



The Lehigh Valley

IEEE Newsletter

Institute of Electrical and Electronics Engineers

November 2009

Chairman's Column

This year has been rather interesting to say the least. The economy is part of everyday conversation as is a national health program, and unemployment is at its peak in most sectors of our economy. However, this is not the time to buckle under. It is time to regroup and refocus on what we do best, engineering. This season's program builds on this theme.

Good old-fashioned networking is going to be the key to success, and in most cases, this means encouraging face-to-face, people-to-people networking. Despite the fact that we are members of a society that represents technological innovation, we must resurrect techniques that allow us to make the kind of professional, personal interactions that can lead to finding the gainful work that we seek. The presentation given on September 2 by Don McMillan on what one can do with an engineering degree, was attended by about 70 people. This indicates that students and young professionals are seeking guidance and advice about the professional benefits of having an engineering degree. This is guidance that our Lehigh Valley Section can provide.

Programs that are planned for the coming year are designed to bring more new IEEE members and students into the IEEE-Lehigh Valley fold and to assist long-standing members with networking opportunities. A major event in this regard will be a Job Fair that is planned for February 2010 at Lehigh University. In addition, scheduled talks from Johns Hopkins engineers and scientists will highlight cutting-edge advances in the engineer-

ing field and will raise the visibility of our Lehigh Valley IEEE Section.

As there are now 1,275 members in our section, this is an increase of more than 20 members since our last meeting in September. This is encouraging news for our section and brings new challenges in how to reach these members with interesting and innovative programming.

Through the Morton Paper contest and supporting the Region III Pennsylvania Junior Academy of Science, kicking off the Lehigh Valley's own Solid State Circuit Society, and restarting the Computer Society, the IEEE Lehigh Valley Section continues to strive to be a vital segment of the educational and professional engineering communities in the Lehigh Valley.

I encourage you to attend some or all of the activities that are planned for you this year. I especially recommend that you make plans to attend the Annual Lehigh Valley IEEE Dinner Dance which will be held at the Silver Creek Country Club. I look forward to meeting many of you throughout the year.

I also encourage you to visit our website (http://ewh.ieee.org/r2/lehigh_valley/) for the latest news. You are also welcome to join us at our executive committee meetings which generally meet on the second Monday of the month at Lehigh University in Packard Lab, room 324.

Leopoldo M. Mayoral
Chairman, LVS-IEEE

Engineering Week Banquet

Friday, February 19th

Holiday Inn Lehigh Valley

Our Lehigh Valley IEEE Program for 2009-2010

| Month | Event |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| October 2009 | Oct. 19: IEEE Monthly Meeting |
| November 2009 | Nov. 4: Johns Hopkins Presentation on the Pluto-bound satellite "New Horizons", 4 PM at Lehigh Univ Rauch Business Center , room 085 TBD: Joint student/member meeting to celebrate the 125 th anniversary of IEEE and PES Nov. 30: SSCS Society, Dale Nelson will give a talk on "Crystal Oscillator Design" 6 PM at Lehigh University Packard Lab room 416 |
| December 2009 | Dec. 17: Advance your grade to Senior member at "Senior Member night" 6-9 PM @ Lehigh University, Packard Lab, Room 324. TBD: Deadline to apply for PE License Exam |
| January 2010 | Jan 20 (TBD): Al Rotz, Chair of Power Society: Talk on "Renewable Energy" |
| February 2010 | Feb. 15-19: Engineer's Week, possible poster session Date TBD: Talk on "Collecting Space Trash" Date TBD: In the planning: Job Fair at Lehigh University |
| March 2010 | Mar. 27: Annual IEEE Dinner Dance TBD: Johns Hopkins Presentation on Probe/Stereo space missions |
| April 2010 | Apr. 20: PE Exam Apr. 22: Morton Paper contest, Penn State, Wilkes-Barre |
| May 2010 | TBD: Invited Speaker, Russell Harrison, Senior IEEE-USA legislative representative in Washington, DC |
| | Summer Break |
| October 2010 | 125 th Anniversary of Tau Beta Pi, first started at Lehigh University |

Membership Upgrade Workshop

The Section will host a workshop to assist eligible members in their preparation of the documents necessary for attaining Senior Member status in IEEE. Senior Member grade is available to members who have at least 10 years experience with at least five years of significant performance in an IEEE-designated field. For more information log on to www.ieee.org/web/membership/senior-member/index.html .

The workshop is tentatively scheduled for December 17th in Rauch Business Center on the Lehigh University Campus. An email with details will be sent to those eligible by early December.

Morton Contest Begins a New Half-Century

The 51st Walter B. Morton Prize Paper Contest was hosted by the Bucknell University Student Branch on April 16, 2009 in the Gardner Lecture Hall of the Dana Engineering Building. The activities opened with welcoming remarks by Bucknell's Dean of Engineering. Don Talhelm, LVS Education Chair, related the history of the contest, explained the contest rules and procedures and introduced the judges.

Eight papers from five schools were presented to the Judging Committee. Only two papers may be submitted from each school. Each presenter was allowed 15 minutes for the presentation, followed by five minute question period.

Judging of the papers include a prior evaluation of the written paper as well as the oral presentation. Final results declared Eileen Maz-zochette and Kenny Blanchette of Lehigh University the First Place winners for their paper "Automatic Feedback Control of Audio Sys-

tems". Second Place went to Richie Mills and Mike Pavlak of Lehigh University. Kavinda Udugama of Lafayette College was the Third Place winner. In addition to cash prizes each author received certificate recognizing his/her accomplishment. Lehigh University Student Branch will receive a plaque during a Branch meeting in the fall semester.

