



INDIANA ACADEMY OF SCIENCE NEWSLETTER

Number 154

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NOMINATIONS FOR ACADEMY FELLOWS ARE NOW BEING ACCEPTED

The title of ‘Fellow’ is an Indiana Academy of Science honor. A member is bestowed the honor of Fellow if he/she has recognized standing as a scientist who has contributed to the objectives of The Academy. A Fellow is a member of the Academy (minimum of 5 years), and has demonstrated service to the Academy and to the advancement of science in Indiana; service to education in science; and achievements in scientific research. Nature of service to the Academy means attending Indiana Academy of Science meetings, presenting papers at meetings, publishing in the *Proceedings*; serving as an officer, as a committee chair, as a committee member; playing a role in organizing Academy functions, etcetera.

Recommendations for Academy Fellows are put forth by previous fellows of the Academy only. Recommended nominees must also be current members of the Indiana Academy of Science. **Recommendations must be submitted by December 1, 2013.** Recommendations are submitted to the **Deposit Box** (which can be found on the Academy website [www.indianaacademyofscience.org] at Member Center > Document Sharing > Deposit Box > Awards). Please note: the Recommendation Form and other documents must be for one nominee only. Please complete separate documents for each nominee.

Recommendations must include the following:

1. The **Recommendation Form** signed by two current Academy Members. (Downloadable from the IAS website)
2. A **cover letter** describing the qualifications of the recommended nominee for fellow status.
3. A **Curriculum Vitae [CV]** highlighting the nature of service to the Academy.

Give the name of the nominee in the blank labeled “Title” and the document “Recommendation Form for Fellow” in the blank labeled “Notes”. Do the same for the “Cover Letter” and “CV”.

New Fellows will be recognized at the 129th Annual Academy Meeting to be held March 15, 2014.

Beginning in 2014 the procedures for recommending Fellows will be slightly changed. At the March 2013 Council meeting, a new reinstated Awards Committee was charged with reviewing existing guidelines and to create new processes and documentation where needed. The Awards Committee consists of five Fellows of the Academy from both the physical and biological sciences. Members will serve on the committee for 3 years. Currently, the committee members are **Marcia Moore**, Chair, **Mike Foos**, **Bill Gommel**, **Jim Plew**, and **Don Ruch**.

Additional details will be printed in future newsletters and on the website. Some of the proposed changes will require Council approval at the November 9, 2013 meeting. Please address any questions or comments to **Marcia Moore**, mmoore@butler.edu, or **317.940-8302**.



-- **Marcia Moore**
Chair of the Awards Committee
Friesner Herbarium Assistant

Note from the President's Corner

Greetings from Southern Indiana! This is my second year as a member of the Academy Council, having served as President-elect of the Indiana Academy of Science during the last fiscal year. Over that time, I have gotten to know other members of the Council and many of the individuals who serve on the Academy's elected and appointed positions. Everyone that I have met has been helpful and patient as I transitioned onto the Council and as I begin my role as President of IAS. I have quickly learned that those who serve the Academy are a talented, accomplished, and hardworking bunch of people. Moreover, they are dedicated to the mission of the Academy that includes promoting and integrating the sciences through research, education and advocacy.

As most of you already know, the Academy has a proud history of improving education in the sciences. This was clearly on display last month when Delores Brown and I had the privilege of attending the *Subaru Loves Science* book donation ceremony at Washington Irving School in Indianapolis. [See pages 3-4.] The science book donation to Washington Irving School was realized through signature collection at our 128th Annual Indiana Academy of Science Meeting, held this past March at the JW Marriott Hotel in Indianapolis. Thanks go out to those who participated in the signature collection process during the meeting. Our partnerships with Subaru of America, the Eli Lilly and Company Foundation, the W.K. Kellogg Foundation, the Indiana State Museum, and the White River State Park has been one of the many ways in which we have increased the visibility of the Academy. Over the summer, the Academy awarded two grants in an effort to sponsor and improve education in the sciences. One grant was awarded to the Indiana State Museum in support of its *Indiana Ice Age Giants: The Mystery of Mammoths and Mastodons* exhibition. The other grant was awarded to the Science Education Foundation of Indiana, Inc. (SEFI) as part of our continued support of *Celebrate Science Indiana* (CSI). **Delores Brown** deserves a special word of thanks for facilitating these awards.

Although the Academy has experienced strong leadership and loyal membership over the years, it needs to continue to recruit new members if it is going to effectively fulfill its mission and continue to provide a wealth of services to its membership. This was, you may recall, an important



Dale Edwards, 2013-14 IAS President

concern of our Immediate Past President, **Michael Finkler**, and I want to continue championing this message. Your efforts, both big and small, to increase membership of the Academy are welcomed and greatly appreciated.

