



IEEE NEWS FOR March 2009

Jacob Z. Schanker, P.E., Newsletter Chair
Rochester IEEE home page at: <http://www.r1.ieee.org/~roch>
(Always check the web PDF edition for late changes and additions)

Rochester Section Meeting - Tuesday, March 3, 2009

The next Rochester Section business meeting is on Tuesday, March 3, 2009 at Noon, at the Shanghai Restaurant, 2920 West Henrietta Road, just south of the intersection with Brighton-Henrietta Town Line Road. All IEEE members are welcome to attend this meeting, meet your officers and have lunch for just \$3.00.

Communications Society Chapter Officers for 2009

Chair: Nirmala Shenoy (RIT, NSSA dept.)
Co-Vice-Chair: Bruce Hartpence (RIT, NSSA dept.)
Co-Vice Chair: Tom Tae Oh (RIT, NSSA dept.)
Secretary: Azadeh Vosoughi (UofR)
Treasurer: Alireza Seyedi (UofR)

Computer Society Chapter Officers for 2009

Chair: Howard Brill
Secretary: Wallace Leigh
Treasurer: Sam Fryer
Publicity: Jean Sheehan
Past Chair: James Heliotis

Engineering in Medicine and Biology Chapter News

Meet some of the leading biotechnology industries of the Rochester area! The Society for Engineering in Medicine and Biology will be cosponsoring an evening function with the with the Biomedical Engineering Society at the University of Rochester. Join the University of Rochester's Department of Biomedical Engineering and biomedical companies from Upstate New York as we bridge the division between academia and industry. On March 27, the University will host a networking evening and industry

showcase designed to establish relationships between students and local companies. Don't miss this occasion to help the next generation of engineers better understand the biomedical industry, anticipate future trends, find internship or employment opportunities and receive career mentoring while promoting your company and the growth of the biomedical community. For more information and registration please visit <http://sa.rochester.edu/bmes>

The Society for Engineering in Medicine and Biology recently hosted an outreach program for the RES Explorer Post students on February 11th. Twenty-two high school students learned about electrical signals produced by the heart and carried out hands-on demonstrations in which they recorded their own electrocardiograms. The event was held in the new biomedical engineering student laboratories at the Department of Biomedical Engineering at the University of Rochester.

Geoscience and Remote Sensing Society Meeting March 12

Topic: Touching Humanity through Space Technology: Indian Perspectives

Speaker: Dr. YVN Krishna Murthy, Director, Regional Remote Sensing Service Centers Indian Space Research Organisation, Bangalore

Date: Thursday, March 12, 2009

Time: Refreshments at 6:30 pm; Meeting and Presentation at 7 pm

Location: Seminar Room, Laboratory for Laser Energetics, University of Rochester 250 E. River Road, Rochester, New York

Map: <http://ewh.ieee.org/r1/rochester/grss/coimap.pdf>

Abstract: Global space technology developments since the launch of first artificial satellite in 1957 have often been focused on space exploration and understanding the nature of our universe beyond Earth. These explorations have sparked the advance of new technologies in many fields including communications and computing but they have also given humanity a new perspective on our own planet. The Indian space program, beginning in the 1960's, has been a pioneer in focusing this technology to benefit man and society. Over the years, India has established two operational space systems: 1) the Indian Remote Sensing Satellite (IRS) System for natural resource monitoring and management; and 2) the Indian National Satellite (INSAT) System providing services for telecommunications, television broadcasting and meteorology including disaster warning support.

The seven IRS satellites serve as mainstays of the Indian National Natural Resources Management System (NNRMS) as well as to provide data to worldwide users. Vital applications such as identifying zones which could yield ground water, suitable locations for recharging water, monitoring command areas, estimating crop areas and yields, assessing deforestation, mapping urban areas for planning purposes, delineating ocean areas with higher fish catch potential and monitoring of environment are being pursued actively by users with the spacebased data.

The ten satellite INSAT system is one of the largest domestic communication satellite systems in the Asia Pacific region and contributes significantly to a variety of services in telecommunications and television broadcasting including meteorological observations, disaster communications, tele-education, tele-health services and village resource centers. A strong bond with academic institutions exists through extensive research partnership. This end-to-end capability in space for vital application in communications, broadcasting, meteorology and natural resource Information, which are of direct relevance for national development, has secured for India a unique place in the international community. Thus, the last four decades have seen the fruition of the vision of Dr. Vikram Sarabhai, and the coming days will see further consolidation of the gains to build a space system which will be consistent with the India's rising status as a global power.

