IEEE NEWS FOR APRIL 2014

Jacob Z. Schanker, P.E., Newsletter Chair
The Rochester section web site is at: http://rochester.ieee.org/

Rochester Section Meeting – Tuesday, April 1 at Noon

The next monthly Rochester Section business meeting is on Tuesday, April 1, at 12:00pm, at the **Hibachi Sushi Buffet Restaurant** in South Town Plaza on Jefferson Road (Route 252) just west of West Henrietta Rd. (Route 15). Any IEEE member is invited to attend. Lunch is only $3 for IEEE members. No reservation or RSVP is needed, just show up.

From the Section Chair, Greg Gdowski

Dear Rochester IEEE members:

There have been many great things happening in the Rochester IEEE Section from awards, to upcoming events, and new initiatives. Here is a sampling of some notable items within our engineering community.

Awards:
I am thrilled to report that Jackson Anderson and Jeremy Warner have been selected to receive the IEEE Scholarships this year. Jackson Anderson resides in Churchville, NY and is a Microelectronic Engineering student at the Rochester Institute of Technology. Jeremy Warner resides in Riverhead, NY and is an Electrical Engineering student at the University of Rochester. The IEEE congratulates them on their spectacular accomplishments. Each will receive $1,500 and will be honored at the Rochester Section Joint Chapter Meeting and the Rochester Engineering Society Annual Gala.

We also congratulate Ron Hira of Pittsford, NY. Ron is a faculty member at RIT in the Department of Science, Technology, and Society/Public Policy. He was recently selected by the IEEE-USA Board of Directors as a 2013 recipient of the IEEE-USA George F. McClure Citation of Honor for "educating the public on outsourcing legislation and its effects on the engineering profession". The presentation of the award will take place at the IEEE-USA Annual Meeting in Providence, RI on May 17, 2014. His award will also be recognized at the Rochester Section Joint Chapter Meeting.

Events:

The Rochester IEEE Section Joint Chapter Meeting will be held on April 7.   We are still in the process of identifying speakers for some of our Chapters.   This year we will be having a special poster session for students. Three awards will be given for the best posters ($100, $50, and $25 Amazon gift cards).   If you are a student, don't miss this networking opportunity and your chance at winning a prize for the best poster. Please see below for more information in registering and attending the Joint Chapter Meeting this year.

The Engineering Symposium in Rochester will be held on April 8 at the Radisson Hotel Rochester Riverside. The Rochester IEEE Section sponsors the Electrical Track and each of its six presentations. Please be sure to catch this special event and earn PDH credits while you are there.

The RES Annual Gala will be held on Saturday, April 26. Our student IEEE Scholarship recipients will be acknowledged at the event.   Please contact us if you are interested in attending and sitting at our table at the Annual Gala. Any Rochester IEEE member may join us during the event ($40/reservation). First come, first served.   I hope to see you there.

The next monthly Rochester Section IEEE Executive Committee meeting will be from 12-1PM on April 1 at the Hibachi Sushi Buffet in Southtown Plaza (3333 W. Henrietta Rd, Henrietta, NY). Please join us to learn more about the Section and how you may contribute. All members are encouraged to attend the meeting. Its only $3 for a buffet lunch.

Other news:

Chris Cassidy was recently elected as Chair of the Technology Management Council. Paul Lee will serve as the Vice Chair. Congratulations to both and we look forward to an active year for the TMC.

The Engineering in Medicine and Biology Society Chapter is helping to establish a Rochester chapter of Engineering World Health. EWH CEO Leslie Calman and COO Ed Hutton recently came to Rochester, where they met with students at the Rochester Institute of Technology and the University of Rochester. The two institutions are in the process of establishing a joint EWH Chapter in Rochester. EMBS is in the process of planning joint events to help establish the initiative in Rochester. The aim of EWH is to improve the technological infrastructure in developing country clinics and hospitals. Both EMBS and EWH especially wish to thank both Ram Dhurjaty, a local IEEE member who serves as a member of the Board of Directors for EWH, and Michael Riedlinger, Director of the Rochester BioVenture Center, for their help in spearheading the effort. Greg Gdowski (UofR), Dan Phillips (RIT), and Iris Asllani (RIT) will be coordinating efforts to bring together students from both institutions to host invited speakers, hold professional development activities and conferences, form committees for various design projects, and much more.   If you wish to evaluate and repair medical equipment donated to developing world hospitals, design appropriate technologies, or

travel to developing countries to provide engineering support to local hospitals and schools --- we need your help. Please contact today to find out how you can participate.

