



IEEE NEWS FOR FEBRUARY 2011

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Rochester IEEE home page at: <http://rochester.r1.ieee.org>

(Always check the web PDF edition for late changes and additions)

Rochester Section Meeting - Tuesday, February 1, 2010

The next Rochester Section business meeting is on Tuesday, February 1, 2010 at Noon, at the Shanghai Restaurant, 2920 West Henrietta Road, just south of the intersection with Brighton-Henrietta Town Line Road.

Any IEEE member is welcome to attend and to participate, or just to observe. Lunch is only \$3 for IEEE members. No reservation or RSVP is needed, just show up.

RIT IEEE Computer Society Chapter – February 7

The IEEE Computer Society Chapter will hold a planning meeting at 12 noon on Monday, February 7, at Ruby Tuesday, 400 Jay Scutti Blvd. Members should send an e-mail to cs-chair@ieee.rochester.ny.us by the day before, if they plan to attend this meeting.

The Computer Society Chapter is planning a technical meeting for Thursday evening, February 24. The location and subject will be announced on their website, <http://ewh.ieee.org/r1/rochester/computer> by February 1st. Pizza and soda will be served prior to the presentation.

IEEE Geoscience and Remote Sensing Society Meeting Feb. 11

Date: Friday, February 11, 2011

Time: 12:00 noon – 4:00pm

Location: Monroe County Public Safety Training Facility, 1190 Scottsville Road, Rochester, NY 14624

Title: The Use of GIS and Imagery information in Emergency Management - featuring the Monroe County GIS Technology Vehicle. For tentative agenda, please refer to the GRSS website at <http://ewh.ieee.org/r1/rochester/grss/> for updates.

Speakers:

- Don McKeown (Distinguished Researcher: RIT Chester F. Carlson Center for Imaging Science) - real-time airborne imagery for disaster response applications
- Justin Cole (Monroe County GIS Services Division) - GIS and its application in disaster response & the GIS Technology Vehicle
- Joan Mondello (Systems Engineering, Center of Excellence Manager: ITT Geospatial Systems) - GIS curriculum for the primary school system
- Tour of the Monroe County GIS Technology Vehicle

Registration: Please register before February 4, 2011 at <http://bit.ly/CNYASPRS22011>

Cost: Free, but a donation of \$5 is encouraged to cover refreshments.

This event is being held in conjunction with the Central New York Region of the American Society for Photogrammetry and Remote Sensing (ASPRS).

Congratulations to our newest Fellows

Congratulations to Michael L. Scott of the University of Rochester on his election to Fellow of the IEEE. He was awarded this distinction for his contributions to parallel and distributed computing.

Congratulations also to Santosh Kumari Kurinec of the Rochester Institute of Technology. She was elevated to Fellow of the IEEE for her leadership in integrating innovative microelectronics research in engineering education.

Congratulations to our newest Life Members

Recently advanced to Life Member status are Edward "Ned" Asam, Edward J. Balsley, Glenn A. Barlis, Michael C. Campa, R.A. Ehnot, Richard C. Holbert, Edward R. Kellett, Jagdish C. Tandon, and James J. Hurny.

Annual Joint Chapters Meeting is coming on March 29

Now is the time to circle the date on your calendars. This is, of course, more of a metaphor than an actual physical action these days, but whatever your technique, make note of it.

Tuesday, March 29, 2011 at the RIT Inn & Conference Center, 5257 W. Henrietta Road.

Registration and refreshment:	4:30 – 5:30 PM
Chapter Technical Presentations:	5:30 – 6:30 PM
Networking (cash bar):	6:30 – 7:00 PM
Dinner & Keynote Presentation:	7:00 – 9:30 PM

The keynote speaker will be Stephen D. Senturia, Professor of Electrical Engineering, Emeritus, Massachusetts Institute of Technology, Former Chairman and Chief Technology Officer, Polychromix.

His presentation will be "*MEMS: Where Everything You Ever Learned Is Relevant.*"

On October 9, 2009, NASA crashed a rocket engine into the moon and then sent an instrument package into the crash zone to look for water in the plume of debris. On November 13, NASA announced the finding of "buckets of water." The primary evidence was derived from spectra measured with a MEMS-based near-infrared spectrometer manufactured by Polychromix. The development of this spectrometer has roots dating all the way back to the work of Harvey Nathanson, Kurt Petersen, Henry Guckel, Roger Howe, and countless others. This talk will illustrate how the many threads of knowledge: electromechanical actuator design, material science, fluid mechanics, optical and opto-mechanical design, low-power electronics, advanced algorithm development, even supply-chain management – all contributed to this singular success. This is just one of many paradigms demonstrating how, when you are dealing with MEMS-enabled products, "everything you ever learned in your life is relevant."