-- Dale Edwards
President, 2013-2014
Indiana Academy of Science



Images from the *Subaru Loves Science* Book Donation Ceremony at Washington Irving School, Indianapolis, Indiana



Indiana Academy of Science President **Dale Edwards** and Academy Executive Director **Delores Brown** helped to present 200 brand new science books to students at the Washington Irving/T.C. Steele 98 Elementary School in Indianapolis Friday August 16, 2013. As part of the *Subaru Loves Science* Program, Subaru of America Columbus Zone produced 200 books for the donation.



In **Dale Edwards's** remarks that afternoon he stated the following: "The Indiana Academy of Science is very pleased to have helped to make today's science book donation possible for students from Washington Irving/T.C. Steele School 98. For over 128 years, the Indiana Academy of Science has worked to realize its mission of improving education in the sciences, promoting scientific research, and encouraging communication and cooperation among scientists. It has been an important voice of Indiana science since 1885. Today is yet another wonderful opportunity for the members of the Indiana Academy of Science to show our support of Indiana school children, and our interest in partnering with organizations and companies like Subaru of America who share our interest in promoting science education in our Indiana schools.

The science book donation today was realized through signature collection at our Indiana Academy of Science 128th Annual Academy Meeting, held March 9, 2013 at the JW Marriott Hotel in Indianapolis, where nearly 400 Indiana scientists, science educators and young emerging scientists attended this year. Subaru of America Columbus Zone has been very generous in supporting the Academy's Annual Meeting for the last three years; these new science books donated today to Washington Irving/T.C. Steele School 98 result from that partnership."

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(L-R)
Dale Edwards, Indiana Academy of Science President;
Ryan Smith, Washington Irving Elementary School Vice Principal;
John Althardt, Public Relations Director and Spokesperson, Indiana Public Schools;
Karen Hastings, Washington Irving School Principal
Tim Stallings, Regional Marketing Manager, Subaru of America;
Delores Brown, Indiana Academy of Science Executive Director;
Askia Ahmad, Subaru Central Region Columbus Zone Marketing Manager.

Plan now to attend and present a research paper or poster, hot topic, or workshop at the

129th Annual Academy Meeting, March 15, 2014
J. W. Marriott, downtown Indianapolis, Indiana

The first *Call for Papers* will go out October 8, 2013. Abstract uploading and pre-registration for the 129th Annual Academy Meeting, will begin on-line December 2, 2013, at <http://www.indianaacademyofscience.org>

Indiana Academy of Science Junior Research Grants

Students in grades 9-12 are encouraged to submit grant proposals to conduct independent research projects. Grants of up to \$300 are available.

Deadline for proposals is October 25, 2013.

For additional information, including guidelines and requirements for grants, please visit the IAS website at www.indianaacademyofscience.org and click on research grants.

Please direct questions to Dr. **Larry Mordan**, student research mentor (lmordan@franklincollege.edu).

From the Desk of the Executive Director...

With the summer behind us, we are looking to a busy year ahead. There is much to be shared with Academy members. Please be mindful of the following:

We are very pleased to announce that the Indiana Public Schools (IPS) has approved continuing education (CE) units for Indiana public school teachers who attend the Indiana Academy of Science annual meetings. As such, IPS teachers attending the 129th Annual Academy Meeting, March 15, 2014 will be able to earn CE credits through their attendance.

The 129th Annual Academy Meeting is on schedule for Saturday, March 15, 2014 at the J.W. Marriott. Make plans now to attend.

Academy Section Chairs convened to plan the academic program for the 129th Annual Academy Meeting, on Saturday, September 28th (10a.m.) at the Indiana State Museum.

With funding made possible by the W.K. Kellogg Foundation, the Academy was able to partner with WFYI- PBS on the production of 4 educational science vignettes designed to help the Academy reach more Indiana young people with information and experiences that could get them excited about science. We recently completed this project by producing the 4 vignettes (with accompanying teacher lesson plans); they are now available on YouTube, Facebook and on the WFYI-PBS Website. WFYI and Academy member **Rick Crosslin** (who narrates the vignettes) are working to get the vignettes placed in the Indiana Public Schools, and market them to a broad audience through *Indiana Expeditions*. (As many of you know, Academy members **Nelson Shaffer** and **Ed Frazier** were instrumental in getting *Indiana Expeditions* off the ground with WFYI and Rick a few years ago.) We are very happy to be able to take us to the next level with this newest collaborative initiative.

