



**ILLINOIS GROUNDWATER ASSOCIATION**  
Advancing Groundwater Knowledge Since 1983

<http://www.illinoisgroundwater.org/>

**2016 Fall Meeting**

Two Brothers Roundhouse

205 N. Broadway

Aurora, Illinois 60505

October 13, 2016

# Agenda and Abstracts

## Illinois Groundwater Association (IGA) Fall 2016 Program Speakers and Topics

Two Brothers Roundhouse

Aurora, Illinois 60505

**October 13, 2016**

- 8:00 – 9:00     **Registration**
- 9:00 – 10:30   **Webinar, Midwest Geosciences: “Designing and Optimizing Groundwater Monitoring Systems in Sedimentary Sequences: Part I: Deciphering Sedimentary Sequences and Targeting Meaningful Monitoring Units” presented by David J. Hart, PhD, and Daniel Kelleher, PG, CIPM, and James Bannantine, PG**
- 10:30 – 10:45   **Break**
- 10:45 – 11:00   **Welcome and Opening Remarks**
- 11:00 – 11:30   **Michael Grzybowski, NIU--** Water resources and quality in Mandalay, Myanmar
- 11:30 – 12:00   **Andrew Greenhagen, USEPA--**Geologic sequestration of CO<sub>2</sub>: Science, regulation, public perception, and legal challenges
- 12:00 – 1:00     **Lunch**
- 1:00 – 1:15     **Awards and Recognitions**
- 1:15 – 1:45     **Syed Quadri- USEPA-** Project Management: Dynamic Tools & Techniques for Scientists and Engineers
- 1:45 – 2:15     **Nicole Haas, IAGP- IAGP--** An Intro to IL Groundwater's Boots on the Ground
- 2:15 – 2:30     **Break**
- 2:30 – 3:00     **Janet Agnoletti, BACOG--**Assessing Water Resources through Collaboration and Cooperation among Multiple Local Governments and Educating the Public
- 3:00 – 3:30     **Ballot, Announcements, Open discussion on the future of IGA**
- 3:30             **Close Meeting**

Our Spring 2017 Meeting will be a joint meeting with the Illinois Association of Groundwater Professionals to be held in East Peoria, February 9-10<sup>th</sup>. You may choose to stay for both days or sign up for just the IGA portion on Feb. 10<sup>th</sup>. Hope to see you there!

## **Water resources and quality in Mandalay, Myanmar**

**Michael Grzybowski,**

Student, **Northern Illinois University**

[mgrzybowski1@niu.edu](mailto:mgrzybowski1@niu.edu)

Since Myanmar opened up they have been developing fast and the lack of basic information on hydrogeology has already resulted in groundwater pollution, and overdevelopment of aquifers. Mandalay is a major city in central Myanmar, which contains an inefficient solid waste disposal systems, and a high urban population. There is a deficiency in knowledge of their groundwater system and is important to determine how these factors may affect their water from local wells that are used for drinking, cooking, and washing. Our goal was to conduct an educational and hands on training in the basics of hydrogeology for faculty at Yadanabon University while investigating this urban groundwater system.

Bio: Michael is a second year graduate student in geology at Northern Illinois University, focusing in hydrogeology. He received his B.S in Environmental science and water resources from Oklahoma State University, and worked at the Oklahoma Department of Environmental Quality.

## **Geologic sequestration of CO<sub>2</sub>: Science, regulation, public perception, and legal challenges**

Andrew Greenhagen  
U.S. Environmental Protection Agency  
77W Jackson Blvd.  
Chicago, Illinois 60604  
[Greenhagen.Andrew@epa.gov](mailto:Greenhagen.Andrew@epa.gov)

In 2013, The FutureGen Alliance applied for four permits from the Environmental Protection Agency Underground Injection Control Program for Class VI geologic sequestration. FutureGen proposed to retrofit an existing portion of a coal-fired power plant in Meredosia, Illinois with oxyfuel combustion technology. Ultimately, the goal was to capture greater than 90% of the carbon dioxide from the power generation, transport the CO<sub>2</sub> via a 30-mile pipeline, and sequester it underground in Morgan County, Illinois. EPA issued the draft permits in March 2014 and final permits in May 2015. The permits were then appealed to both the EPA Environmental Appeals Board and the U.S. Seventh Circuit Court of Appeals. The permits were expired at the request of the FutureGen Alliance in February 2016.

