHIP DUES SCHEDULE

Regular Member	\$35.00	_____
Family Member	\$50.00	_____
Student Member	\$15.00	_____
Life Member	\$400.00	_____

TOTAL FEES (Check each item) \$ _____

KAS AWARDS BANQUET, Friday, November 11 \$25.00 x _____ Tickets \$ _____

URC: Yes _____ No _____ Banquet is free to students entering URC but student **must preregister** in order to receive a free ticket. If you are going to the banquet, indicate after tickets that you are an URC student.

GRAND TOTAL ENCLOSED \$ _____

Thursday Evening Social - Comfort Suites (no charge) Attending Yes No

THIS FORM MUST BE POSTMARKED NO LATER THAN OCTOBER 21, 2005

MAIL TO: PRE-REGISTRATION
KENTUCKY ACADEMY OF SCIENCE
SCIENCE OUTREACH CENTER
UNIVERSITY DRIVE
LEXINGTON, KY 40536-0078

Student Research Supply Grant Awarded for 2005

An Undergraduate Research Supply Grant for \$500.00 has been funded by the KAS Committee on the Distribution of Research Funds for 2005 summer research.

The recipients are Dr. Melissa Hakman and her students, Heidi Cantine, Christy Proffitt, and Becky Elkins from the Department of Psychology at Western Kentucky University for a study, "Examination of Parental Knowledge Level and Tolerance of Child Misbehavior in Relation to Parenting Strategies Employed."

The Research Awards Committee received several very competitive proposals this year. We would like to encourage more KAS members to take advantage of the Academy's grant opportunities. Instructions and guidelines can be found on the KAS web site (<http://kas.wku.edu/kas>) and the KAS newsletter.

Submit proposals to:

Dr. Ralph Thompson
Department of Biology
CPO Box 2121
Berea College
Berea, Kentucky 40404-2121
859-985-3301
ralph_thompson@berea.edu

Marcia Athey & Botany Funds Awards

One proposal for the Botany Fund and one proposal for the Athey Fund have been funded by the KAS Committee on the Distribution of Research Funds for 2005.

The Botany Fund will provide \$700.00 to Dr. Nicholas McLetchie and Charlotte Walker from the Department of Biology at University of Kentucky for a study, "Detecting Genetic Evidence of Sexual Reproduction in Asexual Populations of *Marchantia inflexa*."

The Athey Fund will provide \$1,471.25 to Dr. Richard Durtsche and Ashley Jackson from the Department of Biological Sciences at Northern Kentucky University for a study, "Thermoregulation in Sympatric Tropical Lizards: A Test of Chaotic Patterns of Coexistence."

Funding Request Deadlines

<i>October 1, 2005</i>	KAS Special Research Program
<i>November 15, 2005</i>	Undergraduate Research Supply, Summer Undergraduate Research

Need Information?

If you are looking for information about the Kentucky Academy of Science—our history, goals, membership, meetings, publications, or grant programs— please visit our website at kas.wku.edu. To inquire about membership status or lost Newsletter/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) 221-3369
e-mail: kasexecutivedirector@yahoo.com

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

The Journal of the Kentucky Academy of Science is published twice annually. Original papers based on research or review in science will be considered, also contributions to the "Scientists of Kentucky" series. To submit an article for publication, see the information on the web at kas.wku.edu/kas/HTJourPub.asp or contact:

Editor, Journal of the KAS
Dr. John W. Thieret
Department of Biological Sciences
Northern Kentucky University
Highland Heights, 41099
Phone: (589) 572-6390
Fax: (859) 572-5639
e-mail: thieretj@nku.edu

Submission deadlines for the Newsletter are December 1, March 15, and July 15.
KAS members should receive a Newsletter in January, May, and August.

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 30, 2005. All nominations and supporting materials should be sent in electronic format; e-mail attachments may be either in MS Word or text files. Send to:

Nigel Cooper, Ph.D.
Department of Anatomical Sciences and
Neurobiology
Room # 807A University of Louisville Health Sciences Center
Louisville, KY 40292
(502) 852-1474
nigelcooper@louisville.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.



The Junior Academy was begun over fifty years ago to foster an interest in science for middle school and high school students in Kentucky. 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 Ky Academy of Science.

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.kyjas.org/>

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)

- \$35 Active Member
- \$15 Student member (Collegiate)
- \$10 KJAS member (High School)
- \$50 Family member
- \$400 Life member

Educational/Industrial Affiliate Membership

- \$5,000 Patron
- \$2,000 Associate Patron
- \$1,000 Fellow
- \$500 Sustaining Member
- \$250 Member
- \$100 Associate Member
- \$25 High School Member

Section Choice _____

Payment Enclosed \$ _____

Name _____

Street _____

City _____ State _____ Zip _____

Employer or School _____

E-mail _____

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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