



The IEEE

Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NJ MTT/AP and VTS Chapter: **Wireless Communications in the Third Generation - Markets and Technology**

The IEEE NJ Section MTT/S/AP-S and VTS Chapters will host a talk December 13, 2001 on "Wireless Communications in the Third Generation - Markets and Technology." The speaker will be Dr. George Zysman.

About the Talk

In his talk, Dr. Zysman will describe some of the market drivers that help shape the architectures of 3rd generation wireless systems. Initial implementations of 3G will differ from the current 2nd generation systems primarily in the packet data domain. Data throughput will be significantly greater and access to services will have lower latency. Continuing growth in voice services and new data services will utilize much of the capacity of wireless systems, spurring the introduction of antenna and signal processing technologies. Some of these technologies and their benefits will be described in the talk.

About the Speaker

George I. Zysman is a consultant to Lucent Technologies in the areas of technology planning and standards with a focus on third generation wireless systems. Most recently he has been the Chief Technical Officer and Chief Architect of the Wireless Networks Group at Lucent Technologies where he started in 1966. His responsibilities included the direction of technology planning and roadmapping, overall architecture of Lucent wireless systems, advanced development as well as development and assessment of intellectual property. Dr. Zysman has been involved since 1971 in the pioneering experimental work in mobile and cellular systems that led to the establishments of AMPS standard and AMPS systems. He successfully directed a number of programs at Lucent such as Series II analog and digital architectures and subsequent technology for CDMA base stations. He was also responsible for 2nd and 3rd generation systems

standards development at Lucent.

Dr. Zysman has a BE in Electrical Engineering from Cooper Union in New York and MS and PhD degrees from the Polytechnic Institute of Brooklyn (Now known as Polytechnic University).

Dr. Zysman was a member of the Editorial Board of the Bell Labs Technical Journal and a guest editor of a special issue of IEEE Transactions on Vehicular Technology.

He was elected a Fellow of the IEEE for his contributions to wireless technology and standards.

All Welcome!

You do not have to be an IEEE member to attend.

Pre-Register!

Pre-registration is strongly suggested. Please email swilkowski@lucent.com or kdixit@rfsales.com with full name (first and last), affiliation, and citizenship so that a guest badge is ready.

Time: 7:00 PM, Thursday, December 13, 2001. Free dinner will be available at 6:00 PM.

Place: Lucent Technologies, Room wh-4A-323, Whippany, NJ.

Information: Stephen Wilkowski (973) 386-6487 (Lucent Technologies), Art Greenberg (973) 386-6673, Kirit Dixit, (201) 400-2313 (RF Electronics), Willie Schmidt (973) 492-0371.

In Memoriam - Sergei Bogaenko

Sergei W. Bogaenko, 72, of Totowa died October 14, 2001. Sergei was a long-time member of the North Jersey Section Executive Committee, where he and his wife often attended meetings. In the 1970's and 80's, Sergei was very active with the Professional Activities Committee (PACE). From 1979-1982, Sergei Chaired the Reliability Chapter. From 1991 to 1992 he served as Section Treasurer. In 1993 he served as 2nd Vice Chair for the Section. In 1996 he served as Section Secretary. From 1999 to 2000 he served on the Section Bylaws Committee.

Mr. Bogaenko was an electrical engineer at Conrac in West Caldwell and most recently at the Bendix Corporation in Teterboro for many years before retiring.

Surviving are his wife, Theresa, daughters, Mrs. Joyce Snyder and Mrs. Laura Oeters; his mother, Mrs. Vera Bogaenko; a brother, Alex and two grandchildren.

Volunteers Needed-PES Winter 2002 Meeting

The IEEE Power Engineering Society will conduct the 2002 Winter Meeting Technical Conference at the New York Hilton Hotel, NYC in the Rockefeller Center area (6th Ave at 53rd) January 27-31, 2002. Volunteers are needed to assist in various administrative duties, especially on Sunday, Monday and Tuesday. Please contact Ken Oexle at 973-386-1156 for additional details and information.

December 2001

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Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be sent to the Business Manager via e-mail at k.saracinello@ieee.org or to *The IEEE Newsletter*, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551, (908) 791-4067.

