

the Beacon

*Have a great
summer! See
you in October.*

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

June '04
Volume 13
Number 2

Officers

Chair:
Dave Kotecki

Vice Chair:
Ian Goepfert

Treasurer:
Merlin Smith

Secretary:
Scott Dunning

Chair, Comm.
Chapter:
Brian Huntley

Chair, CS/EDS
Chapter:
Steven Leibiger

Chair, PES/IAS
Chapter:
David Conroy

Chair's Column

by *David Kotecki*, Section Chair

Greetings,

Welcome to the 2nd Beacon for 2004. During the past few months, the executive committee has been discussing changes to the composition of the Chapters in the Maine Section to better reflect the interests of the current IEEE Membership in Maine. Figure 1 (page 2) shows the top seven technical societies represented in Maine. Due to the decline in the number of members in the Communications Society and the increase in the number of members in the Solid-State Circuits Society, we are considering realigning the Communications Society with the Computer Society to form a joint chapter and adding a Solid-State Circuits Society which would be combined as a joint chapter with the Electron Device Society. This realignment is depicted in Figure 2 (page 2).

We feel this will give greater visibility to the computer Society, which has the largest number of members of any society, and at the same time form a strong link between the Solid-States Circuits and Electron Device Societies which have synergistic activities. We welcome any comments or suggestions you have about this change. We are searching for new volunteers to serve on the executive committees for these chapters. If any one is interested in volunteering please let us know. Please send all comments, suggestions and indications of interest to: sec.maine@ieee.org.

Due to logistics issues, this year's Annual Meeting has been moved to the fall and will take place on Friday, October 1, 2004, at the Down East Restaurant in Portland. See details of the events elsewhere in this issue. Hope to see you there.

The IEEE Beacon is moving to an electronic format. To receive future meeting and event announcements by regular mail, please complete and send this coupon to the address below.

Yes, I would like to receive meeting and event announcements by regular mail

Name: _____

Address: _____

City, State, Zip: _____

Send to: David E. Kotecki, 55 College Avenue, Orono, ME 04473

Be sure to plan on attending the Annual Meeting this year, October 1.

