

Iowa Academy of Science

The New Bulletin

Volume 8 Number 1 Spring 2012



The Iowa Academy of Science is established to further scientific research and its dissemination, education in the sciences, public understanding of science, and recognition of excellence in these endeavors.

Message from the Executive Director

Dear IAS Member,

It is election time. Inside this issue of the Bulletin you will find your ballot and biographical information for the candidates for IAS President-Elect and the IAS Board of Directors. Please take time to review the candidates and cast your ballot before the April 4th deadline.

Preparations are continuing for the IAS Annual Meeting which will be hosted by North Iowa Area Community College in Mason City on April 20th and 21st. Community colleges play a major role in the preparation of students for STEM careers. General Session I on Friday will include an address by Iowa Lt. Governor Kim Reynolds followed by a panel discussion with six members of the Iowa Governor's STEM Advisory Council. The Iowa Academy of Science is ideally suited to encourage communication across STEM disciplines including STEM education. This will be an opportunity for IAS members to provide input to the Governor's STEM Advisory Council. Your attendance at this session will help demonstrate the level of interest the Academy has in STEM education. It begins Friday at 11:00 a.m. and we hope to see a large contingent of IAS members on hand.

General Session II on Friday evening will be led by Dr. Joseph Tiffany from University of Wisconsin – La Crosse and the Executive Director of the Mississippi Valley Archaeology Center. Join Dr. Tiffany as we look at archaeology in action at the MVAC.

Mason City is home to Prairie School Architecture with several Frank Lloyd Wright buildings in the community including the only remaining hotel in the world designed by Wright. General Session III will feature a presentation by Dr. Sidney K. Robinson from the Taliesin Frank Lloyd Wright School of Architecture. Tours of two Frank Lloyd Wright buildings will follow in the afternoon.

Symposium topics include wind energy, photography in conservation research, and Iowa's leading role in global biotechnology research. Your Advance Program Guide includes much more on the meeting including hotel and registration information. Consult it and the IAS website at www.iacad.org for more details. You may register online now.

We hope to see you in Mason City!

- Craig Johnson, Executive Director



Table of Contents

Executive Director Message	1
Candidates for President-Elect	2
Journal seeks papers	3
2012 Ballot	3
Candidates for IAS Board of Directors	4-5
Annual Meeting Preview	6
2011 Member Donations	7
Upcoming Events	7
Corporate and Institutional Members	8

Candidates for IAS President –Elect



"The same kind of scientific endeavors that put man on the moon 50 years ago, has recently focused on how the brain operates, and rewritten assumptions about learning. Iowa is well poised to continue providing leadership in the development of science education. I look forward to continuing the work with you."

Yvette McCulley

State Science Consultant, Iowa Department of Education, Bureau of Teaching and Learning

Professional Experience

- Iowa Department of Education, Science Consultant, 2007-present
- Omaha Public Schools, Omaha, Nebraska, King Science and Technology Magnet, Science Curriculum Facilitator/Magnet Coordinator, 2003-2007
- Archdiocese of Omaha, Omaha, Nebraska, St. Matthew School, K-8 Principal, 2002-2003
- Lewis Central Community Schools, Council Bluffs, Kreft Elementary Principal, 2001-2002

Special Activities & Recognition

- Iowa STEM Strategic Roadmap, co-author, 2011
- Creighton University, Biomedical Science Department, Antarctica, 2005
- Presidential Awardee in Secondary Science - 2000

IAS Member since 2009 including serving on the ISTS Conference Planning Committee, 2009-2011; as a conference presenter, 2010-2011; Committee on Committees member, 2010-present; National Youth Science Camp Application Reviewer, 2010-present



"I always attempt to do my best. It has been my private goal to be the best teacher in my building of every district I've taught in. I have a servant personality and work very hard to assure the success of my students. Their learning is extremely important to me."