By placing these vignettes on Facebook and YouTube, we are not only making the vignettes available to teachers but are providing opportunity for Indiana school children (and their parents) to access these educational materials for themselves. The partnership formed with WFYI-PBS on this project has exponentially increased our ability to reach many more school age children, teachers and parents; more than we could have reached using traditional ways of communicating. Each of the four vignettes showcase science subject matter designed to fascinate, energize,



IAS Executive Director Delores Brown

and educate the young mind. Academy member **Alice Heikens** is showcased in the vignette on building a forest and Academy member **Don Takehara** is showcased in the vignette on high altitude balloons. Each of the vignettes is accompanied by a live video and teacher lesson plans. Needless to say the Indiana Academy of Science is very proud of what we were able to accomplish as a result of the support received from the W.K. Kellogg Foundation.



The vignette Eblasts can be accessed at the following links: **EmailNewsletterForest.docx**;
EmailNewsletterHighAltBalloon.docx;
EmailNewsletterRobots.docx;
EmailNewsletterScienceFair.docx

At-large Council member **Marcia Gillette** will be stepping down as the director of the Academy *Science Talent Search* Youth Program after this year. She has given 13 years to this project while teaching at University of Indiana Kokomo. Dr. Gillette will be semi-retiring from Kokomo. Thank you again Marcia for your dedication to this project; so many young people have benefitted as a result of your selfless commitment. We are very happy to

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Executive director can't

have **Marian University** confirmed to host *Science Talent Search* program, beginning 2014. It will be housed at Marian University, Indianapolis under the leadership of Academy member and Dean of Math and Science Dr. **Loren Bertocci**.

Lastly, if you have not renewed your membership for 2014, please take a few minutes and do it now, at

<http://www.indianaacademyofscience.org>. Also, think about gifting a membership for that special colleague or sharp college or graduate student in your life.

-- Delores

Delores Brown, M.S., M.Ed.
Executive Director

FALL MUSHROOM FORAY, SATURDAY SEPT. 28, 1:30PM AT MOYER-GOULD WOODS

Join us as we search for and identify mushrooms. All are welcome.

In association with:

- **The Lafayette Mushroom Hunters Group**
<http://lafayettemushroompeople.blogspot.com>
- **Hoosier Mushroom Society**
<http://hoosiermushrooms.org>
- **NICHES Land Trust**
<http://www.nicheslandtrust.org/calendar/>

How to Get There [see map]:

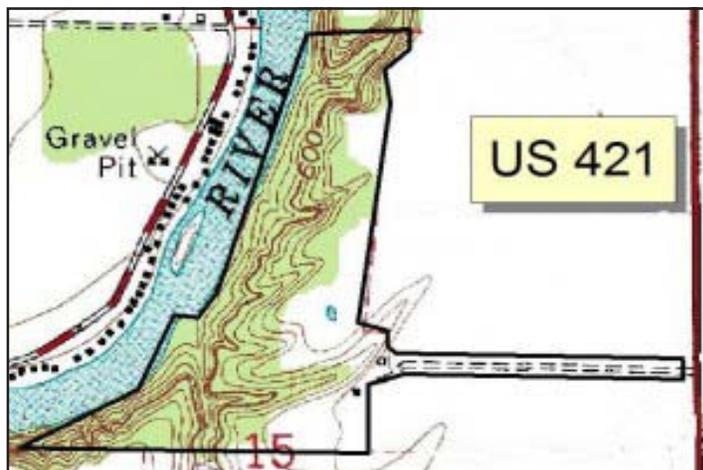
From West Lafayette take Indiana State Highway 43 thirteen [13] miles north to Brookston, then 7 miles west on State Highway 18 to US 421, then 1 ¼ miles north on US 421 to Moyer Gould Woods.

Moyer Gould Woods address is 4620 N US 421. The lane to the parking lot is lined with Black Walnuts.

For reference, it is 1 ¼ miles north of the intersection of SR 18 and US 421; and roughly 8 miles south of the US 421 bridge over the Tippecanoe River on the south side of Monticello.

