



ION Saint Louis



WINTER 2010

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Chair: Bob Becnel, P.E.
Email: bob@becnel.com
Boeing Company

Past Chair: Dr. Keith Corzine
Email: keith@corzine.net
Missouri University of
Science and Technology

Vice-Chair: Jessica du Maine
Email: jdumaine@stlcc.edu
St. Louis Community College

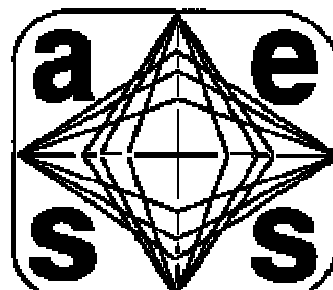
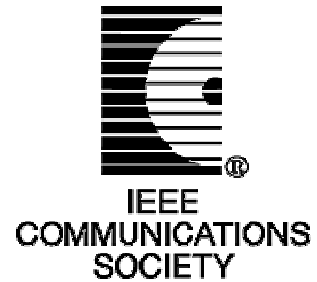
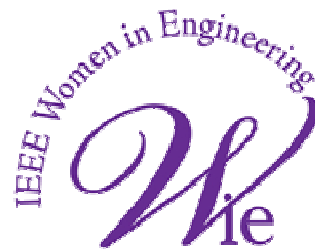
Treasurer: David Gitz
Email: david.gitz@ieee.org
Air Force Network Integration Center

Secretary: Dr. Paul Min
Email: psm@seas.wustl.edu
Washington University



Society List

IEEE Education Society



Student Branch News

Brandon Coventry, a junior in Electrical and Computer Engineering, won second prize in the Black Box competition held at Missouri University of Science and Technology in Rolla, Missouri on November 13th, 2010. The competition was sponsored by the Institute of Electrical and Electronics Engineers (IEEE) Saint Louis Section.

Students from Missouri University of Science and Technology, Washington University at Saint Louis, Southern Illinois University at Carbondale, Southern Illinois University at Edwardsville, University of Missouri at Columbia, and Saint Louis University were eligible to enter.

Dr. Kyle Mitchell of the ECE department was one of the judges.



Section Events

- *Taum Sauk Pumped-Storage Electric Power Plant Re-Dedication*



On Monday, 27 September 2010, members of the Ameren Missouri Corporation and members of the Institute of Electrical & Electronics Engineers (IEEE) convened at the Taum Sauk pumped storage hydro electric power plant to rededicate the IEEE Historical Milestone originally dedicated on 25 September 2005. The facility is located near Lesterville, MO, about 90 miles south of St. Louis.

Shortly after the original dedication, on December 13, 2005, the dam broke and 1.4 billion gallons of water cascaded onto the Johnson Shut-Ins Park. Fortunately, no one was killed as a result. In the interim state and federal government agencies were involved in discussions with the Ameren Missouri Corporation regarding cleanup and rebuild approval.

In 2008, rework began not only on the plant but also the surrounding area. The task was completed in early spring 2010, and Ameren was given to OK to reopen the facility and begin generating 440 Megawatts of power.

In the photo above, Jim Leonard, IEEE Life Fellow presents the original IEEE milestone plaque to Steve Williams, the Taum Sauk power plant superintendent. Mark Birk, Ameren Vice-President of Hydro Electric generation is at Jim's left. The rededication ceremony started with a luncheon provided by Ameren, followed by a short eight-minute video of the reconstruction process. The attending group then proceeded to the reservoir itself, where the plaque presentation was made.

Following the presentation of the plaque, Jim delivered a short speech regarding the significance of the facility and how it fit right in with the Go Green initiative. He noted that there are less than 100 IEEE Historical Milestones worldwide. Some of note are: Marconi's first transatlantic radio transmission from Signal Hill, Newfoundland, the Telluride Electric Power Plant in Colorado-the first ac generator west of the Mississippi River, and the Opana Radar Site: Pearl harbor-the first use of Radar by the US Military in wartime.