Bio: Andrew Greenhagen is a geologist at EPA's Region 5 office in Chicago. He has worked in the Underground Injection Control program since 2010. Andrew received his BS and MS in Geology from Northern Illinois University.

## **Project Management: Dynamic Tools & Techniques for Scientists and Engineers**

**Syed Quadri**

U.S. Environmental Protection  
Agency, 77 W Jackson Blvd,  
Chicago, Illinois 60404  
[quadri.syed@epa.gov](mailto:quadri.syed@epa.gov)

This seminar focuses on some very powerful but simple methodologies, tools and techniques that Scientists and Engineers can immediately apply to their projects for delivering successful projects along with the value added efficiency and effectiveness.

Bio: Syed Quadri is a certified Project Manager who has worked for the Superfund Program of the US EPA for the last 21 years. Syed has obtained a Master's Degree and a Graduate Certificate in Project Management. He has also earned the "Project Management Professional" Credential from the Project Management Institute. He has served for approximately eight years as an Adjunct Professor of Project Management at DeVry University's Keller Graduate School of Management in Chicago. He is also involved in teaching weekend certification courses in Project Management.

**Illinois Association of Groundwater Professionals:  
An Intro to IL Groundwater's Boots on the Ground**

**Nicole Haas**  
Executive Director  
815-973-3000  
877-434-9047 FAX



Illinois Association of  
Groundwater Professionals  
PO Box 210  
Stockton, IL 61085

The members of the Illinois Association of Groundwater Professionals work to protect our groundwater resources much the same as you do every day. The difference from their job to most of yours is they are standing in the mud, looking down a borehole when they go to work every day. Everyone's role in the industry is extremely important and Nicole is here to talk a little bit more about the dirty side of the industry.

Bio: Nicole Haas has been the Executive Director of IAGP for five years and completes all of the association's business from PR and marketing to lobbying and continuing education planning. While her background is in communication and marketing, she has enjoyed learning about the groundwater industry from contractors, NGWA education and IGA presentations.

## **Assessing Water Resources through Collaboration among Multiple Local Governments and Educating the Public**

**Janet L. Agnoletti**, Executive Director  
Barrington Area Council of Governments (BACOG)  
112 Algonquin Road, Barrington Hills IL 60010  
Telephone: 847-381-7871  
Email: [j.agnoletti@bacog.org](mailto:j.agnoletti@bacog.org)  
Website: [www.bacog.org](http://www.bacog.org)

The presentation will describe the BACOG water resources initiative, which is a collaboration among multiple local governments in the metro northwest suburban area. Topics covered will include goals and planning objectives, early modeling and mapping efforts, the private well water testing programs and partnerships, and the most recent project that is monitoring water levels in the shallow aquifer system on a long-term basis. The initiative's public education goals and strategies will be discussed, including a quick look at the groundwater video and Skype program developed by BACOG for elementary schools in the local school district. The presentation will also address key partnerships in the collaboration; how BACOG's groundwater information is being used by local governments and organizations; and assessment of public knowledge and attitudes toward groundwater resources.

### Bio:

Janet Agnoletti has been the Executive Director of the Barrington Area Council of Governments (BACOG) since October 2000. She has over 30 years of experience in city and regional planning. At BACOG, a regional planning organization in the northwest suburban area, Ms. Agnoletti works with multiple local government members on issues of land use and development, environmental protection, groundwater science and public education, legislative advocacy, emergency management, shared services and technology.

Ms. Agnoletti previously worked for the cities of Evanston and Chicago in community development and managed her own planning consulting business in the northwest suburbs. She has an undergraduate degree from the University of Illinois at Champaign-Urbana and a master's degree in city and regional planning from Illinois Institute of Technology in Chicago.

