

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
University of Kentucky
University of Louisville

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

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

Associate Member - \$100 level
Pikeville College
Transylvania University

From the President...

The Kentucky Academy of Science Governing Board is taking a significant step forward this year in hiring a part-time Executive Director to provide year-round support for Academy operations. Our Director will represent the Academy in lobbying efforts, procure corporate sponsorships, maintain the membership database, update web information, and assist with outreach and grant administration. As an organization of rotating volunteers, the Board recognizes the value of continuity that this kind of appointment can provide. Potential applicants are encouraged to review the position announcement on page 2 of this Newsletter.

We have also made a few changes in the sections for next fall. First, since Industrial Science has not been an active section for many years, we thought it best for scientists working in industry to meet in sections related to the member's discipline, such as Engineering or Chemistry. This better achieves our goal to encourage interactions among scientists pursuing similar questions, regardless of the nature of their employment.

Second, we have added a section for Ecology and Environmental Science. Our intention is to recruit members and provide a venue for speakers who have not presented in other life science sections in the past.

Third, the name of Computer Science has been changed to Computer and Information Sciences to encourage participation in informatics-related disciplines. Both this section and the section for Engineering have newly-appointed Chairs, and we anticipate renewed activity in these disciplines at the fall meeting.

Rob Kingsolver
KAS President

2004 Annual Meeting Reminder

The 90th Annual Meeting of the Kentucky Academy of Science will be hosted by Murray State University and co-hosted with West Kentucky Community and Technical College. It will be held November 4-6, 2004, at Murray, Kentucky.

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Calendar



Due Dates

September 24, 2004
Paper Abstracts for
KAS Annual Meeting

September 29, 2004
Nominations for
KAS Superlative Awards

October 1, 2004
Proposals for
KAS Special Research Program

November 15, 2004
Proposals for
Undergrad. Research Supply Grants
Summer Undergrad. Research Grants

December 1, 2004
Paper Abstracts for Publication
in the KAS Journal

Need information?

To inquire about membership status, lost Newsletter or Journal issues, please contact:

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 item for publication in the KAS Newsletter, contact:

Susan B. Templeton,
Kentucky State University
400 East Main Street
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, March 15, and July 15.

Check out the KAS website at <http://kas.wku.edu>!

Executive Director Sought

The Kentucky Academy of Science seeks half-time Executive Director. The Director will help the Governing Board coordinate activities of a 500-member non-profit organization supporting academic and industrial science and science education throughout the state. (See our web page at <http://kas.wku.edu/kas/>) The Director will also represent the Academy in lobbying efforts, procure corporate sponsorships, maintain membership database, and assist with outreach and grant administration.

Qualifications include educational background in a scientific discipline, organizational experience, facility with MS Word, Excel, PowerPoint, Access and HTML software, excellent written and oral communication skills, and a strong commitment to membership development and corporate relations. Must have transportation and ability to work out of home. Average demand 20 hrs. per week; schedule flexible, with the exception of quarterly Governing Board meetings, and an annual conference during the first week of November. Board activities are concentrated in Lexington/Louisville. Annual salary \$18,000, with additional compensation for travel and expenses. Position begins 7/1/04. E.O./A.A.E.

Submit letter of interest and resume to:

KAS Search Committee
Dr. Robert Kingsolver
Dept. of Biology
Kentucky Wesleyan College
Owensboro, KY 42301.

KAS Member News

Dr. Charles V. Covell Jr. is retiring June 31 from his position as Professor of Biology and Curator of the Lovell Insect Collection at the University of Louisville, KY, after 40 years. The insect collection will be transferred to the Department of Entomology, University of Kentucky, to be combined with their collection curated by Dr. Mike Sharkey. Charlie is moving to Gainesville, FL this summer to become a Senior Research Scientist and Curator of Moths at the new McGuire Center for Lepidoptera Research on the University of Florida campus. Charlie was President of the Academy in 1985-86 and received the Distinguished Scientist Award in 2001.

PAPER SUBMISSION FORM

KENTUCKY ACADEMY OF SCIENCE

90th ANNUAL MEETING

November 4-6, 2004

Murray State University and West Kentucky Community and Technical College

Murray, Kentucky

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	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 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 minutes max.) - each room will have an overhead projector and a 2x2 slide projector.

_____ Oral Presentation using Power Point

_____ 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 **September 24, 2004** 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 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



Kentucky Junior Academy of Science 2004 Annual Meeting

The Kentucky Junior Academy of Science held its annual Spring Symposium on Friday, April 16, 2004, on the campus of Campbellsville University. A record 101 papers were presented in eleven scientific disciplines from seven schools statewide. Congratulations to all of the winners! The overall winner of the Life Sciences Division was Shannon Turney from Notre Dame Academy in Park Hills. She presented a paper entitled "A Investigation of the Effect of Brain Dominance, Gender and Age on Remembering Words and Pictures". Arthur Kim from duPont Manual High School was selected as the overall winner in the Physical Sciences Division. He presented a talk entitled "Designing and Fabrication of a Linear Piezoelectrically Actuated Miniature Peristaltic Pump".

These two young scientists will represent Kentucky at the national American Junior Academies of Sciences (AmJAS) meeting in Washington, DC during the middle of February 2005. The national AmJAS convention meets in conjunction with AAAS, the American Association for the Advancement of Science. As the world's largest general science organization and publisher of Science, AAAS has more than 138,000 members and 275 affiliated societies. AAAS serves as an authoritative source for information on the latest developments in science and bridges gaps among scientists, policy-makers and the public to advance science and science education. One very important aim and purpose of the AAAS is to reach out to young scientists in middle school and HS. It recognizes that these young people are its future.

