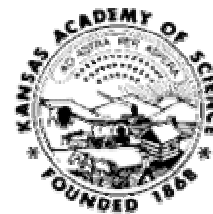


KAS BULLETIN



NEWSLETTER OF THE KANSAS ACADEMY OF SCIENCE

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FEBRUARY, 2007



139th ANNUAL MEETING OF THE KANSAS ACADEMY OF SCIENCE

April 13 and 14, 2007
(FRIDAY AND SATURDAY)

Salina Holiday Inn
1616 W. Crawford St.
Salina, KS 67401



MEETING ANNOUNCEMENT

The 139th Annual Meeting of the Kansas Academy of Science is scheduled for April 13 and 14, 2007, at the Salina Holiday Inn. This meeting will be held jointly with the **Kansas College Chemistry Teachers Conference**. (Friday and Saturday)

Events will include the following:

- Friday afternoon free tours of the Land Institute (2 to 4 PM) and Philips Lighting (2 to 4 PM)
- Friday evening banquet (6:30 PM)
- Friday night guest speaker: Wes Jackson, Ph.D., President of the Land Institute, Salina, Kansas. This talk is open to the public (7:30 PM).
- Saturday Eighth Annual Paleontology Symposium (8 AM to 2 PM).
- Saturday other special symposia (8 AM to 2 PM)
- Saturday numerous oral and poster sessions on a variety of topics including biology, geology, chemistry, engineering, and applied sciences (final times, including when poster authors need to be present for questions and answers, will be posted on the KAS website) (8 AM to 3 PM)
- Saturday lunch (12 noon)
- Saturday student competition cash awards presentation (2 PM)

Conference Directions: Take I-135 to exit 92 (Crawford St.), and go east about ½ mile.

The registration form, abstract submission guidelines, lodging information, map, directions, and entertainment opportunities can be found on the KAS website. Additional detailed information, including abstracts and session times, will be added regularly to the website.

Participants presenting papers must register at the same time that they submit their abstracts. The deadline for submitting abstracts and registration forms is **March 13, 2007**.

Participants not presenting papers can register through the mail or electronically. The deadline for on-time registration is **March 13, 2007**.

KAS PARTICIPANTS ARE STRONGLY ENCOURAGED TO REGISTER IN ADVANCE

Late registration begins March 14, 2007, and continues through Saturday morning, April 14. Only late registration fees can be paid on the days of the conference—April 13 and 14—meals may not be purchased after April 9.

WE LOOK FORWARD TO SEEING YOU IN SALINA

Eric Trump, President-Elect and Meeting Co-organizer (etrump@emporia.edu)

Dorothy Hanna, Meeting Co-organizer (dahanna@kwu.edu)

LODGING INFORMATION

Blocks of rooms are available at conference rates of \$72.00 plus tax for the following motels. *There are no rooms available at the Salina Holiday Inn.* These hotels are both within walking distance of the Holiday Inn. Please mention the Kansas Academy of Science Meeting when registering.

Fairfield Inn

1740 W. Crawford St.
Salina, KS 67401
785-823-0996
or 800-228-2800

Comfort Inn

1820 W. Crawford St.
Salina, KS 67401
1-785-826-1711
or 1-877-424-6423

Other nearby motels include:

Red Coach Inn

Quality Inn and Suites
2110 W. Crawford St.
Salina, KS 67401
1-785-825-2111
or 1-877-424-6423

Best Western Heart of America Inn

632 Westport Blvd.
Salina, KS 67401
785-827-9315

ABSTRACT SUBMISSION

Abstracts may ONLY be submitted online at:

http://www.washburn.edu/kas/meeting2007/meeting2007_abs_online.html and be no more than 250 words (including authors, departments, and university affiliation) single-spaced. Indicate the presenter with an asterisk (*). Do not abbreviate department or institution names. Do not give city, state, or zip code. Punctuate as shown in example below. The title in ALL CAPITALS should begin two spaces following the institution name, with no abbreviations in the title (fewer than 10 words is preferable).

