



# INDIANA ACADEMY OF SCIENCE NEWSLETTER

Number 148

September 2011

## MARK THE DATE



INDIANA  
ACADEMY  
of SCIENCE

*The Indiana Academy of  
Science*  
with the

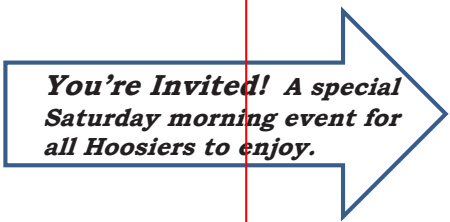


INDIANAPOLIS  
JAZZ  
ORCHESTRA

Presents

***DISCOVERING THE WONDERS OF  
SCIENCE THROUGH THE SENSATIONS  
OF MUSIC***

Saturday, November 12, 2011  
10 a.m. -12 noon  
Indiana State Museum  
(Auditorium)  
650 West Washington Street  
Indianapolis, IN



***You're Invited! A special  
Saturday morning event for  
all Hoosiers to enjoy.***

**Register online**  
**beginning Sept 15, 2011 at**  
<http://www.indianaacademyofscience.org>

Non-Academy members—  
\$10.00 in advance online  
\$12.00 at the door Nov. 12, 2011

Academy members –  
\$8.00 in advance online  
\$10.00 at the door Nov. 12, 2011

(High school students – no charge Register at the door only,  
Nov. 12, 2011)

## Note from the President's Corner...

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Just a couple of things...

First, I want to mention two changes in the IAS By-laws. These were adopted unanimously by the Council this summer. Starting immediately, newly elected officers will assume their duties on the first day of the upcoming fiscal year (June 1<sup>st</sup>) rather than at the end of the Annual Meeting in the spring. This prevents, for example, a treasurer from having to take over on the most active business day of the entire year. The other change solves a problem that we've had for many years. The outgoing president has always presided over the budget committee meeting at which a budget was adopted for a year when he or she wouldn't even be the president. In response to this, the president-elect will now preside over the meetings of the budget committee.

Second, I'd like to say something about the sad news we received this summer—the recent passing of Daryl Karns and the earlier passing of Dale Smith, two very fine Academy members who will surely be missed.

Although I did not have the pleasure of knowing Dale Smith, many of you did, and I have learned that Dale was active in Indiana botany, especially ferns. Dale was living in Deputy, Indiana when he passed away on January 28, 2011. Kay Yatskievych shared the story of last seeing Dale a few years ago on a hike she led to Green Bluff in Owen County. Kay remembers him as the person who found Mountain Splenwort (*Asplenium montanum*) there. It is one of two places in Indiana that this endangered species is found.

Daryl Karns was a member of the Biology Department at Hanover College, and in that capacity, he served the IAS in many ways. I especially remember the 2004 Academy meeting at Hanover; Daryl had a hand in making it what I think was one of our finest meetings. He also organized the Wabash River Symposium which was held



Richard Kjonaas, 2011-2012 IAS President

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as part of the 2005 Academy meeting which took place at St. Mary-of-the-Woods College near Terre Haute.

I look forward to seeing you at the Science and Society Forum at the State Museum at 10:00 AM, Saturday, November 12, 2011. *Discovering the Wonders of Science through the Sensations of Music*, is facilitated by Academy member and past Academy president Uwe Hansen, and accompanied by the Indianapolis Jazz Orchestra. Online registration begins September 15<sup>th</sup>. It promises to be a first-class event.

-- **Rich Kjonaas**  
IAS President

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## IAS Membership List is Online -- Please Update Your Profile

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The Academy's membership list now resides online and you can update your information whenever necessary. To update or edit your profile logon to the IAS website.

Highlight > Member Center and a drop down menu will show > Member Profile. Examine the personal information contained in your profile to make certain that your information such as address, telephone and email are correct

and up to date. While checking this information please enter the year you first joined the Academy, your discipline and areas of interest. Thank you very much.