Ms. Agnoletti served on the Barrington Hills Plan Commission for ten years, and has been active in several community organizations in the Barrington area, including Citizens for Conservation.

# ILLINOIS GROUNDWATER ASSOCIATION

## BALLOT FOR THE ELECTION OF 2017 OFFICERS

**Chair**        **Lauren Hunt Martin**  
CH2M  
Chicago, Illinois  
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**Vice-Chair**        **Amy Gahala**  
United States Geological Survey  
DeKalb, Illinois  
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**Director**        **Sammy Mallow**  
Northern Illinois University (Graduate Program)  
DeKalb, Illinois  
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**Secretary**        **Dr. Eric Peterson**  
Illinois State University  
Normal, Illinois  
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**Treasurer**        **Dr. Steven Bennett**  
Western Illinois University  
Macomb, Illinois  
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**Student Directors**        **Joe Honings**  
(please cast up to 2 votes)    Illinois State University (Graduate Program)  
Normal, Illinois  
    **Claire Harris**  
Illinois State University (Graduate Program)  
Normal, Illinois  
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Instructions: Place an "x" in the box opposite to the candidate of your choice. You may vote for up to two Student Director candidates. If you prefer to vote for a candidate not listed, write the name and business affiliation of the candidate of your choice in the space provided and mark with an "x". Write-in candidates must be members of the IGA. Mail or e-mail the completed ballot to:

Eric W. Peterson, PhD  
Professor  
Department of Geography-Geology  
Campus Box 4400  
Illinois State University  
Normal, IL 61790  
(309) 438-7865  
ewpeter@ilstu.edu



**CANDIDATE FOR CHAIR: MRS. LAUREN MARTIN** received her B.S. in Geology (with a geography minor) from Western Illinois University in 2002 and M.S. in Hydrogeology from Illinois State University in 2005. Her experience includes environmental site investigations, hydrogeologic site investigations and geotechnical site investigations in the US and Middle East. She is currently a hydrogeologist with CH2MHILL in Chicago, Illinois. Her interests include hiking, camping, and biking with husband and children, friends and family.

**CANDIDATE FOR VICE-CHAIR: MRS. AMY GAHALA** received his B.S. in Geology and Environmental Sciences from Northern Illinois University in 2009, M.S. in Geology from Northern Illinois University in 2011. She works for the U.S. Geological Survey since 2011. She is currently a hydrologist working on continuous groundwater monitoring and works at the U.S. Environmental Protection Agency through interagency agreement for reviewing Superfund Site data and reports.

**CANDIDATE FOR DIRECTOR: SAMMY MALLOW** is a first year graduate student at Northern Illinois University with interests in research in water resources and arsenic contamination in groundwater in Cambodia.

**CANDIDATE FOR SECRETARY: DR. ERIC PETERSON** is a Professor of Geology in the Department of Geography-Geology at Illinois State University. Eric also serves as the Graduate Program Coordinator for the Hydrogeology Program. Dr. Peterson earned a B.S. (1995) in Earth Science and Mathematics and a M.A. (1997) in Mathematics from the University of South Dakota, a M.S. (1998) in Geology from the University of Arkansas, and a Ph.D. (2002) in Geology from the University of Missouri. Dr. Peterson is a former Director and Chair of the IGA and currently serves as its the Webmaster.

**CANDIDATE FOR TREASURER: DR. STEVE BENNETT** received his B.S. (1988) in Geology from the University of Northern Iowa and both his M.S. (1990) and Ph.D. (1994) in Geology from Indiana University. Dr. Bennett joined the Western Illinois University faculty in 1994 and is an Associate Professor in the Department of Geology. He teaches courses in introductory physical geology, environmental studies, oceanography, hydrogeology, and geological field methods. Dr. Bennett is formerly a Director and Chair of the IGA and has served as its Treasurer since 2003.

**CANDIDATES FOR STUDENT DIRECTORS: JOE HONINGS AND CLAIRE HARRIS** are graduate students at Illinois State University, and have been nominated to be the student representatives to help facilitate participation and interests in the Illinois Groundwater Association.