Jim moved to St. Louis in 1962, just about the time when this facility was first built. In 1980, he flew over the Taum Sauk reservoir at 900 feet in a US Navy P-3 Patrol Aircraft, in 1997, he and his wife, Barbara, bought a 280 acre farm just 50 miles from this facility near Bunker, MO. So they are part of this community. What really sets Taum Sauk apart is its environmental friendliness-a clean source of energy that uses the power of nature itself-gravity and falling water-to produce reliable electrical power for the citizens of Missouri. In concluding his speech, Jim proclaimed the IEEE Historical Milestone for Taum Sauk has been rededicated!

Following the speech, the IEEE group was given a mobile tour of the top of the dam and the safety instrumentation. They were then taken to the generating station and provided a tour of the control room.

Section Events

- *Fall MOCON*



MISSOURI CONFERENCE



WEDNESDAY, 30 March 2011

Electrical OverCurrent Protection by Mr. Paul Friemel, PE (Bussmann)
 Grounding & Shielding Day 1 by Dr. Tom Van Doren (UMSL)
 Robust & Adaptive Control Theory by Dr. Kevin Wise (UMSL)
 High Frequency Circuit Design by Dr. Jim Hahn (UMSL)

Thursday, 31 March 2011

Adaptive Control Theory (1/2 day) by Dr. Kevin Wise (UMSL)
 Arc Flash Analysis (1/2 Day) by Mr. Edwin Scherry (UMSL)
 Grounding & Shielding Day 2 by Dr. Tom Van Doren (UMSL)
 Signal Integrity by Dr. Jim Hahn (UMSL)
 National Electrical Code Update by TBD (UMSL)

Friday, 1 April 2011

Digital Signal Processing by Dr. Jim Hahn (UMSL)
 Advanced Electrical OverCurrent Protection by Mr. Paul Friemel, PE(Bussmann)
 Basic Control Theory by Mr. Karl Spuhl (UMSL)
 Circuit Board Layout to Reduce EMI by Dr. Tom Van Doren (UMSI)
 Intro to TCP/IP Networking & Appl (1/2 Day) by Mr. Ken Owens (Savvis)
 Advanced Network Implementations (1/2 Day) by Mr. Ken Owens (Savvis)

UMSL = Univ. of MO at St. Louis Campus

Bussmann = Bussmann HQ, STL County

Savvis = Savvis Communications, 1 Savvis Parkway, Town & Country, MO 63017

SEE WEBSITE FOR MAPS! www.moconstl.com

Advanced registration for the 2011 Spring Missouri Conference (MoCon) Workshop is now open. Advanced registration fees are \$500.00 for a full day tutorial and \$250 for a ½ day tutorial. Advanced registration will close on Friday, March 18, 2011. After that, the fees will be \$550 for a full day tutorial and the fees for a ½ day tutorial will be \$275.00. You may register online at the MoCon Workshop web site: www.moconstl.com. Classes start at 8:30 am and end at 5:30 pm. Lunch is provided 12:30-1:30 pm. Lunch is also provided for those taking two ½ day tutorials on the same day. IEEE Members receive a 20% discount. **PDHs and CEUs awarded.**

FOR COPIES OF THE REGISTRATION FORM, CONTACT MR. BOB MENZEL 314-545-6712

Holiday Social Pictures




The St. Louis Section and Washington University Student Chapter of The Institute of Electrical and Electronics Engineers Present:

THE ANNUAL IEEE HOLIDAY SOCIAL

December 4th, 2010
Washington University's Women's Building Formal Lounge

- 6:00 PM Professional Networking
Kid's Games and Santa
- 7:00 PM Full Buffet Dinner
- 8:00 PM Awards Ceremony
- 8:30 PM Professional Networking



This event is free of charge
RSVP: ieeewustl.edu



Section News

• PE Refresher Course

Missouri Society of Professional Engineers is once again scheduling a PE refresher class in three disciplines: Civil, Mechanical, and Electrical Engineering. These classes will be held at the St. Charles Community College every Saturday from 8:00am – 12:00pm, February 12 through March 26. The classes will be finished two Saturdays prior to the spring 2011 PE exam. Registration deadline is February 8, 2011. The cost will be \$450 per each MSPE member, \$500 per each member IEEE, or \$550 per each non-member.