-- **K. Michael Foos**  
IAS Webmaster

## From the Desk of the Executive Director

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I want to begin by welcoming our new members to the Academy as well as members who took a little time off and have now returned. The Academy's membership drive began following the 126<sup>th</sup> Annual Academy Meeting, and we are very pleased to have received great response from both industry and academia. We're nearly 700 strong now (including 156 student scientists), and continuing to grow daily. I also want to thank you for encouraging your colleagues to join us. Please remember that membership in the Academy is for a calendar year, so be sure to renew your membership for 2012, before December 31, 2011. (A notice will be emailed to you as reminder.) Membership in the Academy has many benefits; keep an eye on the Academy Website (<http://www.indianaacademyofscience.org>) to stay abreast of Academy news, and opportunities to get involved.

Secondly, I'd like to welcome our new appointed standing and elected committee members, and new section chairs and vice chairs. These roles have all been updated, and a complete listing can be found at the Academy website at <http://www.indianaacademyofscience.org>.

These editions of the newsletter share many important news items, but please indulge me as I draw your attention to 4 items I'd like to emphasize.

- The Fall Science and Society Forum will take place November 12, 2011 at the Indiana State Museum, 650 West Washington Street, Indianapolis, IN., from 10am-12 noon. An informative lecture by Dr. Uwe Hansen, Physicist, will be delivered on the topic of "*Discovering the Wonders of Science through the Sensations of Music.*" Uwe will be accompanied by Jeff Anderson (IAPO director) and the members of the Indianapolis Jazz Orchestra. This will be a delightful way to begin your holiday season-- You don't want to miss it! Reservations will begin on-line September 15, 2011 at <http://www.indianaacademyofscience.org>. Space is limited so register early!

- Plans for the 127<sup>th</sup> Annual Academy Meeting are underway. We're looking at dates between the middle of March and the Middle of April—keep an eye on your email for the date, time and location, as well as the *Call for Papers*.

- Academy Member Robert Yost, Chair of Science Education Foundation of Indiana (SEFI) and Executive Director, Celebrate Science Indiana, is preparing to send out a coloring contest for the younger students and an essay contest for the middle and high school students focused on Celebrate Science Indiana. The involvement of Academy members is requested. You are asked to volunteer to



Delores Brown, IAS Executive Director

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review the high school essays. If you are interested in volunteering as a reviewer, please email me as soon as you can at [exccdir@indianaacademyofscience.org](mailto:exccdir@indianaacademyofscience.org).

- The 2011 Membership Yearbook is now in print. Hard copies of the Yearbook are distributed to Academy Officers, Council, and Committee chairs/Vice chairs. Members have opportunity to view the contents on-line by topic of interest.

Indiana Science is distinctive!

--Delores Brown  
Executive Director

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## Indiana High School Students Are Encouraged To Apply!

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Junior Research Grant Proposals are being accepted until October 26, 2011 from high school students in grades 9-12. Grants are available for up to \$300 to fund research projects.

Complete instructions and forms are found on the Indiana Academy of Science Website under Research Grants.

Please direct questions to **Alice Heikens** ([aheikens@franklincollege.edu](mailto:aheikens@franklincollege.edu) or 317.738.8302).

-- Alice Heikens  
Junior Research Grant Coordinator

## Awards Received by Members

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### Uwe J. Hansen

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Emeritus physics professor Uwe J. Hansen of Indiana State University is the recipient of the Distinguished Service Citation of the Acoustical Society of America.

The award honors Hansen “for contributions to the Society in musical acoustics, education in acoustics and leadership in outreach.

Highlights of his investigations into the physics of musical instruments include using holography to study vibration patterns in instruments ranging from hand bells and guitars to piano sound boards and Caribbean steel pans.

“It is absolutely wonderful to be recognized for something that brings as much joy as working with students and colleagues in the ASA,” Hansen said about the award.

Hansen’s previous leadership positions include serving as chair of physics at Indiana State University and multiple visiting professor and scientist posts. He worked as a visiting scholar at Northern Illinois University, Physikalisch-

Technische Bundesanstalt in Germany, Rose-Hulman Institute of Technology and St. Mary-of-the-Woods College.