The Photonics Society Chapter is looking for active members to serve as officers to help reinvigorate the chapter. If you have an interest in lasers, optical and photonic devices, optical fibers, and associated lightwave technology and their systems and applications, we need your help. Please contact one of the Rochester Section IEEE Officers for more information in helping with the local Photonics Society Chapter.

Membership statistics:
The IEEE Community in Rochester remains vibrant and strong with 862 members, which includes 28 Fellows and Life Fellows. We currently have 489 Regular members, 84 Senior members, 91 Life members, 35 Life Seniors, 26 Associate members, 59 Graduate Student members, and 50 student members.

Annual Joint Chapters Meeting on April 7

The Rochester IEEE Society will be hosting a joint meeting for all IEEE chapters on April 7, 2013 that is open to the general public. The meeting will focus on the 100th anniversary of the IEEE Rochester Section. The meeting will feature a keynote presentation and two parallel sessions with technical presentations from different chapters and societies. Don't miss this great opportunity to meet and network with people from all engineering disciplines and to learn more about the activities of the different IEEE chapters and societies in the Rochester area. The technical sessions are free to attend and no reservation is required. Reservations *are* required to attend the dinner and keynote presentation.

Date: April 7, 2014
Place: RIT Inn & Conference Center, 5257 W. Henrietta Road
Schedule: Registration and refreshment: 4:00 – 4:30 PM
                    Technical Presentations Session I: 4:30 – 5:30 PM
                    Technical Presentations Session II: 5:30 – 6:30 PM
                    Student Poster Session   6:30 – 7:15 PM
                    Dinner & Keynote Presentation: 7:15 – 9.30 PM

Full details will be on the IEEE Rochester Section website http://rochester.ieee.org as they become available.

MTT and Antennas & Propagation talk at the JCM April 7

Title: A Tale of <u>Two</u> Talks: The Historical Acceptance of Maxwell's Equations and their Application to Printed Circuit Board Surface Roughness Analysis
Speaker: Dr. James Rautio, Ph.D., President & CEO Sonnet Software
Abstract:

<u>The Historical (abbreviated version)</u>: Maxwell first published what came to be called "Maxwell's equations" in 1865. However, it was not until 1888, and Heinrich Hertz's experimental validation that Maxwell's equations were widely accepted as correct. The story of the intervening 23 years is little known. Maxwell, who died in 1879, was exceptionally modest and did not promote his own results at any time. The survival of Maxwell's equations was up to the only three researchers in the entire world who paid serious attention to Maxwell's paper in 1865 and his seminal Treatise in 1873: Oliver Heaviside, Oliver Lodge, and George Francis FitzGerald. Later, Hertz joined the group forming "The Four Maxwellians". This presentation describes the torturous 23 year path Maxwell's equations took from their creation to their initial acceptance. No mathematical knowledge is needed or expected; this presentation is ideal for a general audience.

<u>The Technical</u>: A typical PCB electro-deposited foil has 3 microns RMS surface roughness, required for good adhesion. However, surface roughness increases loss. Previous models either grossly over- or under-estimate roughness loss. In addition, these old models fail to include the substantial (up to 15%) effect roughness has on effective dielectric constant. We demonstrate how these problems are now completely solved. This presentation is based on the Best Paper award winning presentation at DesignCon February 2010 written in collaboration with Rogers Corporation and is based on over 12 months of collaborative research.

Speaker Biography: James C. Rautio (S'77–M'78–SM'91–F'00) received the B.S.E.E. degree from Cornell University, Ithaca, NY, in 1978, the M.S. degree in systems engineering from the University of Pennsylvania, Philadelphia, in 1981, and the Ph.D. degree, under Dr. Roger Harrington, in electrical engineering from Syracuse University, Syracuse, NY, in 1986.