For further information, please contact Scott Becker (Ameren) at 314-554-2242, or Tammie De Los Santos (Coordinator for School Business Programs, St. Charles Community College) at 636-922-8342. Information and course brochure can also be obtained at <http://www.mspe.org> under the St. Louis Chapter link.

Reference books and other material can be purchased from Professional Publications, Inc. If this is done through the MSPE website, students will receive a 15% discount.

• New Officers

For 2011, the IEEE St. Louis Section has new Officers:

Chair: Bob Becnel

Email: bob@becnel.com

Boeing

Vice-Chair: Jessica du Maine

Email: jdumaine@stlcc.edu

St. Louis Community College

Treasurer: David Gitz

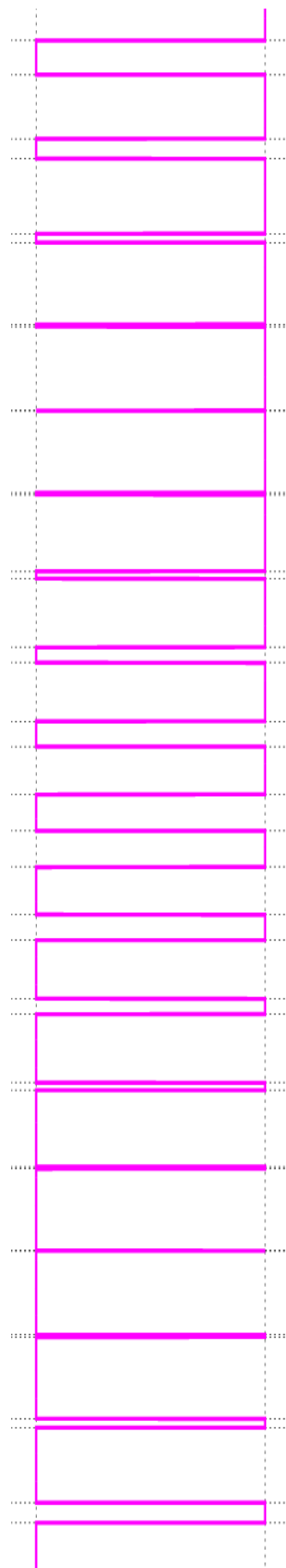
Email: david.gitz@ieee.org

Air Force Network Integration Center

Secretary: Dr. Paul Min

Email: psm@seas.wustl.edu

Washington University



Advertisements

CANNONDESIGN

Position: Electrical Engineer/Team Leader

Cannon Design, a leading international design firm offers challenging and rewarding career opportunities for an experienced Electrical Engineer in a dynamic, team-focused work environment in our St. Louis office. If you are a self motivated, goal driven engineer interested in the exciting growth fields of health care, education, data centers, and sports facility design, then we would like to talk with you.

A proactive, collaborative approach to relationships with project teams, owners, and contractors is necessary. Strong technical and communication skills in power, lighting, and integrated technology systems required. Background in facilitating and multi-tasking these projects types from concept design through construction is essential. Capable of serving as the lead electrical engineer on large projects. Significant project experience in highly technical healthcare, and/or research labs required. Minimum 7+ years of relevant experience required. Opportunities in all phases of design from concept through construction with a focus on client and team interaction and project management, power, datacomm systems or lighting design. Proficiency with BIM applications preferred, REVIT experience strongly desired. BAE or BSEE required. PE registration & LEED Accreditation a plus. Bring your strong communication, analytical, and organization skills and become a part of our integrated design process at Cannon Design. Send your cover letter and resume to EESTL0310.cannon@hiredesk.net.