In addition, Hansen has been named Speaker of the Year by the Indiana Academy of Science, president of the Indiana Academy of Science and is a Fellow of ASA and IAS.

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### Yogesh Joglekar

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Dr. Yogesh Joglekar, Chair of the IAS Physics and Astronomy Section, and assistant professor of physics in the School of Science at Indiana University-Purdue University Indianapolis, has received the National Science Foundation’s CAREER Award. CAREER Awards are the most prestigious awards granted by the NSF in support of faculty members early in their careers who exemplify the role of teacher-scholars through outstanding research, excellent education, and integration of education and research. The award is for \$400,000 over a five-year period beginning Aug. 1, 2011.

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## Members Obituaries

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### Dale Metz Smith

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Dale Metz Smith, 82, passed away January 25, 2011, at Ball Memorial Hospital in Muncie, Ind. He was born December 23, 1928, in Portland, Indiana.

He graduated from Portland High School in 1946; received a B.S. from Indiana University in 1950; a masters from Purdue University in 1952; and a Ph.D. from Indiana University in 1957. Professor Smith taught Botany at the University of Arizona, Tucson; the University of Kentucky at Lexington; the University of Illinois, Champaign; and the University of California, Santa Barbara. During his tenure, he rose to the status of professor and then professor

emeritus, after serving as chair of the biology department at UCSB. Professor Smith authored numerous botanical papers and received the Cooley Award from the American Society of Plant Taxonomists in 1963. He became a Fellow of the Linnean Society, London, and was a member of many scientific societies. Professor Smith will be remembered for identifying a new species of sunflower, *Helianthus Smithii*, which was named in his honor.

A Memorial Service was held 2 p.m. Friday, Feb. 4, 2011, at Grace Episcopal Church, Muncie, Indiana.

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### Fay Daily

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Fay Daily, long-time academy member, died in March, 2011 at the age of 100. Fay and her Husband Bill co-wrote **History of the Indiana Academy of Science 1885-1984**. Fay served as Historian for our group for many years and dutifully reported the passing of members during her necrology report at the annual Business Meeting. Although a life-long resident of land-locked Indianapolis,

Fay gained an international reputation as an expert in the taxonomy of algae, especially Charophytes, an interesting group of plant-like algae long thought to be an evolutionary link between the two groups. She collaborated with collectors around the globe and authored over 50 scientific studies, all as an amateur working out of a converted bedroom lab in her home. Professionally, Fay taught at

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Butler University, her undergraduate and masters' alma mater, and worked as a chemist at Eli Lilly. Her collection

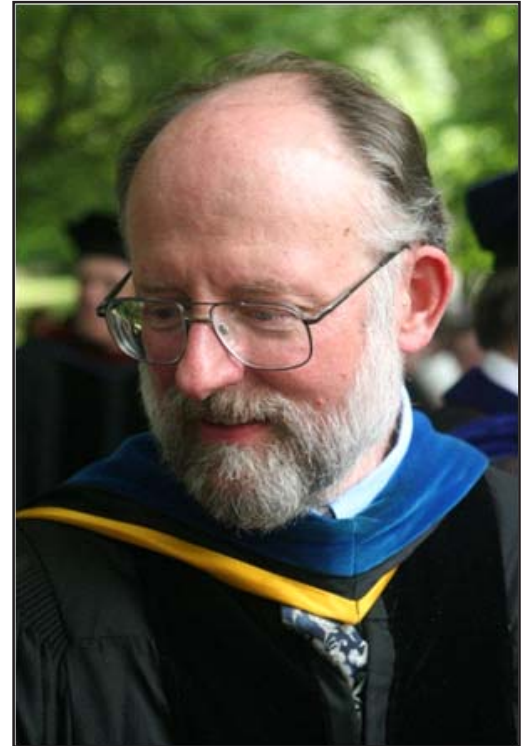
of over 3,000 specimens has been donated to the Friesner Herbarium at Butler.