For further information, email: nickharby@yahoo.com

-- Nick Harby
Arthur & Kriebel Herbaria



Proceedings Editor Dr. Uwe Hansen to complete his term as Editor New Co-Editors begin 2014

Proceedings Editor Dr. **Uwe Hansen** will complete his term as Editor at the end of this year, with Academy Members Dr. **Don Ruch** and Dr. **Paul Rothrock** beginning 2014 as Co-Editors. The Academy wishes to thank Dr. Hansen for his generous and much appreciated

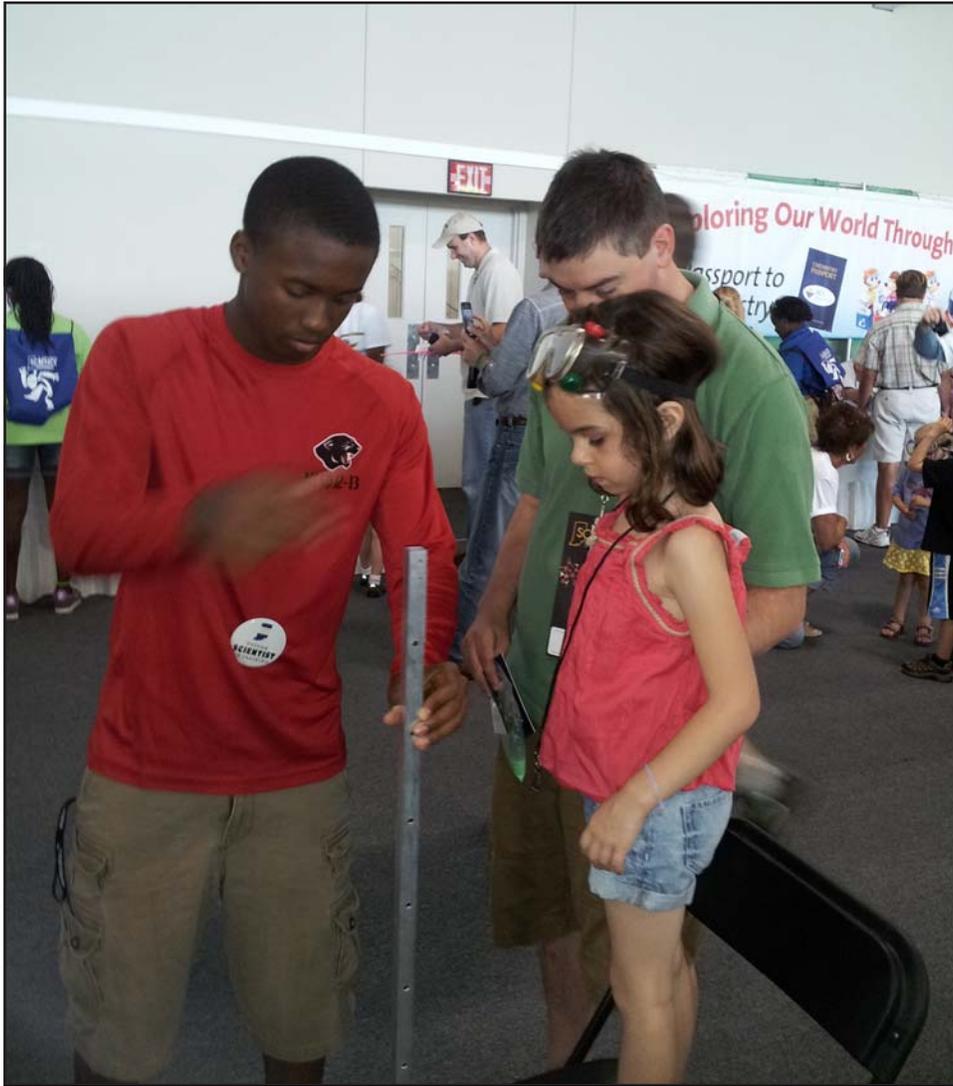
effort as Editor of the Academy's celebrated journal. The *Proceedings* has been in circulation since 1885. It is refereed, covered by numerous abstracting and indexing services, and published semi-annually.

Celebrate Science Indiana 2013

Celebrate Science Indiana (CSI) took place September 8th at the Indianapolis Motor Speedway, where a few thousand students, parents, teachers and other Hoosiers attended. The Indiana Academy of Science is a Charter Sponsor of this well-attended event, and we continue to support it as the Academy's *Science and Society* Initiative. Below are a few scenes from the Indiana Academy of Science exhibit at CSI provided by Delores Brown, the Indiana Academy of Science Executive Director.



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C. W. (Bill) Lovell

Obituary

C. W. "Bill" Lovell, 90, of West Lafayette passed away on Saturday, June 15, 2013 following a prolonged illness.

Born November 16, 1922 in Louisville, Kentucky to the late Edith Green and Charles William Lovell, Sr., Bill served in the U.S. Navy Civil Engineering Corps (Seabees) in the south Pacific during World War II.

He received his Bachelor's degree from the University of Louisville in 1944, and his Master of Science in Civil Engineering from Purdue University in 1951, followed by his PhD from Purdue in 1957.