Chair's Column



Welcome to 2011. We have an exciting year planned for the Saint Louis Section. The officers this year that will be operating the Section are listed below. Please contact one of these individuals if you have questions or suggestion. You can always send an email to sec.stlouis@ieee.org which is an alias for all of the officers.

Chair – Bob Becnel
Past Chair – Dr. Keith Corzine
Vice Chair – Jessica du Maine
Treasurer – David Gitz
Secretary – Dr. Paul Min

While January is always a “planning” month for the section, we have several new things we’d like to try this year and I’m really thrilled that we can role these out. Please bear with us, though, as we are continuously improving our process:

- 1) Issue Continuing Education Units (CEU or PDH) for our membership meetings to assist those members that are Professional Engineers and require continuous education credit for license renewal.
- 2) A reduction in planning meetings to quarterly in order to free up time for more technical meetings.
- 3) Chapter diversity among our technical meeting presentations.

Again, I look forward to 2011 being a positive year for all members.

I want to congratulate all of last year’s winners of our Annual Section Awards. These were the awards that were handed out at the Winter Social last month.

Outstanding Branch Counselor: Dr. Dan Lin
Outstanding Educator: Dr. Bijan Pashaie
Outstanding Section Member: James V. Leonard
Outstanding Student Branch: Computer Society at Missouri University of S & T
Outstanding Student Member: Caroline Fernandez

Each of our Section’s Student Branches submitted their Annual Plans on time and should receive a rebate check early this month if not already. The rebate check is based on number of student branch members as registered through *myIEEE* for the respective school. As a future tip for larger rebates, Student Branches are encouraged to make sure that student members are listing the proper school with correct spelling and their membership remains active. Student Branch data is maintained in SAMIEEE, which each Student Branch should delegate and individual to access periodically. Nevertheless, please look for your rebate and notify the Section’s Educational Activities Chair of any problems.

Respectfully,

Bob Becnel, P.E.
Chair, Saint Louis Section
Email: bob@becnel.com

Student Branch/Society Officers

Student Branch's

Mizzou (University of Missouri – Columbia)
Counselor:
Dr. Scott Kovaleski, kovaleskis@missouri.edu
Chair: Daniel Nabelek, dpn6f4@mail.mizzou.edu

Missouri S&T (University of Missouri – Rolla)
Counselor: Dr. Jag Sarangapani
President: Fred Reineke

Washington University
Counselor: Dr. Paul Min, psm@wustl.edu
Chair: Caroline Fernandez,
carolineannefernandez@gmail.com

St. Louis University – Parks College
gharabr@slu.edu

Southern Illinois University – Edwardsville
gengel@siue.edu

Southern Illinois University – Carbondale
Dr. Fran Harackiewicz, fran@enr.siu.edu
Chair: Anil Mehta, anil@siu.edu

St. Louis Community College – Florissant Valley
Jessica Dumaine, jdumaine@stlcc.edu

Societies

Aerospace and Electronic Systems Society (AESS)
Bob Menzel, Robert.k.menzel@boeing.com

Communications Society (COMSOC)
Ken Owens, ken.owens@ieee.org

Computational Intelligence Society (CIS)
Ganesh K. Venayagamoorthy,
ganeshv@mst.edu

Computer Society (CS)
Jessica Dumaine, jdumaine@stlcc.edu

Education Society (ES)
Fran Harackiewicz, fran@enr.siu.edu

Engineering in Medicine and Biology Society (EMBS)
David Barnett barnettd@slu.edu

Industry Applications Society (IAS)
Ganesh K. Venayagamoorthy,
ganeshv@mst.edu

Power & Engineering Society (PES)
Chair - Leon White Leon.white@ge.com

Graduates of the Last Decade (GOLD)
Anil Mehta, anil@siu.edu

Women in Engineering (WIE)
Jackie Stroble, j.k.stroble@ieee.org

Rolla Subsection
waleed@mst.edu