The Junior Academy sends a big thank you to everyone who helped with this year's competition and with all of the individual research projects. Your time and dedication is greatly appreciated. The results from this year's competition are listed at the right.

The Kentucky Junior Academy of Science also elected state officers for the 2004-2005 year:

President: Alina Carrillo, Ballard HS
Vice-President: John Meigooni, Henry Clay HS
Secretary: Caitlin Grothaus, Notre Dame Academy

Congratulations to all of the state officers!



Overall winners Arthur Kim (left) for Physical Sciences and Shannon Turney for Life Sciences.

High School Division Results

Behavioral and Social Sciences	1st: SHANNON TURNEY, Notre Dame Academy 2nd: ADAM MILLER, duPont Manual HS 3rd: ELIZABETH SERRATORE, duPont Manual H S
Biological Topics I	1st: ALINA CARRILLO, Ballard H S 2nd: SHELLY KAKAR, Ballard H S 3rd: LAUREN TAYLOR, Ballard H S
Biological Topics II	1st: HARIKINA RANGI, duPont Manual H S 2nd: TIANJIAN CHENG, duPont Manual H S 3rd: REBECCA VITALE, duPont Manual H S
Botany	1st: MARIA FOX, Notre Dame Academy
Chemistry	1st: JANE HU, duPont Manual H S 2nd (Tie): CARA HEALEY, duPont Manual H S 2nd (Tie): JOE STITH, Covington Catholic H S
Computer Science and Mathematics	1st: SONIA NIJHAWAN, duPont Manual H S 2nd: HARISH SRINIVASAN, duPont Manual H S 3rd: ROBERT BRACCO, duPont Manual H S
Earth and Space Science	1st: DEEPA SHETH, duPont Manual H S 2nd: MOLLY LINDLE and TOVA YOAST-HULL, duPont Manual H S 3rd: MARY SOLTYS, Notre Dame Academy
Engineering	1st: ARTHUR KIM, duPont Manual H S 2nd: PHILLIP CHO, duPont Manual H S 3rd: WHITNEY HARROD, duPont Manual H S
Environmental Science	1st: CHINEDU OTU, duPont Manual H S 2nd: CAITLIN GROTHAUS, Notre Dame Academy
Microbiology	1st (Tie): DAVID MEIGOONI, Paul L. Dunbar H S 1st (Tie): DEEPA MOKSHAGUNDAM, duPont Manual H S 2nd: ASHLEY SMITH, duPont Manual H S 3rd: DEANNA TRAN and JANE KIM, duPont Manual H S
Physics	1st: MONICA SUMME, Notre Dame Academy 2nd: EVAN FRANK, duPont Manual H S 3rd: HUY LE and AUSTIN AGE, duPont Manual H S
Zoology	1st: TARA ESSOCK-BURNS, duPont Manual H S 2nd: FELICIA HOGAN, duPont Manual H S 3rd: MARCUS SIU, duPont Manual H S

Freshman Division 1st Place Winners

Chemistry: ELLEN BOEGER, Notre Dame Academy
Environmental Science: BECKY GROUT, Notre Dame Academy
Zoology: ALLISON BURNS and KACY RUST, Notre Dame Academy

Middle School Division 1st Place Winners

Botany: JACK ZHANG, Morton Middle School
Earth and Space Science: ANN SIMONE COOPER, Morton Middle School
Microbiology: BRIAN THOMAS, Morton Middle School
Physics: BEN NOSAREWSKI, Morton Middle School

Student Research News

Graduate Oral Competition to be held at the 2004 Annual Meeting

The student research competition will expand at the 2004 Annual Meeting to include oral presentations by graduate students. Make sure to mark the appropriate category on your paper submission form.

No Undergrad Research Funded

No proposals to support research by undergraduates were funded at our January board meeting.

For proposal guidelines and eligibility requirements for the KAS Undergraduate Student Research Grants, the Marcia Athey and Botany Fund Grants, and Special Research Grants, visit the KAS website at <http://kas.wku.edu>. Submit completed applications to:

Dr. Ralph Thompson
Department of Biology
Berea College
Berea, Kentucky 40404
(859) 985-3348
ralph_thompson@berea.edu

Previous Undergrad Research

Casey Barrier conducted ceramic research for 10 weeks in the summer of 2002 for the Labná-Kiuic Regional Archaeological Project in Yucatán, México, a joint research project involving American archaeologists and the Instituto Nacional de Antropología e Historia. Barrier received an Undergraduate Summer Research Grant from the Kentucky Academy of Science in the amount of \$2,340; the proposal was entitled "The role of feasting in the Puuc Region: a comparative modal analysis of the terminal classic Cehpech Sphere at Kivic."

Barrier has since presented a paper on his research at the 2003 Meeting of the Society for American Archaeology (SAA) in Milwaukee.

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
Secretary
Treasurer

Physical Sciences Division Representative

Any member may nominate another member for the Vice President, Secretary, and Treasurer positions. However, for Physical Sciences, the nominator must identify with that Division. Please send nominations by August 1, 2004 to:

Jerry Warner
BIOLOGICAL SCIENCES
Northern Kentucky University
Highland Heights, KY 41099
(859) 572-6571
warner@nku.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>.

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, 2004. 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:

Miriam Kanan
Biological Sciences
Northern Kentucky University
Highland Heights, KY 41099
(606)572-5522
kannan@nku.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.

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

Payment Enclosed \$ _____

Name _____

Street _____

City _____ State _____ Zip _____

E-mail _____

Employer or School _____

Membership Voting Section (check only one)

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

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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