IEEE NJ SECTION HOME PAGE

<http://www-ec.njit.edu/~ieeenj/>

IEEE NJ SECTION NEWSLETTER HOME PAGE

<http://www-ec.njit.edu/~ieeenj/NEWSLETTER.html>

REPORT ADDRESS CHANGES TO:

IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, (732) 981-0060. It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE Newsletter" and other section mailings use a list provided by IEEE's national headquarters.

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Dr. Richard Snyder (r.snyder@ieee.org)

The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Wayne Owens at (201) 767-3400, ext. 226, wowens@crestron.com.

NJ EMS and Communications Society Chapters:

Wireless Network Deployment - A Project Management Perspective

On January 17, 2002, the IEEE North Jersey Section Engineering Management Society and Communications Society Chapters along with NJIT will host a presentation on "Wireless Network Deployment - A Project Management Perspective." The speaker will be Ravi S. Bhatia, PMP.

About the Talk

Metricom, a wireless pioneer founded in 1985, shutdown operations in August 2001 after deploying an ambitious, nationwide high-speed mobile wireless Internet access network. In 1999, armed with a proprietary micro-cellular digital network (MCDN), and \$600 million in funding from Worldcom and Vulcan Ventures, Metricom sought to stay ahead of the looming threat of 3G by building a massive network at a frenetic pace, and effectively created a new market for mobile data. This was a mega-project that demanded the integration of numerous disciplines including RF engineering, site acquisition, project management, logistics coordination, zoning, construction management, network optimization and a group of people who were willing to take risks.

The lessons learned from the *Ricochet* 2 project will be of interest to those who seek to understand the pitfalls and characteristics attendant to the deployment of a wireless network. The focus is on three key elements: design and development of a new technology, operation of a national project management matrix team, and management of a complex mix of vendor relationships, legal challenges and physical constraints. In the final analysis, Metricom may have failed due to an inability to commercialize its service fast enough to pay its creditors, but operationally, its network was acclaimed by many loyal users who regarded its service as unique and without credible substitutes.

♦ DALLAS, Feb. 15 /PRNewswire/ -- The following report is being issued by Billy C. Bowden of Ameri-First Securities.

No one has launched a network of this magnitude, this quickly, for less dollars, ever. More bang for less buck! Despite the disappointing modem sales, this network is coming together, and more importantly, the network is not buggy. To replicate a

network with these numbers of pops, in a competing technology, would carry an aggregate cost north of 100 billion dollars

About the Speaker

Most recently, Ravi Bhatia managed the NYC segment of Metricom's *Ricochet* 2 deployment - the U.S.' first wireless mobile high-speed Internet access network, employing RF technology using a system comprised of wired access points which house antennas (WAP sites) and micro cell repeater radios transmitting IP packets at license-free frequencies (900Mhz and 2.4Ghz). The deployment entailed securing rights-of-way, and leasing, zoning, RF engineering, WAP construction, optimization and maintenance.

Ravi has 17 years of project management experience on high-visibility projects for fortune 500 clients and large institutions. This has included team building, client management, estimating, contracts management, purchasing, planning, engineering, project accounting, and cost control. Other prominent projects include the retrofit, and upgrade of AT&T's corporate headquarters at 32 Avenue of the Americas, U.S. Federal Courthouse at Foley Square and Sheraton New York Hotel restoration.

His career has spanned technical sales, business development, subcontracting, construction management and program management. He has a BS in Engineering (Polytechnic University), a MBA (Hofstra University) and a MS in Telecommunications and Information Management (Polytechnic University). He is a member of IEEE, Project Management Institute and The New York New Media Association.

All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends.

Time: 6:00 PM (refreshments start at 5:45 PM), Thursday, January 17, 2002.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at www.njit.edu.

Information: Dr. Nirwan Ansari (973) 596-3670 (nirwan.ansari@njit.edu) or Wayne Owens (201) 767-3400 x226 (wowens@ieee.org). Please check <http://www-ec.njit.edu/~ieeenj/> for the latest updates.

IEEE North Jersey Section Activities

December 2001

Dec. 5- “Robustness Issues in Multimedia Watermarking” - NJ Signal Processing Chapter, 3:00-4:00 PM (refreshments at 2:45 PM), Stevens Institute of Technology, Edwin A. Stevens Hall (EAS), Room 222, Hoboken, NJ. Professor Hong Man, 201-216-5038, hman@stevens-tech.edu.

