

the Beacon

Welcome to a
New Maine IEEE
Season

The Monthly Publication of the Maine Section, IEEE www.ieee.org/maine

Chair's Column

by *Scott Dunning*, Section Chairman

I'd like to wish a warm "Welcome" to all of my fellow IEEE members. I am glad that you are part of the largest professional organization in the world. I especially appreciate that you are involved with our Maine section. I think this is going to be a great year for our section.

We held our first Executive Committee meeting for the section last week and as I looked around at our officers I thought, "This is going to be a busy year because these guys REALLY look hungry!" I realize now that my observation might be partly explained by the fact that it was after 7:00 P.M. and they hadn't eaten yet. J However, I still believe your officers are going to work hard for you this year.

The section finances are in good shape and we just committed some funds to support student engineering activities. This is always a good investment for our membership and should pay off in the future as those grateful students become professional members. The job market for the electrical engineering technology and electrical engineering graduates appears strong once again with leading students already garnering multiple job offers in the mid to high \$50s. I told my wife recently that with energy prices skyrocketing, its cool to be an electrical engineer again as companies look for help in reducing energy costs. I think she told me that engineers are always in style, or it might have been never in style. I'm not sure.

PES/IAS

I spoke with Dave Conroy recently and he told me about two upcoming meetings for the PES/IAS chapter that sound really interesting. One involves a tour of the new power dispatch system at Central Maine Power and the other involves practical networking skills. They will both occur in the Spring, so keep an eye on your e-mail for upcoming announcements.

CS/COM

Ali Abedi is pulling double duty this year as he takes on the Chair duties of the newly combined CS/COM chapter and serves as Secretary for the Executive Committee as well. He's got great ideas and a lot of energy. As you know, there have already been two meetings in the past couple of months that Ali arranged. Both were well attended. He plans to have three meetings for the chapter this year.

Mar '06
Volume 15
Number 1

Officers

Chair:

Scott Dunning

Vice Chair:

John Roberts

Treasurer:

David Kotecki

Secretary:

Ali Abedi

Chair, EDS Chapter:

Steven Leibiger

Chair, PES/IAS

Chapter:

David Conroy

Chair, CS/COM

Chapter:

Ali Abedi

Student Activities

Our student members in Orono and South Portland have hit the ground running this year. The University of Maine will be hosting the IEEE New England Regional student conference in Orono for the first time this Spring and it sounds exciting. As part of the conference, there will be a micro-mouse competition and a Lego competition.

To assist the students from UMaine in this competition, the Executive Committee agreed to allocate \$1,000 for the purchase of a micro mouse kit that will be owned by the Maine Section. Students from Orono will program the mouse for the competition and will hopefully fare well. Additionally, this micro mouse will be available for use by UM and USM students in future competitions thus benefiting our students for many years. Fun activities such as this allow students to apply their knowledge to engineering applications in a competitive environment.

Outreach Activities

As most of our members know, faculty at UM and USM host department and laboratory tours year round to help introduce the public to engineering. Continuing that tradition, the University of Maine will host two events promoting engineering this year. First, the Orono campus will serve as host for the Engineering Expo on Saturday, March 4th as part of the **National Engineer's Week** activities. Be sure to check out the web site hosted by the Maine Engineering Promotion Council at www.engineeringme.com for more details.

Also, the Advanced Manufacturing Center is arranging for the first time to host a **BattleBot Camp** for kids in grades 6-12 this summer. This one week camp will give participants the chance to work in teams to specify, build, and operate a twenty pound robot. The teams will specify their robot parts from a limited list of equipment provided by the engineering team at the AMC. They will have to work within a budget limit and a weight limit. Next, they will gain tool experience working with equipment such as drill presses, band saws and soldering irons as they work to assemble their robot. They will also get introduced to some precision manufacturing machines operated by mechanical engineers. They will then work with electrical engineers to program their wireless controller to operate their drive train and manipulate their weapon. To test their prototype, they will each get to drive it through a complicated obstacle course. Finally, they will compete under the lights in Alford Arena with their parents watching on Friday night. Look for more information at the Engineering Expo and on your e-mail as details and sponsorship is finalized!

Continuing Education

Some of our members have been looking for courses to help them obtain their professional engineering license as well as continuing education opportunities to meet the training requirements necessary to maintain their license. The University of Maine College of Engineering now has two courses available to help individuals prepare for the Fundamentals of Engineering (FE) and Professional Engineering (PE) exams. The courses were recorded this past Fall and are available on DVD with accompanying manuals. The 16 hour FE prep course costs \$300 and the 24 hour PE prep course costs \$480. Contact Scott Dunning at the University of Maine for more details.