Brain Teaser – can you solve it?

I thought I'd liven up things in the midst of a dreary Rochester winter by throwing in a brain teaser to challenge you. This is one which I originally published in May 1995, and which came from the *rec.puzzles* archive on the Internet. Back then, two IEEE members, Dave Maul and Ian Paull solved it by writing their own looping code routines in C and in Power Basic. Fifteen years later, how will you solve it? Will you use some application, a web applet, or scratch code? E-mail me (j.schanker@ieee.org) your solution and how you solved it, and I will give you glorious credit in print. Enough said - here's the brain teaser:

A customer at a 7-11 store selected four items to buy, and was told that the cost was \$7.11. He found it curious that the cost was the same as the store name, so he inquired as to how the figure was derived. The clerk said that he had simply multiplied the prices of the four individual items. The customer protested that the four prices should have been ADDED, not MULTIPLIED. The clerk said that that was OK with him, but when he added them, the result was still the same: exactly \$7.11.

What were the prices of the four items? (The answer will appear next month).

IEEE-USA Fellowships Available – Work in Washington

IEEE-USA Government Fellowships: Linking Science, Technology & Engineering Professionals with Government <http://ieeusa.org/policy/govfel/default.asp>

Each year, IEEE-USA sponsors three government fellowships for qualified IEEE members. The fellows - chosen by the IEEE-USA Government Fellows Committee and confirmed by the Board - spend a year in Washington serving as advisers to the U.S. Congress and to key U.S. Department of State decision-makers. Known as either a Congressional Fellowship or an Engineering & Diplomacy Fellowship, this program links science, technology and engineering professionals with government, and provides a mechanism for IEEE's U.S. members to learn firsthand about the public policy process while imparting their knowledge and experience to policymakers.

2012 Application materials are now available online. The submission deadline is March 18, 2011

The Application Kit for 2012 Congressional Fellowship is at:
http://ieeusa.org/policy/govfel/documents/cfappkit12_000.doc

The Application Kit for 2012 Engineering & Diplomacy (State Department) Fellowship is at:
http://ieeusa.org/policy/govfel/documents/Stateappkit12_000.doc

News from IEEE

IEEE Members Elect Gordon W. Day as 2012 President

11 January 2011 – Gordon W. Day, of Boulder, Colorado, has been elected president of IEEE for 2012. IEEE, the world's largest technical professional association, supports the technical and professional interests of over 400,000 members in 160 countries. It publishes a third of the world's literature in the electrical engineering and computer science fields, sponsors over 1100 conferences each year, and has an active portfolio of nearly 1,300 industry standards and projects under development.

Day, an electrical engineer with experience in research, management, and public policy, will become the 50th President of IEEE on January 1, 2012 and will also serve as CEO. He will succeed 2011 IEEE President Moshe Kam, Department Head and Robert Quinn Professor of Electrical and Computer Engineering at Drexel University, Philadelphia, Pa. Day will serve on the Board of Directors as IEEE President-elect for 2011.

“Over the past century or so, most advances in quality-of-life have been achieved through technology. Our members were responsible for many of those gains,” Day commented upon assuming his new role. “Today, IEEE’s job is to help technologists continue that history of achievement, in a world where technology is advancing ever more rapidly and innovation is the key to prosperity around the globe.”

Day’s technical specialty is the combination of optics and electronics. He spent most of his career in research and management at the National Institute of Standards and Technology (NIST) in Boulder, where he founded and led the NIST Optoelectronics

Division. His personal research ranged from fundamental optical measurements to the development of standards for optical communication and new concepts in optical and electronic instrumentation.

More recently, he has served as science advisor to U.S. Senator Jay Rockefeller and Director of Government Relations for the Optoelectronics Industry Development Association. He has been a professor adjoint at the University of Colorado and a visiting Fellow at the University of Southampton (UK), and has served on many industry, government, and academic advisory groups. He is a Fellow of the IEEE, the American Association for the Advancement of Science, the Optical Society of America, and the Institute of Physics, and holds a bachelor's, master's and doctorate degrees from the University of Illinois, Urbana-Champaign.

Day has served the IEEE previously in many leadership capacities, including president of the IEEE Photonics Society and of IEEE-USA, which supports the career and public policy interests of IEEE members in the U.S.