Dec. 6- “Consultants’ Network Planning Meeting & Workshop” – NJ Consultants' Network, 7:30 PM, KDI Triangle, 60 S. Jefferson Road, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Dec. 6- “Town Hall Meeting With Representative Rush Holt” – 5:00 PM Cocktails and Registration, 6:00 PM Dinner, 7:30 PM Town Hall Meeting, Ramada Inn, 195 Highway 18 South, East Brunswick, NJ. Chris Brantley, Director Government Relations, IEEE-USA, c.brantley@ieee.org.

Dec. 7- “Electric Power Cable Seminar” – NJ IAS/PES Chapters, 9:00 AM – 3:00 PM, GPU Energy, 300 Madison Ave, Morristown, NJ. R. Vittal Rebbapragada (609) 720-3209 or via e-mail at r.rebbapragada@ieee.org.

Dec. 13- “Project Management: High-Impact Techniques for Any Effort” - NJ EMS, 7:00 – 9:00 PM, Crestron Electronics, Training Room 2, Rockleigh, NJ. Wayne Owens at (201) 767-3400 Ext. 226 or wowens@crestron.com.

Dec. 13- “Wireless Communications in the Third Generation - Markets and Technology” - MTT/S/AP-S and VTS Chapters, 7:00 PM (dinner at 6:00 PM), Lucent Technologies, Room wh-4A-323, Whippany, NJ. Stephen Wilkowski, 973-386-6487 (Lucent Technologies), Art Greenberg 973-386-6673, Kirit Dixit, (201) 400-2313 (RF Electronics), Willie Schmidt (973) 492-0371.

Dec. 20-22- “Fourth International Conference on Information Technology - CIT 2001” – IEEE NJ Section, Gopalpur-on-Sea, India. For more information please contact skmohapatra@lucent.com or see www.nist.edu/cit2001.

Upcoming Meetings

Jan. 15- WOCC 2002 Presentation Submission Deadline. Details can be found on <http://www.wocc.org>.

Jan. 17- “Wireless Network Deployment - A Project Management Perspective” - NJ EMS and Communications Society Chapters, 6:00 PM (refreshments at 5:45 PM), NJIT, 202 ECE Center, Newark, NJ. Dr. Nirwan Ansari (973) 596-3670 (nirwan.ansari@njit.edu), Wayne Owens (201) 767-3400 x226 (wowens@ieee.org). Please check <http://www-ec.njit.edu/~ieeenj> for the latest updates.

Jan. 27-31- “Power Engineering Society 2002 Winter Meeting” - New York Hilton (6th Avenue at 53rd Street), NY, NY. For more information see <http://www.ieee.org/organizations/society/power/subpages/meetings-folder/wm2002/wm2002page.html>.

Feb. 6- “NJ Section Executive Committee Meeting” – 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Wayne Owens at (201) 767-3400 ext. 226 or wowens@crestron.com.

Apr. 26 & 27- “The 11th Annual Wireless and Optical Communications Conference”, 8:00 AM Registration, 9:00 AM Opening Remarks, Marriott Hotel, Newark Airport, Newark, NJ. Details can be found on <http://www.wocc.org>.

Members and Non-Members Welcome
PLEASE POST

NJ EMS Chapter:

Project Management: High-Impact Tech- niques for Any Effort

On December 13, 2001, the IEEE North Jersey Section Engineering Management Chapter will host an electronic presentation on "Project Management: High-Impact Techniques for Any Effort" by Cinda Voegtli. The IEEE Electronic Distinguished Lecturers Program prepared this presentation.

About the Talk

The focus of this presentation is on the process of project management. Techniques which lead to successful projects. Methods which have failed. How is a marketing concept transformed into a finished product? What steps along the way will produce a higher probability of success? These questions and more will be addressed.

About the Speaker

Cinda Voegtli, BSEE, is President and CEO of ProjectConnections.com, a web-based service providing online resources and support for project managers worldwide. She has 20 years experience in hardware and software development, engineering and project management, and product development process improvement. Her experience spans a wide variety of industries such as data and telecommunications systems, medical devices, robotics and computer systems, software and information systems, and virtual reality and game products.