Annual Meeting

Paul Villeneuve has planned a refreshing summer meeting for us in May in the Bar Harbor area. His plan offers talks to cover interest in all three chapters and includes a tour of the Center for Cooperative Aquaculture Research in Franklin, Maine. I am especially looking forward to the authentic barbecue for lunch.

I hope you are all as excited about this year's programs as I am. If you have any ideas for meetings or tours, please drop me an e-mail at scott.dunning@umit.maine.edu and I will do my best to get it on the schedule.

Maine IEEE Section Annual Meeting

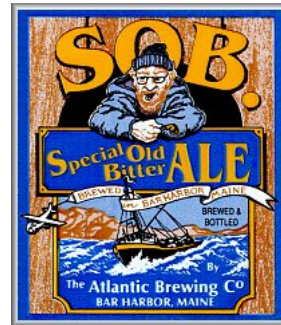
Friday, May 19, 2006

This year's annual meeting will take place in the Bar Harbor region of Maine. The coastal area has many great many attractions including Acadia National Park and is one of the ports for the Cat ferry service to Canada. The day's events will begin at the University of Maine's Center for Cooperative Aquaculture Research (CCAR) in Franklin. A tour will be given by Dr. Nick Brown, CCAR Operations Manager. CCAR is a finfish hatchery that has undergone a recent major expansion and shares facilities with the US Department of Agriculture. Further, the facility provides research and business incubation for fish farming. For additional information regarding the facility please go to www.ccar.um.maine.edu/index.html.

At the completion of the tour, we will be heading to Bar Harbor to enjoy a buffet style lunch at the Knox Road Grille adjacent to The Atlantic Brewing Company. Lunch will be a barbeque lover's dream consisting of ribs, pulled pork, chicken, sausage, baked beans, potato salad, Cole slaw and for your sweet tooth, homemade blueberry pie. The restaurant also serves the brewery's full line of beers including their famous root beer which is a great starter for root beer floats. For additional details on the brewery and restaurant, check out www.atlanticbrewing.com. Following lunch there will be two speakers. Tentative topics include the Gulf of Maine Ocean Observing System (GoMOOS) and alternative energy options. A tour of the brewery with sampling is available after the speakers have completed their presentations



CCAR Facility



Atlantic Brewing Company

Tentative Schedule

- 10:00 - 11:30** Tour of CCAR Facility
- 11:30 - 12:00** Drive to Atlantic Brewery Company
- 12:00 - 1:00** Buffet Style Lunch
- 1:00 - 1:30** First Speaker
- 1:30 - 2:00** Second Speaker
- 2:15 - 3:00** Atlantic Brewery Company Tour

Cost and Registration

The cost for the luncheon will be \$20/per person. This year's outing will be very interesting and fun for all ages so friends and family are welcome. For additional questions, or to make reservations, please contact Paul Villeneuve at (207) 581-2271 or paul@eece.maine.edu. Please register by May 5, 2006.

Directions: See top of next page

Directions to CCAR:

From points south of Bangor: Take I-95 North to Bangor. Take exit 182a to I-395 to Brewer. Take US Route 1A to Ellsworth. Once in Ellsworth, take left on to Taunton Drive. After 2 miles, take left on to Salmon Farm Road.

From points north of Bangor: Take I-95 South to Bangor. Take exit 182a to I-395 to Brewer. Take US Route 1A to Ellsworth. Once in Ellsworth, take left on to Taunton Drive. After 2 miles, take left on to Salmon Farm Road.

Directions to Atlantic Brewing Company:

From CCAR Facility: Turn right on to Taunton Drive. After 2 miles, turn right on to US Route 1A. After 0.4 miles, turn left on to High Street (SR-3). After 8.5 miles, proceed on to SR-102 (SR-198). After 2.3 miles, turn left on to Knox Road.

IEEE Maine Section
PES/IAS Joint Chapter Meeting
**Tour/Program on the new Central
Maine Power Company Management
System (EMS)**

Tuesday, April 18, 2006

The Maine Section PES/IAS Chapter is pleased to announce a combined tour/program on the new Central Maine Power Company Energy Management System (EMS). The plan is to begin with a tour of this modern energy management system, provide a buffet dinner on site, and conclude with an entertaining presentation by two of the key individuals responsible for making this project a success. Jim Begin is the Manager of System Operations and project manager for the new EMS. Ken Schessler is Supervisor of Energy Management and Support and manages the day-to-day operations. The talk will cover system design, project management, and describe the software applications for this new system which controls the Maine transmission grid and operates as the Maine Satellite for the New England regional power system. **Mark this date on your calendars!**

Location: Central Maine Power Company General Office, Edison Drive, Augusta, ME

Meeting agenda:

4:00-5:30 PM EMS Tour

5:30-6:00 PM Social Time

6:00-7:00 PM Buffet Dinner (on site). Choice of (1)Roast Beef carving, mashed potatoes, and string beans or (2)Lasagna and string beans. Both choices include tossed salad, desert, and fixings

7:00-8:00 PM Presentation: **State of the Art Energy Management System** by Jim Begin/Ken Schessler

Cost and registration: Cost \$20. Please register by contacting *Curt Beveridge* at (207) 623-3521 or e-mail: curtis.beveridge@cmpco.com

Attention Maine Section members!