From 1978 to 1986, he was with General Electric, initially with the Valley Forge Space Division, then with the Syracuse Electronics Laboratory. During this time, he developed microwave design and measurement software and designed microwave circuits on alumina and on GaAs. From 1986 to 1988, he was a Visiting Professor with Syracuse University and Cornell University.

In 1988, he took Sonnet Software, North Syracuse, NY, full time, a company he had founded in 1983. In 1995, Sonnet Software was listed on the Inc. 500 list of the fastest growing privately held U.S. companies, the first microwave software company ever to be so listed. Today, Sonnet Software is the leading vendor of high accuracy three-dimensional planar high-frequency electromagnetic analysis software with Dr. Rautio as CEO and president.

Dr. Rautio was the recipient of the 2001 IEEE Microwave Theory and Techniques Society (IEEE MTT-S) Microwave Application Award. He was appointed MTT Distinguished Microwave Lecturer for 2005 – 2007 lecturing on the life of James Clerk Maxwell. He received the 2014 MTT Distinguished Service Award.

Registration: Registration is not required, but is appreciated.
https://meetings.vtools.ieee.org/meeting_view/list_meeting/24569

Technology Management Council talk at JCM April 7

Rochester Section Technology Management Council Chapter presents Michael Alt, Director of Eastman Business Park at the Joint Chapters Meeting. For more information: https://meetings.vtools.ieee.org/meeting_view/list_meeting/24969

EMC/PSE Joint Chapter News and JCM Talk

Results of the 2014 officer election are Chair: Frank Ryan, Vice-Chair: Jim Shipkowski The next chapter meeting will be at the Rochester Section Joint Chapters Meeting, described elsewhere in this newsletter. At Joint Chapters, EMC-PSE will host Victoria Spinanger presenting **Failure Modes and Effect Analysis: A Powerful Tool**. Ms. Spinanger is a System Safety Engineer at Saab Sensis.

IEEE Geoscience and Remote Sensing Society talk - April 23

Title: Current scenario and challenges in the analysis of multi-temporal remote sensing images.
Speaker: Dr. Lorenzo Bruzzone, Department of Information Engineering and Computer Science, University of Trento, Italy.
Date & Time: Wednesday, April 23, 2014, at 4:00PM.
Location: The auditorium (room 1125) of the Chester F. Carlson Center for Imaging Science (Bldg. 76) at the Rochester Institute of Technology.
Sponsors: IEEE Geoscience and Remote Sensing Society Distinguished Lecturer Program, and the Chester F. Carlson Center for Imaging Science.

Abstract: In the last decade a large number of new satellite remote sensing missions have been launched, resulting in a dramatic improvement in the capabilities of acquiring images of the Earth surface. This involves an enhanced possibility to acquire multi-temporal images of large areas of the Earth surface, with improved temporal and spatial resolution with respect to traditional satellite data. Such new scenario significantly increases the interest of the remote sensing community in the multi-temporal domain, requiring the development of novel data processing techniques and making it possible to address new important and challenging applications. The potentials of the technological development are strengthened from the increased awareness of the importance of

monitoring the Earth surface at local, regional and global scale. Assessing, monitoring and predicting the dynamics of land covers and of anthropic processes is at the basis of both the understanding of the problems related to climate changes and the definition of politics for a sustainable development. Nonetheless, the properties of the images acquired by the last generation sensors pose new methodological problems that require the development of a new generation of methods for the analysis of multi-temporal images and temporal series of data.

After a general overview of the problems related to the analysis of multi-temporal images and time series of data, this talk will focus on the very important problem of automatic change detection between multi-temporal images. The development and the use of effective automatic techniques for change detection are of major importance in many of the above-mentioned application scenarios. The increased geometrical resolution of multispectral and SAR sensors, the increased revisit time of high resolution systems, and the expected availability of time series of hyperspectral images in the near future result in many different methodological problems, as well as in very important new possible applications. The talk will address these problems by pointing out the state of the art and the most promising methodologies for change detection on images acquired by the last generation of satellite sensors. Examples of the use of change-detection approaches in operative scenarios will be provided.