Gale Vermeulen

Chemistry Teacher & Science Department Chair, Oskaloosa Senior High School, Oskaloosa

Professional Experience

- Oskaloosa Senior High School, Oskaloosa, Chemistry teacher, 1998-present
- Eddyville-Blakesburg High School, Eddyville, Science teacher/ Yearbook advisor, 1990-1998
- Wm. Penn University night adjunct, Oskaloosa, Elementary Methods course taught: Biology for elementary majors, 1988-1993
- Twin Cedars High School, Bussey, Science teacher/Yearbook advisor, 1982-1990

Special Activities & Recognition

- National Board Certification in AYA Science, 2002
- Currently serve on the board and the strategic planning committee of the Christian Opportunity Center, a central Iowa facility headquartered in Pella, IA for those with mental disabilities
- Currently serve on the board and as secretary of Nationwide Youth Roundup, a national youth conference

IAS Member 1976-1979 & 1989-present, IAS Fellow in 1979; has served for many years on the ISTS Leadership Team including as Iowa Science Teaching Section Chair (2006) and ISTS Fall Conference Chair (2007); awarded the Excellence in Science Teaching Award for Chemistry, 1978; currently an ISTS regional director.

**Journal
of the
Iowa Academy of Science**

JIAS is currently soliciting papers for Volume 119. The Journal considers several types of contributions from disciplines represented by sections of the Academy including formal research with no minimum or maximum length; reviews or annotated bibliographies; and papers on science teaching. Previously copyrighted material will not be considered.

A checklist and submission form is available on the IAS website:

www.iacad.org

Like us on Facebook

The Iowa Academy of Science

Facebook members can now show their support for science in Iowa by becoming a fan of the Iowa Academy of Science. IAS Facebook Members will receive updates about the IAS Annual Meeting and the ISTS Fall Conference plus other IAS events and programs appropriate for the general public. Simply search for Iowa Academy of Science to become a fan or join!

Iowa Academy of Science

2012 Ballot

Rules: One vote per individual member. This original ballot only, no photocopies. *Ballots must be arrive at the IAS Office by Wednesday, April 4th, 2012.*

IAS President-Elect

(vote for *one*)

_____ Yvette McCulley

_____ Gale Vermeulen

IAS Board Directors

(vote for *two*)

_____ Mahdi M. Kaisi

_____ Keith Cain

_____ Sara Coleman

_____ Joshua Hanna

_____ Chad Linzel

_____ Doug Herman

_____ Bill Krain

_____ Kathy Megivern



Return to: Debbie Dean,
Iowa Academy of Science
UNI—175 Baker Hall
2607 Campus St.
Cedar Falls, IA 50614-0508

**VOID ORIGINAL
BALLOTS ONLY**



"Iowa Academy of Science was established to promote scientific research, science education, public understanding of science education, and recognition of excellence in these endeavors.

I would like to contribute to this mission as a member of the board of directors, if I have the opportunity to serve."

Mahdi Al-Kaisi
Associate Professor of Soil Science, Iowa State University
Candidate for IAS Director

Dr. Mahdi Al-Kaisi is an associate professor of soil science at the Agronomy Department at Iowa State University. He joined the faculty in 2000. Prior to joining ISU, he worked as Extension water quality specialist (1990 to 2000) with Colorado State University. From 1980 to 1986, he joined the Department of Soil Science at North Dakota State University as a research assistant, where he completed his M.S. and Ph.D. in soil physics with emphasis on soil and water conservation.

IAS Member, 2001-present; has served as Chair of the Conservation Committee



"As a member of the Iowa Academy of Science for twenty six years, I have had many opportunities to gain a great deal through my interactions between colleagues and science oriented professionals. As a member of the board of directors I would work to give back all I have gained by

helping IAS continue to be a strong voice for Science Education at all levels in our state. Thank you for this opportunity."