Starting in 1948 at Purdue as a graduate assistant, Bill moved through the ranks to become a full professor in civil engineering in 1974. In 1996, he left civil engineering and became a facilitator of Stephen Covey's 7 Habits of Highly Effective People for human resources at Purdue. In 2002, he was honored as the Facilitator of the Year by the Franklin Covey organization. At the time of his full retirement in 2010, he had been a staff member at Purdue for almost 63 years.

Professor Lovell developed numerous courses in his civil engineering specialty of geotechnical engineering and taught extensively at both the undergraduate and graduate levels. He served as major advisor for 114 graduate students, and supervised 59 graduate theses. He was recognized internationally as an expert in the stability of earthen slopes, in the performance of compacted soil and rock fills, and in the use of waste materials in civil engineering construction. He authored or co-authored 193 publications.

Professor Lovell held high positions in the American Society for Testing and Materials (ASTM), the American Society of Civil Engineers (ASCE), the Transportation Research Board, and other professional organizations, from which he received numerous awards. He was a Fellow of both the ASTM and the ASCE. He was a past district governor of Lions International, a past president of the Lafayette Lions Club, a member of the Board of Directors of the Lafayette Rotary Club, a past president of the Greater Lafayette Civic Theatre, a charter member of the Covenant Presbyterian Church, West Lafayette, and an elder of the Central Presbyterian Church, Lafayette.



Mr. Lovell traveled extensively and was an avid fly fisherman. He actively supported environmental initiatives, including the Nature Conservancy.

In 1991, Bill married Mary Ellen Totten, who survives him. Also surviving are a daughter, Christine Kemp (James) of Columbus, IN; a son, Douglas Lovell (Elizabeth), of Berkeley,

CA, and 1 grandchild, Megan Kemp. The rest of his loving family includes 3 stepdaughters, Rebecca Kamm of Merritt Island, FL; Holly Crawford (Peter) of Orlando, FL; and Kristi Travers (Mischa) of Portola Valley, CA; a stepson, Tom Totten of Battle Ground, IN; 6 step grandchildren, John and Mary Totten, along with their mother, Mary Jo Totten; Grayson (Cathy) and Austin Kamm; and Cameron and Lindsey Travers; and 1 step great-grandchild, Collier Kamm. He was preceded in death by a brother, John G. Lovell of Crystal River, FL, and a grandchild, Scott Lovell.

Bill Lovell was the president of the Indiana Academy of Science in 1992.

A memorial service was held at the Central Presbyterian Church, Lafayette, on Saturday, June 22, at 11 a.m., followed by a reception in the church parlor.

In lieu of flowers, donations may be sent to Central Presbyterian Church or The Nature Conservancy.



National Geographic Society Explorer-in-Residence - Sylvia Earle

The Quest for Sustainable Seas

Tuesday, Oct. 15, 2013 - 7:30 p.m., Reilly Room, Butler University

Sylvia A. Earle is an explorer-in-residence at the National Geographic Society, founder of the Mission Blue Foundation, chair of the Advisory Council for the Harte Research Institute and the Marine Science and Technology Foundation, and former Chief Scientist of NOAA. She was named Time Magazine's first Hero for the Planet, a Living Legend by the Library of Congress, and a 2009 winner of the TED Prize. Earle has pioneered research on marine ecosystems and has led more than 100 expeditions totaling more than 7,000 hours underwater.

Earle is author of more than 175 scientific and popular publications, including "The World Is Blue: How Our Fate and the Ocean's Are One" (2009) and "Ocean: An Illustrated Atlas" (2008). Her research places special emphasis on marine plants and ecosystems, and the development of technology for access and research in the deep sea.

She played a key role in bringing about increased support for U.S. National Marine Sanctuaries during the Clinton administration in 1999, and later helped inspire George W. Bush to designate vast tracts of American-controlled Pacific Ocean islands, reefs, surface waters,



and sea floor as marine national monuments, limiting fishing, mining, and oil exploration. Today, she is leading a global effort to develop networks of protected areas in the sea—"Hope Spots"—large enough to protect the blue heart of the planet.

Earle has a bachelor's degree from Florida State University and a master's degree and doctorate from Duke University as well as numerous honorary doctorate degrees. She lives in Oakland, Calif.

The Indiana Academy of Science's "Science Experts Database"

If you have not already done so, please go to the the Indiana Academy of Science webpage and join the Science Experts Database.

The webpage is **www.indianaacademyofscience.org**

Once on the page, log in and click on **Scientists** on the right side of the bar at the top of the page and follow the instructions.

Deadline for submission of copy for the December issue of the IAS Newsletter is

December 6, 2013

Send copy to Donald G. Ruch at druch@bsu.edu

For IAS information, go to: www.indianaacademyofscience.org