Judges for the contest were Prof. Robert Bartkowiak of Pennsylvania State University, Allentown Campus, Stephen Csaszar, Senior Software Systems Engineer, Computer Science Corp., Picatinny Arsenal, NJ, Leopoldo Mayoral, President and CEO, Mayoral System Analytics, Center Valley, PA, and David Thompson, Consulting Member of Technical Staff, LSI, Inc., Allentown, PA.

The 2010 Morton Contest will be held at Penn State- Wilkes Barre, tentatively scheduled for April 22nd.

New Solid State Circuits Society Chapter Formed in Lehigh Valley Section

The IEEE Solid State Circuits Society (SSCS) approved a petition to form a new chapter affiliated with the Lehigh Valley Section (LVS) on May 14, 2009. The new chapter has met several times since then to plan and organize future activities. Elections are planned before the end of the year, but the initial volunteer/appointee officers are:

| | |
|-------------|----------------|
| Chair: | Robert Peruzzi |
| Vice Chair: | Ian Rippke |
| Treasurer: | Roger Minear |
| Secretary: | Kouros Azimi |
| Webmaster: | Richard Booth |

The chapter's Executive Committee is comprised of the officers and the following attendees of the planning meetings: Paul Davis, Russell Foster, Roger Fratti, Jack Moriarty, Dale Nelson, Glen Offord, Elizabeth Perry, and Robert Walden.

The chapter held its inaugural "kick-off" meeting on September 21, 2009, at Lehigh Univer-

sity. The guest speaker for the kickoff meeting, through the SSCS Distinguished Lecturer Program, was Professor Tom Lee of Stanford University. Forty members and guests enjoyed Dr. Lee's topic: "Wireless Technology: Past, Present and Future", tracing communication history from Marconi's spark telegraphy to today's cell phones (selling three million per year), and speculating on probable developments in future wireless communication. Professor Jan Van der Spiegel of the University of Pennsylvania, Philadelphia, welcomed and congratulated the founders of the new chapter.

The Solid-State Circuits Society with over 10,000 members around the world focuses on realized integrated circuit designs for all applications, using appropriate materials and interconnections.

The usual route to SSCS membership is to select it as a nominal add-on to IEEE membership.

The Lehigh Valley Chapter of the IEEE Computer Society is Re-establishing!

A petition to restart the chapter has been submitted to IEEE corporate and is currently awaiting confirmation. Currently, the IEEE Computer Society has 145 registered card carrying members in our section, making it the largest IEEE technical chapter in the Lehigh Valley. After full chapter recognition, we will be afforded the benefits that go along with recognition; including access for profession enhancement services, guest speakers and even virtual meeting services; the IEEE computer society already has a virtual space on the internet in Second Life.

Benefits for participation in the chapter include professional and educational presentations, organized trips and, more importantly considering the nature of the economy, somewhere to socialize and network with others or our kind... It's a unique opportunity to sharpen our technical skills, get involved within our technical community and help reinvigorating the profession locally.

As of the beginning of September, we've had 5 meetings and typically meet the third week of every month at Lincoln Technical Institute in Allentown at 7:15 PM. We've established an

IEEE Computer Society of the Lehigh Valley group on LinkedIn.com for easier communication; to date, it has 45 members registered on it. We would greatly appreciate and accept all help, comradely and support from our membership.

Our current agenda of topics for discussion includes:

- Establishment/maintenance of a Lehigh Valley IEEE Computer Society web page (support for it from IEEE corporate after recognition is expected)
- Officer nominations and elections
- Engagement of students in the profession
- Suggestions for guest speakers or topics (currently looking into getting someone to speak on InfraGard and internet security)

All members and non-members of the society are cordially invited to attend. For time and location details please contact me. *Steve Csaszar, Stephen.J.Csaszar@ieee.org, Vice Chair - IEEE Lehigh Valley Section, IEEE Computer Society Member*



**Save the
Date**

Saturday Night, March 27, 2010 ***The 2010 Fellows Recognition Night and Dinner Dance***

Returning to the Silver Creek Country Club, Hellertown, PA
The same musical group as last year, featuring Allan Cook.
Expect your written invitation to arrive in February.

Upcoming Solid State Circuits Society Chapter Events

November 30, 2009: Technical activity meeting featuring Dale Nelson of DHN Integrated Circuit Design and Adjunct Professor at U. Penn. Prof. Nelson's topic is "Crystal Oscillators: Analysis and Design Overview", 6 PM at Lehigh University, Packard Lab room 416.

There will also be a business/planning meeting in early November. To learn more or to be placed on the chapter mailing list, visit the IEEE/LVS/SSCS website or LinkedIn group.

Chapter Website: http://ewh.ieee.org/r2/lehigh_valley/sscs/

Chapter LinkedIn Group: http://www.linkedin.com/groups?gid=1924138&trk=hb_side_g



*The
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Chair's Column

**New Solid State Circuits Society Chapter Formed
LV Chapter of Computer Society is Re-establishing**

Upcoming Events:

Johns Hopkins talk on Pluto-bound satellite

Nov 4 - 4 PM Lehigh Univ Rauch Business Center

SSCS talk on Crystal Oscillator Design

Nov 30 - 6 PM Lehigh Univ Packard Lab

IEEE Dinner Dance - March 27, 2010

Silver Creek Country Club