Biography: Dr. Y.V.N. Krishna Murthy is Scientist-G & Director of Regional Remote Sensing Service Centers of the Indian Space Research Organisation (ISRO), Dept. of Space, Govt. of India, Bangalore. As Director, he leads a team of geospatial technologists and scientists across five centers in executing national and regional projects using space technology. He obtained his M.Sc from Andhra University, Visakhapatnam in 1979 with distinction and Ph.D. from College of Engineering, Andhra University in 1986. He is the recipient of Hari-Om Ashram Vikram Sarabhai Research award in space applications for the year 2003.

RES Representative for the Rochester Section – open position

The Rochester Section of the IEEE has been a very long-time affiliate member of the Rochester Engineering Society. As such, we send a representative to participate in the governance of the RES by attending RES board meetings. I have been serving in this position, and have found it very rewarding. Because my teaching duties at RIT have lately had me in class when the RES board is meeting, I felt that I should step down and open the position to someone who can attend the meetings, which are held each month on the third Wednesday at Noon. Although I, and my immediate predecessor Mac Drummond, are both RES members and Professional Engineers, there is no requirement that the IEEE representative be other than a full member of the IEEE.

This is a great opportunity to serve, to network, and to grow in the profession. If you are interested in possibly putting yourself forward for this appointment, you can contact the Rochester Section Chair, Paul Lee, at section-chair@ieee.rochester.ny.us. If you have questions about what is involved in the position, you may contact me at j.schanker@ieee.org.

IEEE Joint Chapters Meeting April 15

The IEEE Rochester Section Joint Chapters Meeting (JCM) will be held on Wednesday, April 15 at the RIT Inn and Conference Center on West Henrietta Rd. The JCM will consist of parallel Chapter-sponsored technical seminars followed by a dinner and keynote presentation. See the full-page announcement on the next page for more information. And, mark the date on your calendar now.

2009 Rochester Section Joint Chapters Meeting

April 15, 2009

RIT Inn & Conference Center, 5257 W. Henrietta Road

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| Registration and refreshment: | 5:00 – 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 |

Keynote Speaker: Dr. Charlie Judice

Visiting Professor at Monmouth University, and founder, Elaze Digerati LLC, New Jersey

Multimedia Services for the Fiscally Challenged

Dr. Judice has taught multimedia communications at Rutgers University, Monmouth University, and most recently Flagler College. Previously he was an Eastman Fellow and Director of Networked Imaging at Kodak in Rochester where he lead research on digital storytelling technologies. Prior to 1996 he worked at Telcordia Technologies (formerly Bellcore and Bell Labs) as an Executive Director responsible for the development of MPEG, DSL, and video-on-demand technologies. During his 37 year industrial research career he wrote over 50 technical papers, co-authored several book chapters, received 11 patents, and became an IEEE Fellow for his leadership in visual communications and the invention of DSL. Currently, Dr Judice is a Visiting Professor at Monmouth University and founder of a communications consulting firm, Elaze Digerati LLC. Dr. Judice received his Phd in physics in 1973 from Stevens Institute of Technology.

Parallel Technical Presentations (5:30 – 6:30 PM)*

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| <i>LEOS</i> | Dr. Duncan Moore | Univ. of Rochester | Optics for Solar Cells for Portable Power |
| <i>Signal Processing Society</i> | Prof. Ahmed Tewfik | University of Minnesota | Adaptive Local Field Potential Neural Prosthetics |
| <i>Computer Society/RIT CS Student Branch</i> | Prof. Iain Richardson | The Robert Gordon University, UK | Dynamic Configuration Beyond Video Coding |
| <i>EMC/PSE</i> | Mr. Issac Waldron | Ansoft | Fundamentals of EMI Simulation |
| <i>MTT</i> | Prof. Jayanti Venkataraman | RIT | Size Reduction Techniques for Microstrip Antennas |
| <i>EMBS</i> | Dr. Ted Farrell | Ortho-Clinical Diagnostics | The Time is Now: Engineering opportunities in biology, medicine and economics |
| <i>Comm. Soc & Aerospace</i> | T.B.A. | | |

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

Dinner Selections

New York Strip Steak

Ten Ounces, Peppercorn Rubbed
with Roasted Sliced Portabella
Mushrooms

Or Cedar Plank Salmon

Maple Bourbon Glaze
or
Teriyaki with Wasabi

Or Eggplant Napoleon

Breaded Eggplant, Roasted Red Pepper,
Parmesan Cheese and Baby Spinach,
Toasted Walnut and Amaretto Cream Sauce

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

Reservations (required for dinner):

Contact the reservation clerk at RES, 585-254-2350 (or res@frontiernet.net) by April 9 to guarantee your dinner choice. Please also indicate which technical presentation you will be attending.

Dinner: \$20.00 (IEEE members), \$25.00 (Non-members), and \$10 for Student members.

Further details and on-line registration at: <http://www.r1.ieee.org/~roch/jc09/>