Cinda has held director-level and senior management positions at high-technology companies in Dallas, Los Angeles, and Silicon Valley. She has managed projects in start-up, high-growth, and established large corporate environments. Since 1992 she has provided corporate high-technology clients with product development and project management expertise, led related workshops in the US and abroad, and presented at project and engineering management conferences.

Cinda served as President of the IEEE Engineering Management Society for two years and as Chairman of the Silicon Valley EMS chapter for two years, and also held the positions of EMS Chapter Coordinator, VP Member Relations, and Executive VP. She served as guest editor of the winter '96 and winter '99 issues of *IEEE Engineering Management Review* focused on project management. She writes the Project Tips column in *Today's Engineer* magazine, published by IEEE-USA.

Her other IEEE responsibilities include leader of the IEEE Leadership

Development Program working group, and member of the editorial board of *THE INSTITUTE*. She previously served on the IEEE Electronic Services Steering Committee and the Section/Chapter Support Committee.

All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends.

Time: 7:00 - 9:00 PM, Thursday, December 13, 2001.

Place: Crestron Electronics, Training Room 2, Rockleigh, NJ. Directions are available at <http://www.crestron.com/contact/directions.html>.

Information: Wayne Owens, (201) 767-3400 x226 (wowens@ieee.org).

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NJ Consultants' Network:

Consultants' Network Planning Meeting & Workshop

On Thursday, December 6, 2001, the IEEE Consultants' Network of Northern NJ (CNNNJ) will conduct its annual Planning Meeting and Workshop.

About the Meeting

The November/December meeting of the IEEE Consultants' Network is a strategic planning meeting for IEEE Consultants' Network members and consultants who are considering membership in the Consultants' Network.

The main purpose of the meeting will be to discuss ideas and expectations for the various Network functions in the upcoming year and also announce the results of the annual election of officers.

The major functions performed by the IEEE Consultants' Network that will be discussed are:

- **Monthly General Meetings** – Suggested feature topics will be discussed.
- **Member Networking** – Member presentations and alternate general meeting formats that improve networking.
- **Group Marketing & Image Building** – CNNNJ Website, Trifold and postcard mailing, CNNNJ's free consultant referral service, and alternate publicity methods.

Following the workshop session, holiday refreshments and snacks will be served, compliments of the IEEE Consultants' Network.

About the Consultants' Network

The IEEE Consultants' Network of Northern NJ was founded in 1992 to encourage and promote the use of independent technical consultants by business and industry.

All Welcome!

You do not have to be a member of the IEEE or of the Consultants' Network to attend. Networking after the meeting is encouraged. There is no charge for admission.

Time: 7:30 PM, Thursday, December 6, 2001.

Place: KDI Triangle, 60 S. Jefferson Road, Whippany, NJ.

Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-0344 or visit our website at www.TechnologyOnTap.org.

NJ Signal Processing Chapter: Robustness Issues in Multimedia Watermarking

On Wednesday, December 5, 2001, the IEEE North Jersey Section Signal Processing Society Chapter will host a presentation on "Robustness Issues in Multimedia Watermarking." The speaker will be Dr. Yun Q. Shi.

About the Talk

Information hiding in multimedia has drawn extensive attention recently because of its potential wide applications ranging from copyright protection to anonymous communications. One of challenges encountered is the robustness of embedded data.

In the first part of the talk, we present a transform-domain-based data hiding algorithm. It embeds data in the DC and low-frequency AC DCT coefficients, or the DWT coefficients in the LL and other subbands according to their visual significance. We model information hiding as a digital communication problem. We study the image data hiding capacity and apply some techniques developed in the communication theory to data hiding such as error correction coding (BCH channel code vs. repetition code), soft-decision vs. hard-decision decoding, and a novel 2-D interleaving technique. With the proposed algorithm, we hide a string of 32 characters (equivalent to 192 information bits, excluding redundant bits used in error correction coding) in a gray image of 256x256x8 bits. It has been demonstrated that the hidden information is perceptually transparent (44 dB in PSNR). The algorithm can successfully resist common signal processing procedures. With respect to the StirMark testing functions, it is shown that our approach can recover the embedded characters with no error under the jitter attack, aspect ratio variation, scaling change, small angle rotation, small amount cropping, and JPEG compression with quality factor as low as 10. But as a transform-domain-based technique, it fails in large angle rotation and the randomisation-and-bending attack.