Abstract Example:

*Cook, N.H., E. Blackwell, A.D. Gasking, Department of Natural Sciences and Mathematics. Lincoln University. IN VITRO EFFECTS OF METHOXYETHYL CARBAMATE ON CHINESE HAMSTER FIBROBLASTS. Our previous studies have reveals the mutagenic potential of methoxyethyl carbamate.....

Abstracts are transmitted as a TEXT files (special formatting will be lost) and will be reformatted after receipt. To indicate italicized words, enclose the words with the special codes [i] [/i]. For superscript and subscript, use the code [super] [/super] and [sub] [/sub], respectively. To show Greek letters, enclose the spelled out Greek letter [alpha], [beta], etc.

Formatting Examples:

Saponins from the flower buds of [i]Buddleja officinalis[/i] was isolated.....

Abundance of CH₃CH₂OH was found....

The synthesis of [alpha]- and [beta]- amino acid derivatives has been.....

You may indicate your preference for the Section (area of interest). We will try to accommodate your request, but papers are groups by meeting organizers.

You may present a poster or oral paper. Oral presentation are limited to 15-20 minutes, posters are limited to 4' x 4' and should be set up by 8:00 am Saturday morning, April 14, 2007.

Student presenters may optionally compete for awards in B.S., M.S., or Ph. D. levels.

WORKING OUT MAY HELP FLU VACCINE DO ITS JOB

Mild exercise before having a flu shot may make the vaccine more effective, British researchers have found. A small study, published in the February issue of *Brain, Behavior and Immunity*, found that lifting weights before a vaccination increased antibody response in women, while reducing it in men. In men, cell-mediated response - the activation of white blood cells and other kinds of cellular defenses - was increased.

The scientists randomly divided 60 healthy men and women into two groups. A group of 40 exercised by lifting weights for about 25 minutes and then got their shot. The scientists took blood samples from all of the participants, then tested their blood again 6, 8 and 20 weeks later. They found a consistently increased immune response in the exercisers. Kate M. Edwards, the lead author, said that it could do no harm if everyone exercised before being vaccinated. The authors suggest that exercise increases the number of immune cells that arrive at the muscle tissue, which increases activity in the lymph nodes, leading to a more efficient immune response.

The New York Times, Tuesday, February 13, 2007.

ANCIENT CRASH, EPIC WAVE

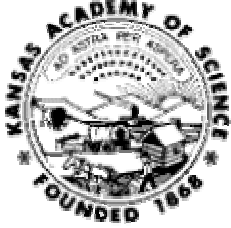
At the southern end of Madagascar lie four enormous wedge-shaped sediment deposits, called chevrons, that are composed of material from the ocean floor. Each covers twice the area of Manhattan with sediment as deep as the Chrysler Building is high. On close inspection, the chevron deposits contain deep ocean microfossils that are fused with a medley of metals typically formed by cosmic impacts. And all of them point in the same direction – toward the middle of the Indian Ocean where a newly discovered crater, 18 miles in diameter, lies 12,500 feet below the surface.

The explanation is obvious to some scientists. A large asteroid or comet, the kind that could kill a quarter of the world's population, smashed into the Indian Ocean 4,800 years ago, producing a tsunami at least 600 feet high, about 13 times as big as the one that inundated Indonesia nearly two years ago. The wave carried the huge deposits of sediment to land.

Most astronomers doubt that any large comets or asteroids have crashed into the Earth in the last 10,000 years. But the self-described “band of misfits” that make up the two-year-old Holocene Impact Working Group say that astronomers simply have not known how or where to look for evidence of such impacts along the world's shorelines and in the deep ocean.

Scientists in the working group say the evidence for such impacts during the last 10,000 years, known as the Holocene epoch, is strong enough to overturn current estimates of how often the Earth suffers a violent impact on the order of a 10-megaton explosion. Instead of once in 500,000 to one million years, as astronomers now calculate, catastrophic impacts could happen every few thousand years.

by Sandra Blakeslee, The New York Times, Tuesday, November 14, 2006.



KANSAS ACADEMY OF SCIENCE
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