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## Daryl Ralph Karns

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Daryl Ralph Karns, 61, of Madison, Indiana, died suddenly Tuesday, June 7. He was a Professor of Biology at Hanover College in Hanover, Indiana. Daryl was a very active member of the Indiana Academy of Science. Daryl became a Fellow of the Academy in 1997. Since 2000, Daryl was a member of the Biodiversity and Natural Areas Committee and organized an amphibian workshop for the 2004 annual Academy meeting. He has also served as Chair of the Ecology and Zoology Sections of the Academy. Most recently, Daryl was involved in planning and coordinating BioBlitz events throughout the state. Along with his collaborators, he helped to organize the Otter Creek, Hanover College, Wesselman Woods, Loblolly Wetland Preserve, and Goose Pond Fish and Wildlife Area BioBlitz events. He was actively assisting in the Trail Creek Open Space BioBlitz at the time of his passing. As a member of the Academy he also organized the Wabash River Symposium. Daryl was a prolific contributor to the Indiana Academy of Science Newsletter. He was also a member of the Proceedings Editorial Review Board since 1991. When the Proceedings of the Indiana Academy of Science began publishing a series of biographical articles honoring notable living members of the Indiana Academy of Science, Daryl wrote the first installment on Dr. J. Dan Webster (Daryl was Dr. Webster's successor in the Biology Department of Hanover College). Daryl's sudden and unexpected death precluded him from being honored by this series, but his distinguished academic, service, and teaching careers surely would have earned him this honorable distinction.



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## Indiana State Museum Exhibitions and Lectures

Dean and Barbara White Auditorium  
650 West Washington Street, Indianapolis

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### Amazing Maize: The Science, History and Culture of Corn Opens Sept. 24, 2011

This 10,000 genetic journey explores the relationship between people and corn, arguably the most productive domesticated plant and the greatest plant-breeding achievement of all time. Without corn, life as we know it wouldn't exist, as Americans need 25 corn plants per person per day to support our way of life!

### The Endurance: Shackleton's Legendary Antarctic Expedition Oct. 15, 2011 - Feb. 19, 2012

This exhibition documents one of the greatest stories of survival in expedition history, the dramatic near-fatal expedition to Antarctica led by Sir Edmund Shackleton in 1914. When the ship became trapped in packed ice, the crew was stranded for 18 months; miraculously, no life was lost. The exhibit presents more than 150 riveting photos taken by ship photographer Frank Hurley, plus 3-D models, videos, and interactives.

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### Endurance Lecture Series: Science on the Ice

Join Indiana scientists as they share their stories of life on the Antarctic ice. Discover how the southernmost continent is used as the largest outdoor laboratory in the world, and what stories it shares about the Earth and

the Universe. Must pre-register at **317.232.1637**.

Oct. 20: *Ocean Currents and Ice Sheets: Plunging into an Icehouse World*: Dr. Jen Latime, Assistant Professor Geology, Indiana State University

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*Indiana State Museum events continued*

Nov. 3: *How Fast Can It Melt: A Brief History of Climate Change through Geologic Time*: Gabriel Filippell, Professor Earth Sciences, IUPUI

Nov. 17: *Antarctic Search for Meteorites*: Marta Corbin, IUPUI/IUPUC Lecturer

Dec. 1: *Teacher at Sea in the Arctic*: Christine Hedge, 7th Grade Science, Carmel High School

Jan. 19: *Climate Change & the Future of Ice at the Poles*: Dr. Paul Shepson, Professor of Chemistry, Purdue University

Feb. 2: *Geological Exploration in Antarctica*: Dr. Kathy Licht, IUPUI Associate Professor of Earth Sciences

Feb. 16: *Voyages to the Antarctic: Seasons of Life on the Ice*: Anthony Rathbun, Professor of Geology, Indiana State University

**Deadline for submission of material for the December issue of the IAS Newsletter is  
December 20, 2011**

**Send copy to Donald G. Ruch at [druch@bsu.edu](mailto:druch@bsu.edu)**

**For IAS information, go to: [www.indianaacademyofscience.org](http://www.indianaacademyofscience.org)**

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