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Vol. 16, No. 4

Serving IEEE Members of South Central Wisconsin

April 2013

# Madison Metropolitan Sewerage District (MMSD) Tour of Physical Plant and Engineering Systems

Thursday, April 18, 2013 11:45pm - 1:15pm Date: Time: Speaker: MMSD Engineering Representative Informal networking will begin at 11:30am. Agenda: Presentation: 11:45am, Tour: 12:30pm. Location: Madison Metropolitan Sewerage District 1610 Moorland Rd Madison Madison, WI 53713 Lunch meal provided: \$5 for IEEE members, \$10 for non-members, free for students. Menu: RSVP: Deadline: Apr. 15. Go to https://meetings.vtools.ieee.org/meeting\_view/list\_meeting/17653 to register. Please send questions or difficulties to CJ Gervasi at cj@cgervasi.com

# Abstract

The MMSD has graciously invited us to a tour of their Bio/Facilities capacity. Much engineering occurs in such a facility, including: laboratory, large electrical motor service, process controls, anaerobic digesters, and post-processing dried sludge handling. This physical plant provides about two-thirds of the power to run the facility, due to its three 500 kW generators driven by the methane from their digesters. The plant also generates steam for heating the waste stream and thermally driving AC electricity in the main building. Please come with us on the 45-minute tour of this very impressive facility, and also enjoy a lunch with the pre-tour presentation.

# Biography

Over 100 years ago, the first wastewater treatment plant was built in Madison, Wisconsin. In comparison, many communities did not have wastewater treatment for another 50 years. The Madison Metropolitan Sewerage District was created in 1930 by state statute to protect the environment in the region of lakes and streams that comprise the upper Yahara River watershed. The Madison Metropolitan Sewerage District now serves almost 300,000 people in the cities, towns, and villages in the Madison area. The District is governed by a five-member Board of Commissioners appointed by the County Executive. The Board is responsible for setting policy, ensuring fiscal responsibility, and establishing District directions. Wastewater treatment for the entire District is performed at the Nine Springs Wastewater Treatment Plant. District staff are responsible for the administration of the District and for the design and maintenance of interceptor collections sewers and pumping stations which convey wastewater from over 40 municipal customers to the Nine Springs Wastewater Treatment Plant. More at:



# IEEE Entrepreneurs & Consultants Network, Madison Networking Meeting

 Date:
 Thursday, April 4, 2013

 Time:
 12:00pm to 1:00pm

 Purpose:
 Presentation, topic TBD.

 Location:
 Sector67 (East Side of Madison)

 2100
 Winnebago Street

 Madison, 53704

 Parking:
 Park in lot or on Winnebago Street.

 Process:
 Members are encouraged to make introductions, describe endeavors, and make request for: contacts in target companies, needs, resources. Bring your elevator speech and rolodex!

 RSVP:
 Tim Chapman (PrettyGoodGUIs@TrueNym.NET), 608-206-2570



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# Implications of The America Invents Act: What "First-to-File" Means for Engineers

Date:	Thursday, June 20, 2013	
Time:	12:00pm - 1:00pm	
Speaker:	James Joyce, Patent Attorney	•
	Whyte Hirschboeck and Dudek	0
Agenda:	Informal networking will begin at 11:30am.	Promega
	Presentation will begin at 12:00pm.	-iouio3a
Location:	Promega BioPharmaceutical Technology Center	
	5445 E Cheryl Pkwy, Room Number: 122	
	Fitchburg, WI 53711	
Menu:	Lunch meal provided: \$5 for IEEE members, \$10 f	or non-members, free for students.
RSVP:	Deadline: June 17. Go to: https://meetings.vtools.ie	eee.org/meeting view/list meeting/1

P: Deadline: June 17. Go to: <u>https://meetings.vtools.ieee.org/meeting\_view/list\_meeting/17734</u> to register. Please send questions or difficulties to CJ Gervasi at ci@cgervasi.com

## Abstract

The American Invents Act was signed by the president on Sept. 16, 2011. On March 16, 2013, the biggest change brought about by this Act is America's conversion from a First-To-Invent system to a First-To-File system. Most of the world has maintained a First-To-File system from the outset, while the U.S. has traditionally resisted outside pressure to conform. It is imperative that inventors understand the various ramifications of this change and understand how they can take advantage of some caveats to the First-To-File system.