The second part of the talk focuses on the robustness of hidden information against geometric distortion. Several newly developed major approaches are introduced and commented. Future research is discussed.

About the Speaker

Dr. Yun Qing Shi obtained his BS and MS degrees from Shanghai Jiao Tong University, Shanghai, China, and his MS and PhD degrees from University of

Pittsburgh, Pittsburgh, PA, respectively. He joined ECE, New Jersey Institute of Technology, NJ in 1987. He has been the Chairman of the Signal Processing Chapter of IEEE North Jersey Section since 1996, an editorial board member of *International Journal of Image and Graphics* since 1999, a member of IEEE Circuits and Systems Society's Technical Committee of Multimedia Systems and Applications as well as Technical Committee of Visual Signal Processing and Communications since 2001. He was an Associate Editor of *IEEE Transactions on Signal Processing* from 1994 to 1996, a guest editor of a special issue on Image Sequence Processing for *International Journal of Imaging Systems and Technology* (published in 1998), one of the contributing authors in the field of Signal and Image Processing for the *CRC Press Comprehensive Dictionary of Electrical Engineering* (published in 1998). He is an author/co-author of 100 journal and conference proceeding papers, and a co-author of a book on Image and Video Compression for Multimedia Engineering (published in 1999). He was a senior fellow in Nanyang Technological University, Singapore from 1998-1999.

All Welcome!

You do not have to be an IEEE member to attend.

Time: 3:00 - 4:00 PM, Wednesday, December 5, 2001. Light refreshments will be served at 2:45 PM.

Place: Stevens Institute of Technology, Edwin A. Stevens Hall (EAS), Room 222, Hoboken, NJ. School map: <http://www.stevens-tech.edu/eci/about/map.html>. Directions: <http://www.stevens-tech.edu/tours/directions.html>.

Information: Professor Hong Man, 201-216-5038, hman@stevens-tech.edu.

IEEE Fellow Nominations Due

The deadline for submitting nominations and endorsements for Fellow Grade candidates is March 15, 2002. Fellow kits can be requested from IEEE Piscataway by contacting the IEEE Fellows Committee at fellows@ieee.org or by phone at (732) 562-3843. Detailed information about the Fellow program is available on the ieee.org/fellow web site.

Town Hall Meeting With Representative Rush Holt

The American Institute of Chemical Engineers (AIChE) and its North Jersey Section have arranged a Science and Technology Town Hall Meeting with U.S. Representative Rush Holt (NJ 12th District) on Thursday, December 6 to discuss the role of science and technology in the legislative process and upcoming bills affecting the professional community. Because the 12th District has also has been particularly hard hit by the recent anthrax contamination, Rep. Holt will also discuss bio-terrorism and the government's response.

Attendees must RSVP by December 3, 2001. The cost is \$30 payable by check to North Jersey Section AIChE (covers dinner, gratuity and the meeting). Respond to:

Stephen Smithson, Esq.,
c/o Porzio, Bromberg & Newman, P.C.
100 Southgate Parkway
Morristown, NJ 07962-1997

Tel: (973) 889-4116
Fax: (973) 538-5146

Time: 5:00 PM Cocktails and Registration, 6:00 PM Dinner, 7:30 PM Town Hall Meeting, Thursday, December 6, 2001.

Place: Ramada Inn, 195 Highway 18 South, East Brunswick, NJ, (732) 828-6900, located off I-95 (Exit 9), I-287, and Route 1.

Information: Chris Brantley, Director Government Relations, IEEE-USA, c.brantley@ieee.org.

Upgrade To Senior Member Grade

To become a Senior Member, you need ten years experience. A Bachelors degree counts for three of those years and Master and Doctorate degrees each count for one more year of experience. You don't have to be an IEEE member for ten years. The dues for Senior Members, Members and Associates are the same. New Senior Members will receive an engraved wood and bronze Senior Member plaque from the IEEE.

To get information and an application, contact Don Weinstein, Kulite Semiconductor, One Willow Tree Road, Leonia, NJ 07605-2239, (201) 461-0900 ext 234 mornings, FAX (201) 461-0990. **Please include your mailing address.**

Instructors Wanted!