Don't be shy about contacting your Section officers if you have any questions, concerns, or suggestions regarding the operation of the Maine Section IEEE. Here are the e-mail addresses and phone numbers of your four officers for the 2006 Section year.:

Chair: **Scott Dunning**

O: 207 581 2349

H: 207 862 3686

E-mail: scott@eece.maine.edu

Vice Chair: **John Roberts**

O: 207 443 3311

E-mail: jroberts@biw.com

Secretary: **Ali Abedi**

O: 207 581 2231

E-mail: abedi@eece.maine.edu

Treasurer: **David Kotecki**

O: 207 581 2248

E-mail: david.kotecki@umit.maine.edu

Student Branch News

Dr. Ali Abedi, Section Secretary and Chair, Maine Section COM/CS Chapter, has announced that the IEEE Region I Student Conference will be held for the first time ever at the University of Maine in Orono on April 29, 2006. The conference will consist of an Individual/Team Student Paper Contest and a Micro-Mouse Team Competition. Competition is limited to IEEE student members and paper presenters are eligible for cash prizes of \$800, \$500, or \$200. The Maine Section Executive Committee voted to support the UMaine team participation in the Micro-Mouse competition with a donation of \$1000 to purchase a micro-mouse kit.

Request for Help to Endow the IEEE Student Branch Scholarship at the University of Maine.

by Roger Blanchette,
Chair UMaine Student Branch

The Student Branch of the IEEE at the University of Maine is requesting funds to further grow the endowment for the IEEE Student Branch Scholarship. An IEEE Student Branch Scholarship, in the amount of \$500, is awarded each Spring to a full-time undergraduate student who has been both active in the student branch of the IEEE and has exhibited exceptional academic merit. The recipient is chosen by the Scholarship Committees of the ECE and EET Departments in consultation with the IEEE Student Branch Executive Committee. The scholarship fund is maintained by the University of Maine Foundation (www.umainefoundation.org) and is currently quasi-endowed with a total value of just over \$2,000.

The IEEE Student Branch intends to continue making contributions to this fund over time with the goal of reaching an endowment level of \$10,000 which will generate \$500 in yearly interest. Until then, the Student Branch of the IEEE will pay the remainder of each year's award. The principle generated each year is about 5% of the total holdings. This year, the Student Branch is requesting \$500 from the Maine Section of the IEEE to be used to increase the IEEE Student

Branch Scholarship Fund and plans to match the \$500 contribution with an additional \$500 which will increase the scholarship fund to just over \$3000.

Editor's note: The Section Executive Committee did support what they consider a very worthwhile endeavor with a contribution of \$500. The Executive Committee encourages all Section members to consider contributing to the IEEE Student Branch Scholarship. If any Section members have any questions about the scholarship fund, or would like to make a contribution, please contact Roger Blanchette at (207) 423-2413 or e-mail: roger.blanchette@umit.maine.edu

H-1B Reform Legislation Introduced

Rep. Bill Pascrell (D-N.J.) has introduced legislation that attempts to correct some of the "serious problems" in the H-1B temporary visa program. Rep. Pascrell's bill, H.R. 4378, the *Defend the American Dream Act of 2005*, is designed to provide greater workforce protections for U.S. citizens and H-1B visa holders. It would require all employers, not just so-called "H-1B-dependent companies," to attest to good-faith efforts to actively recruit U.S. workers for jobs employers propose to fill with H-1B workers. And it prohibits the outplacement (i.e., outsourcing, leasing or contracting) of H-1B workers by H-1B employers to other companies.

Contact your Representative and ask them to support this very important piece of legislation!

Attention Section Members!

The usual distribution method for the Maine Section Beacon newsletter is via e-notice from IEEE headquarters. The Beacon is attached as a pdf file. A few Beacons, such as this one, will be paper versions that will be mailed to all members. If you wish to continue to receive paper copies of all Beacons, please complete and mail the following form to the address shown. If you have previously filled out a similar form requesting paper copies of the Beacon, it is not necessary to complete the form again.

Yes, I would like to continue to receive paper copies of all the Beacons

Name: _____

Address: _____

City, State, Zip: _____

Send to: Scott Dunning, 19 Frances Dr., Hampden, ME 04444