See the announcement on page 6

Figure 1

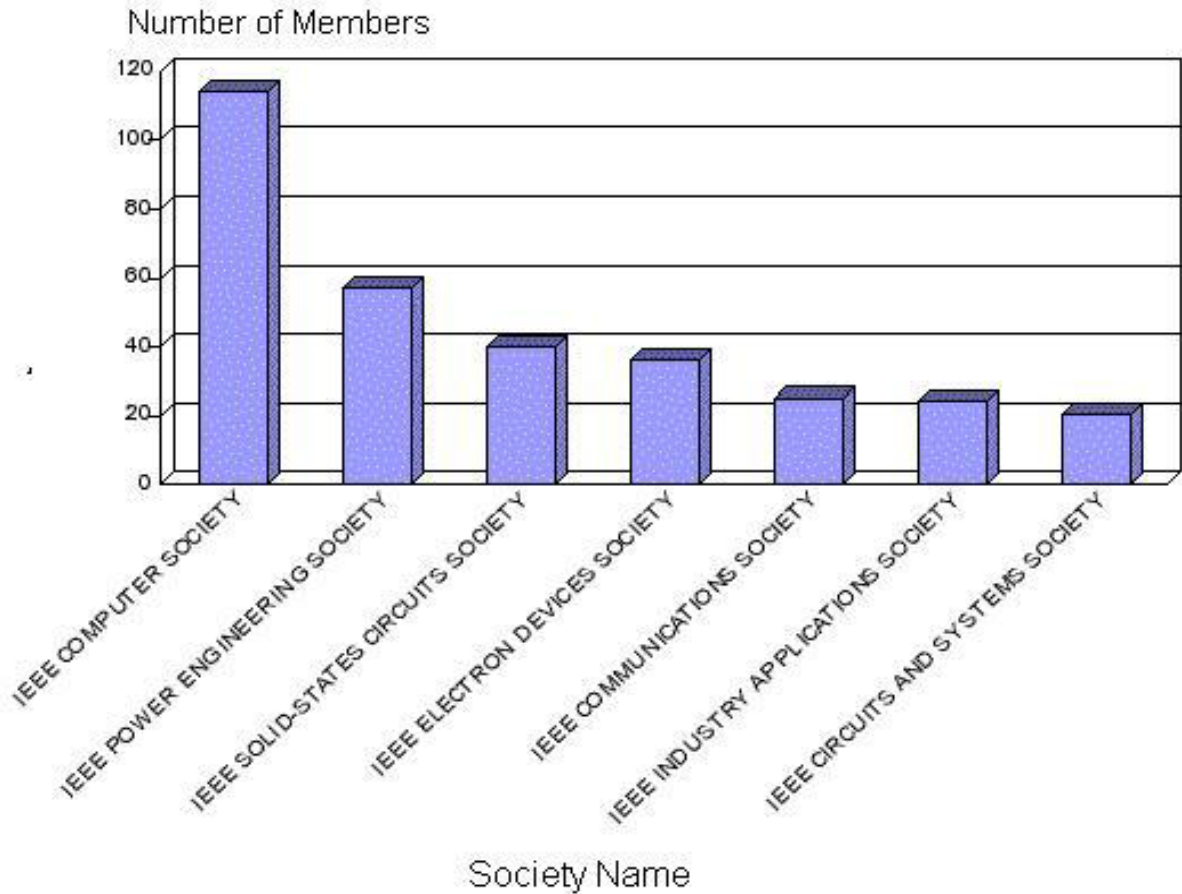


Figure 2

IEEE Maine Section Chapters

Current

PES/IAS
Power Engineering Society/
Industry Applications Society

CS/EDS
Computer Society/
Electron Device Society

COM Soc
Communications Society



Proposed

PES/IAS
Power Engineering Society/
Industry Applications Society

EDS/SSC
Electron Device Society/
Solid State Circuits Society

CS/COM
Computer Society/
Communications Society

Institute of Electrical and Electronics Engineers

Maine Section

Notice of Intent to Elect Officers

In accordance with Article VI, Section D of the IEEE Maine Section Bylaws, notice is hereby given that an election of officers for the 2005 Section year will be held at the Annual Meeting in Portland, ME on Friday, October 1, 2004 unless petitions are received as outlined below.

The slate of officers recommended by the Nominating Committee for the 2005 Section year (1/1/05-12/31/05) is as follows:

Chair:	Ian Goepfert
Vice Chair:	Scott Dunning
Secretary:	Mohamad Musavi
Treasurer :	Merlin Smith
Jr. Member-at-Large:	{open– nominations sought}
Previously Elected:	
Junior Past Chairman	David Kotecki
Senior Past Chairman	Dan Martin

From the Maine Section Bylaws:

Article VI

Section E Nominations for any or all offices may be made by petition under the following provisions:

1. Such petition or petitions shall bear the personal signature of a least 10 voting members of the Maine Section.
2. Such petition or petitions must be delivered to the Secretary not later than April 1.
3. The nominee or nominees covered by such petition or petitions shall be included in the regular ballot and designated as such.

Article VII

Section A If no nominations by petition are received by the Secretary as outlined under Article VI, Section E of these Bylaws, then no further announcement to the Section membership is necessary and the election, by voice vote, shall be held at the Annual meeting

Section B If there develops a contest for any elective office as provided for under Article VI, Section E of these Bylaws, then an election by written ballot shall be held.

The Awards Committee of the Maine Section is soliciting nominations for the 2004 “IEEE Maine Section Engineer-of-the-Year” award. The purpose of this award is to recognize a Maine Section IEEE member for significant achievements in the field of electrical engineering. These achievements could have occurred in any of the following categories:

- Advancements of Technical Concepts in Electrical Engineering
- Electrical Engineering Management
- Electrical Engineering Professionalism

The award consists of a plaque that will be presented at the Annual Meeting.

To nominate a Maine IEEE member for this award, send a letter of reference describing the actions, activities and accomplishments that set your nominee’s performance above normal expected levels by either e-mail: sec.maine@ieee.org, or by post: IEEE, 5708 Barrows, Orono, ME 04469 before Friday, July 16, 2004.