## Biography

James Joyce is a patent attorney in the Madison office of Whyte Hirschboeck Dudek and is a member of the firm's Intellectual Property Law group. Mr. Joyce focuses his practice on patent law with technical expertise in the electrical, computer, software and mechanical fields. Prior to legal practice, Mr. Joyce worked for seven years as an engineering consultant. He has drafted patent applications for various electrical and mechanical devices, including wireless, mobile devices, as well as computer and software related applications; provided patentability, invalidity, and non-infringement opinions and analysis to clients from various industries; counseled clients regarding the application and protection of trademarks. He brings the following technical experience to his patent work:

- Programmable Logic Controllers (PLC) and ladder logic programming
- Building control systems
- Man to machine interfaces (MMI)
- Industrial controls, including Actuators, Sensors, Motors and Motor Drives
- Power distribution systems, including Switch Gear and Transformers
- Large scale computer and communication systems
- Backup power systems, including Stand-By Generators and Transfer Switches
- Fire alarm and notification systems
- Lighting control systems
- Security and PA systems
- Industrial Pumps, including centrifugal and Positive Displacement Pumps



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bl. 16, No. 4 Serving IEEE Members of	f South Central Wisconsin April 201:			
SECTION Meetings The third Thursday of Jan – May and Sep – Dec. is reserved for a meeting to provide recent research, developments, trends and/or innovations in one of our membership's technical areas.	NETWORKING Meetings The first Thursday of even numbered months is reserved for a meeting to provide networking opportunities for members who are consultants or entrepreneurs. Bring your elevator speech and rolodex!			
Section Meeting Schedule for 2013 (schedule subject to change) January 17, Reference Models for e-Logistics February 15, Engineering Ethics March 13, Electric Vehicle Recharging March 29, Engineering Ethics April 18, Madison Metropolitan Sewage District, Tour of Engineering Facility by MMSD Engineering May 16, Student Engineering Project Reports by MATC Students (IEEE sponsored) June 20, America Invents Act: First-to-File by James Joyce August 15, TBD September 19, TBD October 17, TBD November 21, TBD December 19, TBD December 19, TBD Talks in the Works for the Fall: - More on filter design from CoilCraft - Distinguished Lecturer - Multispectral Imaging-Equipped Aircraft	Networking Meeting Schedule for 2013 (schedule subject to change)         February 7         April 4         June 6         August 1         October 3         December 5			

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SELECTION OF OFFICERS At the December monthly meeting, the IEEE Madison Section conducts its annual officer elections prior to the Presentation. Vote by 12/19. Go to: voting.vtools.ieee.org.

## JOB BOARD AREA (NEW!)

Check out <u>www.WIEES.com</u> for electrical engineering jobs in Madison and the surrounding region. This site is maintained as a service for electrical engineers.

Jobs are displayed starting with the most recent postings first. You can filter results by location and job type. If you are hiring an electrical engineer in our area, for full-time or contract work, you can post the job in the Contact Us section.



## 2013 OFFICERS

David Marca, Chair dmarca@openprocess.com Thomas Kaminski, Vice Chair kaminski@matcmadison.edu Charles Gervasi, Treasurer cj@cgervasi.com Kevin Schoeneck, Secretary KSchoeneck@bjorksten.com Tim Chapman, Web Master prettygoodquis@truenym.net

### 2013 MEMBERS AT LARGE

Dennis Bahr bahr@inxpress.net Mitch Bradt bradt@wisc.edu Craig Heilman craigh@bugsoft.com Clark Johnson clarkjohnson@cpinternet.com Sandy Rotter rotter@ieee.org Steve Schultheis ss@ieee.org

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# IEEE Membership Level Upgrades

Those interested in upgrading their IEEE membership level should send their resumes or other information showing five years of significant performance in an IEEE-designated field to Charles J Gervasi (cj@cgervasi.com). Madison Section Board will attempt to find Senior IEEE members knowledgeable in the applicant's area of practice who may be able to provide references. You are invited to attend the informal networking portion of the monthly Section meetings (starting at 11:30am) to meet the Section Board members and discuss intentions.

# 2013 Section Board Members

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Tom Kaminski
Charles Gervasi
Kevin Schoeneck
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# **IEEE Madison Section Newsletter**

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Our members have professional interests in computers, power engineering, signal processing, communications, industry applications and a number of other technical fields

For more information, contact Mitch Bradt at 608-263-1085 or <u>bradt@wisc.edu</u>.

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