The IEEE North Jersey Section needs instructors with any combination of the following qualifications, skills and experience (both teaching and consulting experience) to teach Education Committee training seminars in the North Jersey Area. The classes may take place one or two evenings each week for a minimum of 10 classes (2.5 hrs x 10 classes = 25 hrs). Otherwise, classes may be offered on Saturdays depending on IEEE member's request and availability of the venue or place.

Topics of interest:

- Introduction to Java Programming (including RMI, Network Programming, Multi-threading etc)
- Advanced Java Programming (JavaBeans, EJB, J2EE etc.)
- XML, HTML, XHTML, DHTML programming and development
- Visual Basic Programming with Access or SQL Server
- Advanced Visual Basic with ASP, COM, DCOM etc.
- Oracle Database Programming
- Database Administration (Oracle, SQL Server)

The Education Committee is open to comments or suggestions. Resumes should be sent to Bhanu Chivakula at b.chivakula@computer.org. Please contact the undersigned for further information:

- ✉ Dr. Fred Chichester, Chair Education Committee, Voice mail (973) 744-3065.
- ✉ Bhanu Chivakula, Co-Chair Education Committee, email: b.chivakula@computer.org

IEEE Power System Fundamentals CD-ROM Set Available

Here's your chance to have Power System Fundamentals at your fingertips. Dr. Bruce F. Wollenberg, Director of Graduate Studies at University of Minnesota (UM) & Director of the UM Center for Electric Energy, designed and delivered this three and half hour course at the 2001 IEEE Power Engineering Society Summer Meeting in Vancouver, BC, Canada in July.

The IEEE Educational Activities Board production of Power System Fundamentals is now available. For those working in the electric power industry, this two CD-ROM set provides an opportunity to learn or review some of the basics of power system engineering. For those who possess a general engineering background and supervise engineers, it can provide some familiarity with power system engineering terms. It teaches the basics of AC Power Systems, but avoids the use of deep mathematics. Think of it as "Power Systems 101."

Topics include three phase circuits, symmetrical components and sequence networks, power transformers, the per unit system and power flow, symmetrical and unsymmetrical faults, system protection, automatic generation control, and power system transient stability.

Dr. Wollenberg is an IEEE Fellow and is a contributor to IEEE Transactions on Power Systems. "The Power System Fundamentals tutorial was conducted to introduce someone who wasn't a power specialist to understand, in a basic way, how power systems work," said Dr. Wollenberg. "Using this, non-power systems people can 'fill in the gaps' in their understanding."

See

<http://www.ieee.org/organizations/eab/newswire78.htm>

for the full article.

Free How-To Guide For Course Design Available

Free from the Educational Activities Board (EAB): the Telcordia Technologies' Reference Guide for Instructional Design and Development. This on-line only, 'how-to' guide teaches efficient and effective course and tutorial design. Add educational value to your tutorials and courses, which can qualify them for Continuing Education Units.

Based on the Systematic Design of Instruction, by Walter Dick and Lou Chaney, the guide outlines six distinct steps to acquire sound principles of design. These clear steps are displayed on colorful, easily navigated webpages. Learn to:

- Assess the needs of the instructional situation
- Analyze the learners
- Write learning objectives
- Select an instructional strategy that fits your assessment
- Develop materials that enhance your strategy
- Evaluate your work

With each step there is a concise concept outline, tools to aid in the application of the steps, and online references that can add to the material in the outline. Access this guide at

<http://www.ieee.org/organizations/eab/tutorials/refguide/mms01.htm>

Fourth International Conference on Information Technology

CIT 2001

December 20 - 22, 2001 at Gopalpur-on-Sea, India

www.nist.edu/cit2001

For more information please contact
skmohapatra@lucent.com

WOCC2002 Call For Presentations

The Eleventh Wireless and Optical Communications Conference

26-27 April, 2002, Newark Airport Marriott Hotel, Newark, New Jersey, USA

Conference Chair

Charles Kao, former Vice Chancellor, Chinese University of Hong Kong

Conference Organizers

James Hwang, Lehigh Univ.
Chung-Sheng Li, IBM

Technical Program Chairs

T.C. Chiang, Lucent
Cedric F. Lam, AT&T
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- ◆ The Chinese Institute of Engineers - USA (CIE-USA)
- ◆ The Photonics Society of Chinese Americans (PSC)
- ◆ The Chinese Association of Science and Technology (CAST)
- ◆ The Chinese American Academic and Professional Society (CAAPS)
- ◆ The Monte Jade Science and Technology Association (MJSTA)
- ◆ IEEE North Jersey Section