Biography: Lorenzo Bruzzone received the laurea (M.S.) degree in electronic engineering (summa cum laude) and the Ph.D. degree in telecommunications from the University of Genoa, Italy, in 1993 and 1998, respectively. He is currently a Full Professor of telecommunications at the University of Trento, Italy, where he teaches remote sensing, pattern recognition, radar, and electrical communications. Dr. Bruzzone is the Head of the Remote Sensing Laboratory in the Department of Information Engineering and Computer Science, University of Trento. His current research interests are in the areas of remote sensing, radar and SAR, signal processing, machine learning and pattern recognition. He promotes and supervises research on these topics within the frameworks of several national and international projects. He is the author (or coauthor) of 114 scientific publications in referred international journals (76 in IEEE journals), more than 170 papers in conference proceedings, and 16 book chapters. He is editor/co-editor of 11 conference proceedings and 1 scientific book. He has served on the Scientific Committees of several international conferences and he was invited as keynote speaker in more than 20 international conferences and workshops. He is a member of the Managing Committee of the Italian Inter-University Consortium on Telecommunications. Since 2009 he is a member of the Administrative Committee of the IEEE Geoscience and Remote Sensing Society.

Dr. Bruzzone ranked first place in the Student Prize Paper Competition of the 1998 IEEE International Geoscience and Remote Sensing Symposium (Seattle, July 1998). He was a recipient of the Recognition of IEEE Transactions on Geoscience and Remote Sensing (TGRS) Best Reviewers in 1999 and was a Guest Co-Editor of different Special Issues of international journals. In the past years joint papers presented by his students at international symposia and master theses that he supervised have received international

and national awards. He was the General Chair/Co-chair of the First, Second and Sixth IEEE International Workshop on the Analysis of Multi-temporal Remote-Sensing Images (MultiTemp), and is currently a member of the Permanent Steering Committee of this series of workshops. Since 2003, he has been the Chair of the SPIE Conference on Image and Signal Processing for Remote Sensing. From 2004 to 2006 he served as an Associated Editor of the IEEE Geoscience and Remote Sensing Letters, and currently is an Associate Editor for the IEEE TGRS and the Canadian Journal of Remote Sensing. Since April 2010 he has been the Editor of the IEEE Geoscience and Remote Sensing Newsletter. In 2008 he has been appointed as a member of the joint NASA/ESA Science Definition Team for the radar instruments for *Outer Planet Flagship Missions*. He is a member of the Italian Association for Remote Sensing (AIT).

More talks: The chapter will also host two talks earlier in April. These will be at RIT as part of the Center for Imaging Science seminar series held at 4pm in the Carlson Building auditorium on the RIT campus.

April 2
Dr. Curtis D. Mobley
Vice President and Senior Scientist
Sequoia Scientific, Inc.

April 9
Dr. Michael Eismann
Air Force Research Laboratories
Wright-Patterson Air Force Base
Dayton, OH

The Joint Chapters Meeting through the years

In keeping with the historical nature of this, the Rochester Section's hundredth year, let's take a look at some Joint Chapters Meeting talks of the past.

2001

Management Society Talk

Professor M. Ethyl Ketone of the Sloan School of Business at M.I.T., who was a speaker at the Joint Chapters Meeting a few years ago, returns after two years Sabbatical on Nauru Island in the South Pacific, where she developed an econometric model for Guano-based economies. Her talk to us will be on a topic of more direct interest, "Dealing with the Management Glut."

The managerial shortage of just a few years ago has now turned into a glut as more and more engineers take the easy

path and drop out of engineering in favor of management. This has caused at least three problems: a glut of managers, a shortage of engineers, and a decrease in Dilbert cartoons posted on bulletin boards.

Corporations have attempted to deal with the simultaneous excess of management and shortage of engineering by adopting organizational structures based on the matrix model which was popular some years ago. In this approach, several managers can share one resource, i.e., engineer. While this may appear to work from the management viewpoint, it is less satisfactory for the engineer in question. One manager is usually enough to deal with, who needs three or four? Of course, such an uncooperative attitude is deprecated by management.

Professor Ketone's proposed solution to the management glut came to her as she was contemplating the active volcano on Nauru Island's north side. She will share her conclusions with us at this meeting.

Professor Ketone's biography appeared in a previous issue. Her early work in solvency has led, more recently, to studies of volatile issues such as biomass economies and management-engineer dynamics.