Thank you for your interest and help in recognizing an Outstanding IEEE Maine Section Electrical Engineer.

Student Branch news from UMaine

reported by

Roxie Paine, UM IEEE Student Branch Chair

Over the past year, we have completed many different activities. With IEEE Maine State Section funding from last year, we sent two student teams to compete at the RIT student design contest. Both teams gave a strong showing with one of the teams receiving second place. We have also hosted numerous tech talks over the past year and hope to continue doing so in the following year. As many of you know, we had to cancel the annual Engineering Co-Op Job Fair this past October due to a lack of responses from companies. We plan to hold the next one in October 2004. Special interest has been taken for actively recruiting prospective students for an engineering career as well as recruiting present students to join IEEE. Officers have met and spoken with prospective students during the Open Houses sponsored by the University.

On February 28th, half a dozen of student members participated in the National Engineering Expo held here at the University of Maine. With help from the State Section, we ran a table where K-12 students lit an LED using lemons. Students left with certificates, directions, and an LED so they could experiment on their own. Other UMaine student IEEE members helped with the Electrical & Computer Engineering Department table.

Looking into the future, our major project is establishing a scholarship fund for student IEEE members here at the University of Maine. The fundraiser called Faculty Dollar Dare that we held in February raised over \$300. The first scholarship should be awarded in the fall semester, 2004.

The UMaine IEEE student branch sponsored the Electrical & Computer Engineering annual banquet in April. The branch has also helped with a day long event called BYOB, Be Your Own Boss, which provided information and resources for students in all disciplines about starting their own businesses.

Elections were held on March 31, 2004 for officers for the 2004-2005 school year.

IEEE Milestone Plaque proposed for RCA Experimental Radio Station in Belfast, Maine

Harold Nelson, who works for the Maine Department of Transportation in Augusta, has generously agreed to submit to the IEEE History Center a proposal for an IEEE Milestone for Belfast, Maine. The milestone, if approved, would be for the "First Transatlantic Relay of a Live Radio Program". This event occurred in 1925 through an RCA Experimental Radio Station at Belfast. The station existed in Belfast from 1921 to 1929. A permanent bronze plaque marking the milestone would be mounted at the Belfast site.

In addition to the physical site, Maine also has a very strong technical connection to the historic relay experiment. The antennas used at the Belfast site were Beverage wave antennas invented by Dr. Harold H. Beverage, former professor of EE at the University of Maine. Beverage discovered the properties of the wave antenna at the Fabbri Radio Station at Otter Cliffs on Mount Desert Island, and together with Rice and Kellogg, wrote a paper on the wave antenna that today bears his name.

Harold has previously worked with Section members Brian Conroy and Dave Belanger on the IEEE Milestone dedication in Andover, Maine which recognized the first transatlantic transmission of a television signal via satellite. Andover was the site of the US earth station.

The Maine Section Executive committee approved \$1000 for the milestone plaque and ceremony promotion if the milestone dedication goes forward next year. The year 2005 will be the 80th anniversary of the 1925 relay through Belfast.

Harold has submitted his milestone proposal to the IEEE History Center and the Section should receive an initial response by the end of July. More information about the radio relay site at Belfast can be found at:

http://www.state.me.us/newsletter/dec2003/radio_free_belfast_maine.htm

Harold will be giving a presentation on the radio relay site for the Belfast Historical Society on Monday July 26 at 7:00 pm. The Belfast Historical Society is located at 10 Market St. A web search under the name of the society will give you directions to their building.

Maine Engineers Week Banquet and Expo 2004 a great success this year in Orono



Pictures of the Maine Section exhibit and lemon battery activity table at the 2004 Maine Engineers Week Expo held on Saturday, February 28 at the University of Maine Field House in Orono. The activity table allowed K-12 students to experiment with lighting an LED with a battery created from a lemon. The lemon battery activity table was a project of the University of Maine IEEE student branch. (See Roxie Paine's report on page 4.)