Sara Coleman
Science Instructor, Norwalk High School
Candidate for IAS Director

Science Instructor, Norwalk High School, 1994-present

Environmental Science Instructor, Online American Institute of Business, 2007-2011

Science Instructor, Guthrie Center High School, 1990-1994

IAS Member, 1987-present; has served as ISTS Secretary, Newsletter Editor, Fall Conference Presenter



"With the formation of Next Generation Science Standards, a new iteration of inquiry, science and engineering, will be implemented. It will be necessary to leverage the voices of biotech as we imbed the new practices. This will be important work- the creation of

a position statement that will manifest awareness, understanding and usage of the new practices. It is a great opportunity for the biotech community to contribute to the global perspective surrounding biotechnology. I feel that the IAS is in exactly the right position to initiate and facilitate these changes, and I seek the opportunity to serve on the IAS Board of Directors to help effect and lead that change."

Kacia Cain
Educator, Des Moines Central Campus & Des Moines Area Community College
Candidate for IAS Director

Adjunct Professor, DMACC, 2003 – present
 Des Moines University Summer Medical Microbiology Practicum Advisor (2000-2005)

IAS Member, 2001-2003 & 2012; has served as ISTS Regional Chair and facilities coordinator



"It has been an honor to serve and work with other IAS members as a part of the ISTS board and through this position I hope to continue to serve the IAS as a passionate STEM advocate and promoter science education."

Joshua Hanna
Technology Integration Specialist, University of northern Iowa
Candidate for IAS Director

Joshua has taught as a science teacher in both the Davenport Schools & Muscatine CSD and is now in his first year at the University of Northern Iowa as a Technology Integration Specialist. Joshua has been a member of the Iowa Academy of Science from his first year of teaching (2005) to present and has served for the past three years as the Corporate Sponsor Coordinator for the Iowa Science Teachers Section of the Iowa Academy of Science. Recently, Joshua was invited to join the Technology Enhanced Instruction team as a part of the Governors STEM Advisory Council.



"By growing up and living in Iowa, I feel a tremendous sense of responsibility to help Iowa's students, teachers, and citizens reach their full potential! Therefore, it would be an honor to serve on the IAS Board of Directors and further scientific research, education, and our citizens' understanding of science."

Chad Heinzl
Assistant Professor of Geology & Science Education, University of Northern Iowa
Candidate for IAS Director

Assistant professor of Geology & Science Education, UNI, 2007-present
 Elected regional director for the National Earth Science Teachers Association, 2011-2013
 CEO of the Iowa Geoscience Education Information Network (www.exploreiowageology.org) 2010-2013

IAS Member, 2007-present; has served as Chair of the Geology Section, Annual Meeting workshop leader and IJAS Judge

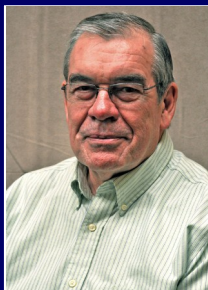


"Our science educators continue to have an important role in providing sound scientific information for discussion and action regarding course content, global warming, increased world population & pollution problems, genetic engineering of food products, the diminishing supply of fresh water including the Ogallala Aquifer, etc. I would welcome the opportunity to be a part of the IAS Board of Directors."

Bill Klein
Adjunct Community College Science Instructor/Public School Science Teacher (Ret.), Western Iowa Tech Community College/Sioux City Community Schools
Candidate for IAS Director

Adjunct Instructor, Western Iowa TCC, 6 years
 Sioux City CCD (Biology, Chemistry, AP Biology, Biology II Field, Earth Sci., 34 years
 SCCS Science Coordinator, 10 years

IAS member, 1982-present; has served on the ISTS leadership team and as ISTS Chair and Fall Conference Chair



"I would like to assist the IAS Board in encouraging Iowa Science Teachers to become active members of the IAS and ISTS. We also need to find ways to support science teachers in Iowa with Professional Development in these times of budget deficits."