2000

Computer Society Meeting
The Rochester Chapter of the IEEE Computer Society Presents Alan Willett of Xerox at the Joint Chapters Meeting on Wednesday, April 12th, 2000. The talk will begin at 5:00 PM.
The topic is, "Achieving Personal Software Engineering Excellence: An introduction to the Personal Software Process".

"The personal software process (PSP) is a self-improvement process designed to help you control, manage, and improve the way you work. It is a structured framework of forms, guidelines, and procedures for developing software. The PSP's sole purpose is to help you be a better software engineer."   -- From Watts Humphrey's book, *A discipline for Software Engineering*.

A growing mountain of evidence indicates that individuals and teams who complete the PSP training deliver much

higher quality software, in the same or less time, at highly predictable costs and schedule. In this presentation, Alan Willett will discuss his personal experiences in taking the PSP course, and in so doing, how it transformed his views of software engineering.

The presentation will answer the following questions:
- What is the PSP?
- How does this all fit with the Capability Maturity Model (CMM)?
- What is a CMM level 5 personal process like?
- What are the results of students across the industry?
- What is the Team Software Process (TSP) and how does it build on the PSP?
- What is the investment needed to take a project team through the PSP/ TSP?
- How quickly is the investment returned to the organization?

Alan Willett orchestrates the Xerox MessageBroker organization software process improvement program. In Alan's 20 years of working in software he has covered various areas including order entry system developer, engineering tools developer, software engineer, software project manager, software configuration management manager, multinational launch translation manager, and Software Engineering Process Group (SEPG) member. Alan has BS in computer science and a Masters degree in Management of Software Engineering/ Management of Technology. He is SEI certified to teach the Personal Software Process. Alan spoke at the 1998 Software Engineering Symposium on the topic "Leading Transitions Successfully", and at the International SEPG 2000 conference in March, he gave a talk titled, "Begin with a lever and move the world".

Free E-book for IEEE members

In April, IEEE-USA E-Books will offer "Communicating with Congress -- How to Build a Relationship with Your Elected Officials."

Author Russell Harrison, IEEE-USA senior legislative representative, grassroots activities, offers insight into effective communication techniques to use when meeting

with members of Congress. He encourages readers to be activists, and gives guidance on writing letters to Congress and having a successful congressional visit.

Congratulations to our new Senior Members

At the February 27 Admission & Advancement panel meeting in Los Angeles, three Rochester section members were elevated to Senior membership. Congratulations to:

Jack Mottley, a member of the Education Society.
Eric Weatherbee, a member of the Power & Energy Society.
Frank Ryan, a member of the Antennas & Propagation Society, Electromagnetic Compatibility Society, Electron Devices Society, Geoscience & Remote Sensing Society, Photonics Society, and the Nuclear & Plasma Sciences Society.

IEEE Resume Lab – new service for members
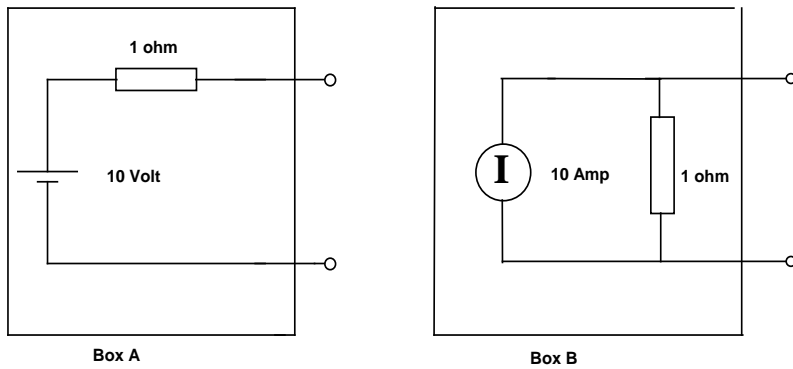
The IEEE Resume Lab can be found at:
http://www.ieee.org/membership_services/membership/resumelab.html

As described at that web site, "IEEE ResumeLab is an online service that allows IEEE members to develop a resume or curriculum vita using a wide array of resume templates. Members can also perform mock interviews using over 900 potential interview questions or develop letters, portfolios, and skills assessments to use during the interview process. Best of all, the information developed on IEEE ResumeLab is easily shared with potential employers, mentors, or colleagues via a personalized website."