Maine Section Annual Meeting

Friday, October 1, 2004

Yarmouth, ME

The theme of this year's event is *Engineering Challenges for New Companies*. Come join us for an evening of socializing followed by an interesting program of a panel of speakers discussing our theme and a talk by Dave Conroy about the 2003 Northeast Blackout. Annual meetings are always a good time for members to meet new people, renew acquaintances, and just have a fun, relaxing time. Don't miss this year's event!

Location:

Down-East Village Restaurant Motel

705 U.S. Route 1

Yarmouth, ME 04096

Telephone: (207) 846-5161

Reservations: 1-800-782-9338 (There is a 10% discount for attendees wanting to stay at the motel)

Directions: Do a Google search under "Down-East Village Restaurant Motel near Yarmouth, ME" to obtain detailed directions

Meeting Agenda

Social hour and dinner:

4:00 - 5:00

Social Hour (Complimentary Hors D'oeuvres, cash bar)

5:00 - 5:45

Buffet Style Dinner (Chicken Dijonnaise, Sirloin Tips, or Vegetarian Lasagna with red bliss potatoes and seasonal vegetables)

Speaker Schedule:

5:45 - 6:45

Mark Waite, Launch Momentum LLC, Falmouth, ME and *Dave Ferris*, Tundra Semiconductor, Portland, ME will discuss **Engineering Challenges for New Companies**

6:45 - 7:00

BREAK

7:00 - 7:30

Dave Conroy, Central Maine Power, will discuss **The 2003 Northeast Blackout: What Happened?**

Annual Meeting Registration:

Please return the coupon below along with a check payable to IEEE-Maine Section:

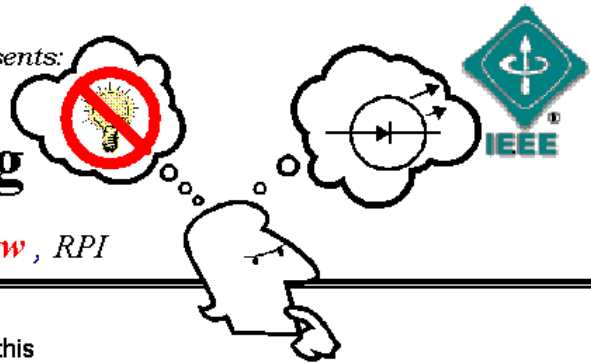
Dr. Scott Dunning
University of Maine
5708 Barrows Hall, Rom 7
Orono, ME 04469

The cost of the meeting is \$25.00 per person. Questions about the meeting can be directed to Scott Dunning at (207) 581-2349 or scott@eece.maine.edu

Name: _____
No. of registrations @ \$25 _____
Phone no. _____ E-mail _____

The Computer Science and Electron Device Society of the
Institute of Electrical and Electronic Engineers proudly presents:

Solid State Lighting



Presented by **Dr. Michael Shur, IEEE Fellow**, RPI

Lecture Summary:

Today, 21% of energy use is in lighting, and, perhaps, half or more of this energy can be saved by switching to efficient and cold solid-state lighting sources. From traffic lights to road signs, from automobile taillights to outdoor displays, from landscape to accent lights, solid-state light sources have already arrived as harbingers of the next lighting revolution.

The creation of efficient sources of white light is the ultimate goal of the solid-state lighting technology. The efficiency of white LEDs using conversion of blue or UV light in ionic phosphors (now approximately up to 20 lm/W, already twice of that for incandescent lamps) is expected to reach 50 lm/W by year 2010. Optimization of such multi color LED modules is one of the most important problems of the emerging solid-state lighting technology.

Speaker Biography:

Dr. Mike Shur is Patricia W. and C. Sheldon Roberts'48 Professor of Solid State Electronics Electrical, Computer, and Systems Engineering, Physics, Applied Physics, and Astronomy at RPI in Troy N.Y.



When: August 8, 2004

Where: TBD

Cost: \$TBD / person

Agenda:

5:30 PM - 6:30 PM Social/Dinner

6:30 PM - 6:40 PM IEEE Business

6:40 PM - 8:00 PM

Lecture/Questions/Discussion

Please pre-register if possible by email to either:

Steve Leibiger

(steven.leibiger@fairchildsemi.com)

Steve Adler

(Steven.J.Adler@nsc.com)