Doug Herman
Biology Instructor, West High School, Iowa City
Candidate for IAS Director

West High School, Iowa City, AP Biology, 2000-present
 East High School, Sioux City, 1977-2000
 Remsen Union High School, Remsen, 1968-1977

Siemens Award for Advanced Placement—Iowa, 2009

IAS member, 1988-present; has served as ISTS Chair and Fall Conference Chair



"I've been moved in my work with ISTS through the years as I experienced firsthand the effective collaboration of dedicated professionals in Iowa science and science teaching. It would be my privilege to extend my involvement in many areas of Iowa science as a Director on the IAS Board."

Kathy Megivern
Science Teacher, Ankeny High School
Candidate for IAS Director

Ankeny High School (Geology, Biology, Animal Sci., Plant Science, Env. Sci.), Ankeny, 2005-present
 Ames High School, 2004-2005
 Project Coordinator & Instructor, Center for Excellence in Science & Mathematics Education, ISU, 2001-2004

IAS member as an undergrad and from 2009-present; has served as ISTS Chair and Fall Conference Chair, contributor to the Iowa Science Teaching Journal and presenter at Fall Conferences

**You are invited
to the 124th
Annual Meeting of the
Iowa Academy
of Science**

April 20-21, 2011
North Iowa Area
Community College
Mason City, Iowa



**General Session I
Iowa STEM Major Initiatives: Input Wanted**

Friday, 11:00 a.m.—Noon

Featuring:

Lt. Governor Kim Reynolds, Co-Chair, Governor's STEM Advisory Council
Jordan Cohen, VP Research, University of Iowa
Josh Byrnes, State Representative, House District 14
Jennifer Becker, Rockwell Collins
Ken Maguire, Project Lead the Way
Rachel Hurley, Iowa Biotechnology Association



**General Session II
The Mississippi Valley Archaeological
Center: Archaeology in Action**

Friday, 7:45-8:45 p.m.

Joseph A. Tiffany, Executive Director, Mississippi Valley Archaeology Center

**General Session III
Frank Lloyd Wright's "Organic" Architecture**

Saturday, 11:00 a.m.—Noon

Sidney K. Robinson, Taliesin Frank Lloyd Wright School of Architecture.



The New Bulletin is a publication of the Iowa Academy of Science and is distributed to current IAS members 3-4 times per year.

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<http://www.iacad.org>

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Article Submission: The deadline for submission of articles for Vol. 8 #2 is June 1, 2012. Articles must be pre-approved. For more information contact Craig Johnson, IAS Executive Director, at craig.johnson@uni.edu

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www.iacad.org

2011 Member Donations to the Academy

\$500 or more

Harry Horner
Bion Pierson

\$200 or more

Gary Donnermeyer
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John Pesek
Nick Stoyhoff

\$100 or more

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Sally Hinz
David Hodgkin
Bruce E. Kaasa
Otto Knauth
Joyce Norton
Marsha Pierson
Jaime Sabel

Announcements, Events & Deadlines

- **IJAS Members represent Iowa at American Junior Academy of Science Conference**
February 16-20, 2012
Vancouver, Canada
- **Myrle Burke Scholarship**
Applications Due: March 30th, 2012
- **Advance Registration for IAS Annual Meeting**
Due: Friday, April 5th, 2012
(fees increase after this date)
- **The 123rd Annual Meeting of the Iowa Academy of Science**
April 20 & 21, 2012
North Iowa Area Community College,
Mason City



See www.iacad.org for additional event/program details.

Do you have know of an event that should be listed in here? Contact iascience@uni.edu and let us know!

ISTS Elections information will be sent to Iowa Science Teaching Section members in a separate letter.



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Graceland University, Lamoni
Grand View University, Des Moines
Grinnell College, Grinnell
Iowa Central Community College
Iowa Conservation Education Coalition
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Rapids
Krell Institute, Ames
Loras College, Dubuque
Luther College, Decorah
Mount Mercy College, Cedar Rapids
North Iowa Area Community College,
Mason City
Northwestern College, Orange City
Simpson College, Indianola
The Nature Conservancy, IA
The Putnam Museum, Davenport
University of Dubuque, Dubuque
University of Iowa, Iowa City
Upper Iowa University, Fayette
Wartburg College, Waverly