Brain Teaser Solved

To remind you, the problem posed in March's brain teaser was as follows.

Shown below are two black boxes. Box A contains the Thevenin equivalent of some linear circuit, and Box B contains the Norton equivalent of the same circuit. Note that a voltmeter connected to either will read 10 volts, and an ammeter connected to either box will read 10 amps - just as you would expect. With access to only the outsides of the boxes and to their terminals, how can you tell which is which?

1 ohm

10 Volt

Box A

I **10 Amp** **1 ohm**

Box B

Congratulations to James Heliotos who sent in a correct solution almost immediately.

And now the solution: When you learned about Thevenin and Norton equivalents in school, you were probably told that they are exactly equivalent as seen from the external terminals. So how then, can we tell which is Box A and which is Box B? The answer lies in making a mental jump from the theoretical world of symbols on paper to the real (or almost real) world where boxes A and B are physical boxes with the components shown within.

Put your hand on each box - Box B will be warmer than Box A because 10 Amps are flowing through the 1 ohm resistance, dissipating 100 Watts. Box A, however, has no current flowing and no power dissipation. To confirm this, put a short circuit across the terminals of each box. Now, the roles are reversed. Box A is warmer because 100 Watts are dissipated in its 1 ohm resistance, while in Box B the short circuit takes all of the 10 Amps available so there is no dissipation in its 1 ohm resistance within the box.

So, it seems that the equivalency for voltage and current (and resistance) does not extend to an equivalency for power. On reflection, this is not unreasonable since the equivalency is for linear circuits and their linear relationships, but power is a non-linear function with an exponential (squared) relationship to V and I.

As an historical side note, Dr. Harry E. Stockman in his *The Network Theorem Book* (2nd edition, ISBN 0-918332-11-7) states on page 202: "Due to a regrettable oversight in the history of science, one of its most useful network theorems, the HELMHOLTZ' THEOREM, has become known in America under the wrong name, THEVENIN'S THEOREM....Helmholtz' theorem was published in 1853, Thevenin's in 1883." Dr. Stockman also points out that Norton's theorem is more properly credited to H.F. Mayer (1926). So this brainteaser, instead of being about Thevenin-Norton equivalents, is really about Helmholtz-Mayer equivalents. In the words of the late Yankees baseball announcer Mel Allen, "How about that?" http://youtu.be/re7O5q3xuTg

IEEE

2014 Rochester Section Joint Chapters Meeting

The Rochester IEEE Society will be hosting a joint meeting for all IEEE chapters on April 7, 2014 that is open to the general public. The meeting will focus on the 100th anniversary of the IEEE Rochester Section. The meeting will feature a keynote presentation and two parallel sessions with technical presentations from different chapters and societies. Don't miss this great opportunity to meet and network with people from all engineering disciplines and to learn more about the activities of the different IEEE chapters and societies in the Rochester area. The technical sessions are free to attend. Reservations are required to attend the dinner and keynote presentations.

April 7, 2014
RIT Inn & Conference Center, 5257 W. Henrietta Road

Registration and refreshment:	4:00 – 4:30 PM
Technical Presentations Session I:	4:30 – 5:30 PM
Technical Presentations Session II:	5:30 – 6:30 PM
Student Poster Session	6:30 – 7:15 PM
Dinner & Keynote Presentation:	7:15 – 9.30 PM

Keynote Speaker I: Tony Whitman
Optical Test Director for Cryogenic Optical Test of NASA's James Webb Space Telescope
Exelis
Title: NASA's James Webb Space Telescope

Tony Whitman is the optical test director for the cryogenic optical test of NASA's James Webb Space Telescope. Tony came to Exelis (formerly a division of Kodak) to begin the project in 2002 as the lead systems engineer for the integration and test equipment for JWST from the Rochester Photonics Corporation.. Earlier in his career, Tony was part of the optical metrology team for the Cosmic Background Explorer at the NASA Goddard Space Flight Center. Other career stops included the former Holotek Ltd. of Rochester and the former General Electric Electronics Laboratory in Syracuse. He earned his M.S. Optics degree from the University of Rochester and a B.S. in Applied and Engineering Physics at Cornell University.