For the last 10 years, WOCC has enjoyed great success in providing a unique opportunity for telecommunication professionals to exchange ideas and to extend their business networks. It offers a forum to discuss both business and technical topics in the telecom industry, especially business opportunities between the USA and Asia/Pacific. The theme of WOCC2002 is **"Riding the Next Wave: Technologies Leading to and Substantiating Telecommunication Industry Recovery."** Until about two years ago, the telecommunication industry had been enjoying tremendous growth. The demand for bandwidth seemed insatiable and opportunities seemed endless. Then came the economic downturn and the burst of the Internet bubble, which had setback the industry including many wireless, optical and multimedia companies.

Nonetheless, the current situation in the telecom industry presents us with both challenges and opportunities. We believe the industry will recover and businesses that survive this turmoil will eventually flourish. This conference examines the technologies and business drivers that will lead the recovery of the telecommunication industry. Abstracts of presentation are solicited in areas of multimedia, wireless and optical communications. Presentations can be made in one of the following (but not exclusive) forms:

- reports of new technological and scientific findings and results
- reviews, tutorials and technology surveys
- field trial and new technology deployment results
- economic studies and analysis
- business proposals and presentations

Submission Deadline: 15 January, 2002

Authors will be notified by **March 1, 2002** about the acceptance of their presentation.

Format: Include both abstract and bio of speaker on one page, 8.5"x11", 1" margin, font size>10. Also, title of talk, name affiliation, and e-mail address.

Send Microsoft Word file to:

tchiang@lucent.com

cflam@ieee.org

Shih-Ping.Liou@scr.siemens.com

Please refer to: <http://www.wocc.org/> for details of page formatting and other information about WOCC2002.

Electric Power Cables

A One-Day IEEE Seminar

Presented by the North Jersey Section IAS and PES Chapters

December 7, 2001

9:00 AM to 3:00 PM

The PES & IAS Chapters will sponsor a daytime seminar on the design, operations, testing, electric characteristics and failure modes of medium and low voltage electric power cables. Topics to be covered in the session include:

- 1) Conductor Physical and Electrical Properties – Copper & Aluminum materials
- 2) Insulation Systems – Low Voltage & High Voltage Cables
- 3) Cable Shielding – Tapes, Wires & Other Options
- 4) Jacket Materials
- 5) Cable Standards & Specifications
- 6) Cable Characteristics – Resistance, Inductance, Capacitance, Stress Distributions
- 7) Ampacity Calculations – Dielectric Loss, Conductor Loss & Shield Loss
- 8) Cable Splices & Terminations

The seminar leader is Lawrence Kelly who has an extensive career in the wire and cable industry. His background includes cable manufacturing, research and engineering assignments. He served as Director of Engineering Development at Okonite Cable. He is past Chairman of the IEEE Insulated Conductor Committee (ICC) and a voting member on the National Electric Code (NEC). He has also taught Cable Engineering Courses at UCLA and the University of Wisconsin.

Subject matter covering cable splices and terminations will be presented by Mr. Patrick Lyons. Mr. Lyons graduated with BSEE & MSEE degrees from Purdue University, majoring in Power Engineering. He has worked in Application Engineering and Product Management at Raychem Corporation, and is currently the Regional Sales Manager for Tyco Electronics Energy Division.

LOCATION:	GPU Energy, 300 Madison Avenue, Morristown NJ. Directions: Route 287 to Route 124 Exit in Morristown. Follow signs toward Madison, GPU is about 1.5 miles on the left side.
COST:	Registration fee for the seminar prior to November 15 th is \$150 (non-IEEE members), \$100 (IEEE Members), and \$25 (Students with valid ID). Registrations received after November 15 th must include a late fee of \$25.00. The Seminar fee includes lunch and break refreshments.
INFORMATION:	R. V. Rebbapragada, Washington Group, International, 510 Carnegie Center, Princeton, NJ 08540, phone 609-720-3209, e-mail r.rebbapragada@ieee.org

REGISTRATION – Electric Power Cables, December 7, 2001

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