Keynote Speaker II: Dr. Ron Hira
Associate Professor and Chair of the Department of Public Policy
Rochester Institute of Technology
Title: A Decade of Offshoring: Trends, Implications, and Public Policy

Ron Hira is an associate professor and chair of the department of public policy at Rochester Institute of Technology where he specializes in policy issues on technological innovation, offshoring, high-skill immigration, and the American engineering workforce. Ron is also a research associate with the Economic Policy Institute, a major think tank in Washington, D.C. Hira is co-author of the book, Outsourcing America (AMACOM 2005; 2nd edition 2008), which was a finalist for best business book in the PMA's Benjamin Franklin Awards Ron completed his post-doctoral fellowship at Columbia University's Center for Science, Policy, and Outcomes. He holds a Ph.D. in Public Policy from George Mason University (GMU), an M.S. in Electrical Engineering also from GMU, and a B.S. in Electrical Engineering from Carnegie-Mellon University.

Parallel Technical Presentations

Session I (4:30-5:30PM)

Chapter	Speaker	Affiliation	Title
Electron Devices Societies	Sean Rommel	Rochester Institute of Technology	Benchmarking of Tunneling Currents for Tunneling Field Effect Transistor Applications
Power & Energy Society	Dave Krispinsky	Rochester Institute of Technology	Clean Energy Power Systems / RIT's Golisano Sustainability Bldg.
Technology Management Council	Michael Alt	Eastman Kodak Company	Eastman Business Park

Session II (5:30-6:30PM)

Chapter	Speaker	Affiliation	Title
Electromagnetic Compatibility / Product Safety Engineering	Victoria Spinanger	Saab Sensis	Failure Modes and Effect Analysis: A Powerful Tool
Signal Processing Society	Ray Ptucha	Rochester Institute of Technology	Machine Learning for Intelligent Behavior
Communications, Aerospace, and Electronic Systems Society	Xian-He Sun	Illinois Institute of Technology	Memory System Parallelism for Data-intensive and Data-driven Applications
Engineering in Medicine and Biology Society	Bill Grande	Micropen Technologies	Medical Device Design and Manufacture at Micropen Medical
Microwave Theory & Techniques Society / Antennas and Propagation	James Rautio	Sonnet Software	A Tale of Two Talks: The Historical Acceptance of Maxwell's Equations and their Application to Printed Circuit Board Surface Roughness Analysis

[*]No charge for attending technical presentations. Reservation / registration not required.

Dinner Selections

Prime Rib of Beef   **_Or_** **_Seared Salmon_**   **_Or Spicy Orecchiette_**
Ten Ounces, slow-roasted   Prosecco Cream Sauce   Pasta with Mixed Vegetables
with Natural Juices   in Arrabiata Sauce

All dinners include salad, dinner roll basket, coffee, tea, and dessert

Reservations (required for dinner):
Register Here (pay-pal accepted) or contact Matt Sidley at msidley@harris.com
Dinner: $30.00 (IEEE members), $40.00 (Non-members), and $15 for Student members.
Further details and on-line registration at: https://meetings.vtools.ieee.org/meeting_view/list_meeting/24419

IEEE

2014 Rochester Section Joint Chapters Meeting
Student Poster Session

Call for Posters!

When: April 7, 2014 – Poster Session: 6:30–7:15pm

Where: RIT Inn & Conference Center

Awards: 1st – $100 Amazon Gift Card, 2nd – $50 Amazon Gift Card, 3rd – $25 Amazon Gift Card

The Rochester IEEE Society will be hosting the annual Joint Chapters Meeting (JCM). Don't miss this great opportunity to meet and network with people from all engineering disciplines and to learn more about the activities of the different IEEE chapters and societies in the Rochester area.

Program
4:00 – 4:30 PM	Registration and Refreshment
4:30 – 5:30 PM	Technical Presentations Session I
5:30 – 6:30 PM	Technical Presentations Session II
6:30 – 7:15 PM	Student Poster Session
7:15 – 9:30 PM	Dinner, Awards, and Keynote Presentation

Poster Information: Recommended size – 33.1" x 46.8", Poster easels provided
Sign up: Contact Matthew Sidley – msidley@harris.com by April 1st, 2014
Award notifications will be announced after dinner and sent electronically
Registration is required for dinner; $10 for students submitting a poster