Meetings

Lasers and Electro-Optics
Thursday, May 15, 1997
7:00 p.m. Refreshments
7:30 p.m. program
NIST, Room 1107
325 Broadway, Boulder, Colorado

Speaker
Gary C. Bjorklund
President-Elect
Optical Society of American and Director, Advanced Development Optivision, Inc.

"Optics in the Information Age"

The role of optics in the modern age of information is already of profound importance, yet the full potential of light to transport, store, and manipulate information has just begun to be tapped. In this talk, prospect for transparent "all-optical" switched communications networks, laser disk and holographic optical data storage, optical control of RF phased array antennas, and free space digital optical interconnects using smart pixels will be discussed. Several specific examples from leading industrial and academic laboratories will be presented.

Contact Andy Aust at 497-3942 or aust@boulder.nist.gov for additional information.

Joint Antenna & Propagation/Microwave Theory & Technology, Geoscience & Remote Sensing Chapter and Reliability Chapter, and Aerospace and Electronics Chapter, and Computer and Information Theory Chapter
Wednesday, May 21, 1997
Social: 6:00-6:30 p.m.
Dinner (optional, $16): 6:30-7:15 p.m.
Awards and Speaker: 7:15 p.m.
Radisson North Graystone Castle
83 E. 120th, Thornton
At I-25 & 120th

Speaker
Dr. Kevin Trenberth
Head of the Climate Analysis Section
National Center for Atmospheric Research

"Evidence for Human Influence on Climate"

More than fifteen years of satellite and ground based measurement of climate yield apparently inconsistent evidence on the subject of global warming. Dr. Trenberth will speak to the subject of human impact on climate change, its causes, methods of measurement of change, and discuss NCAR's recent analysis of the apparently different conclusions that are being drawn from earth and satellite measurement.

Call Marilyn Peterson at PSCO for reservations by Friday, May 16, (303) 571-7615. Please make reservations whether or not you will be attending dinner, in order that sufficient space may be reserved.

Joint Power Engineering /Industry Applications
Thursday, May 15, 1997
Refreshments: 5:30
Program 6:00
Coors Engineering Building
Maps are available from Barbara

Speaker
Tony Jefferson

"Adaptive VAR Compensation"

Call Barbara Linton at 388-6322 for more information, reservations, and maps to the facility.
“There’s GOLD in Denver!”
by Clifton J. Alston, Vice Chair, Member Services

Valuable, Professional Tools for Graduates Of the Last Decade.

The Denver Section is establishing a Graduates Of the Last Decade (GOLD) program to better support all IEEE members in our section. The program’s purpose is to represent the interests of the beginning engineer/scientist by promoting services and activities directed toward the needs of young professionals, students poised to graduate as well as the recent graduates.

The IEEE has noted that many student branch member graduates allow their membership to lapse after graduation. A relevant quote describes IEEE’s approach to this challenge:

“The GOLD program has been established to provide the framework and tools for the Sections’ use in retaining this valuable group of members. By identifying those who make up this affinity group, determining their needs and expectations, and ACTING to meet those needs and expectations, the goal of GOLD is to add such value to the IEEE membership that the recent graduate finds it to be an indispensable tool.”

Valuable, professional tools include:
- Radio Frequency Integrated Circuits Symposium, 1997 IEEE.
- International Microwave Symposium, 1997 IEEE/MTT-S.
- Nuclear & Space Radiation Effects Conference, 1997 IEEE.

These activities, organized to present the distinguished work of technical professionals, can become unique opportunities to select one’s initial career path. Other programs exist which closely share GOLD’s theme. The recently held 2nd Young Engineers Forum provided a forum “geared toward the engineer with 0-10 years of experience.” Its topics ranged from opportunities in emerging technologies to the MBA option to a Q & A session via live satellite broadcast.

These topics of interest as well as future local conferences need added advertisement designed to reach the young engineers and scientists among us. Our section is attempting to satisfy this need through the executive committee until a Denver Section GOLD committee is established. Member Services shall provide the program resources while this committee comes to life. To this end, our first step is to select a volunteer to chair this new committee and lead our efforts in this service to our members. If you would like to volunteer your time and effort to building our GOLD program in Denver, please contact our Membership Chair, Fareed Hassan, at (303) 843-2347.

Become the First GOLD Program Leader in Denver!

Second Annual Wireless Communications Conference
The Regal Harvest House, Boulder, Colorado August 11-13, 1997

The success of last year’s Wireless Communications Conference demonstrated the appeal of a symposium focused on technological advances in the commercial wireless industry. The WCC will be back in 1997, once again offering a broad and integrated perspective in a single track, providing an exposure to the big picture as well as the critical details. Accompanying the technical sessions will be a half-day Workshop on “Simulation Methods for Wireless Subsystems,” an evening Panel Session on “Identifying the Needs of the Wireless Customer,” and a product Exhibition. The program breadth is consistent with the wide interests of its co-sponsors:

- IEEE Microwave Theory and Techniques Society (MTT-S); IEEE Communications Society; International Microwave and Technology Society (IMAPS); National Institute of Standards and Technology (NIST); Institute for Telecommunications Sciences (ITS).

Technical presentation will cover these wireless technologies:
- Systems: FCS, cellular, paging, wireless LANs, LMDS, etc.
- Active Components
- Passive Components
- Packaging
- Antennas, propagation, compatibility, and interference
- Measurements

For Conference information, or to arrange an exhibit, check the Web site at http://www.boulder.nist.gov/wcc or contact the General Chair: Dr. Roger B. Marks, National Institute of Standards and Technology, phone: (303) 497-3037; fax: (303) 497-7050 or email: r.b.marks@nist.gov.
Patent Perspectives
by Bill Vobach

One common pitfall faced by first-time inventors is the inadvertent loss of foreign patent rights due to publication or public use of their invention before they file a patent application. First, understand that a U.S. patent is essentially limited in its territorial scope to the United States. To prevent others from making and using your invention in Germany, for example, you would want to obtain a German patent. Therefore, it is important to be aware of the strict rules of foreign patent law as well as U.S. patent law in order to protect your inventions.

In a large number of foreign countries, one such rule is that you may not publicly disclose your invention prior to filing a patent application. For example, displaying and selling your invention at a trade show will often be deemed a public disclosure. In addition, publishing an article in a scientific journal likely will be deemed a public disclosure. Even showing the invention to a limited audience (e.g., a sales presentation) might be deemed a public disclosure. Therefore, it is important to shore up your foreign rights by either: 1) keeping the invention secret and exploiting it as a trade secret; or 2) filing a patent application before making any disclosure.

In regard to U.S. patents, a much different rule controls. You will typically have an entire year from when the invention is first commercially exploited (e.g., by it being offered for sale) or from when it is publicly disclosed (e.g., by you or someone else publishing it in an article) before you must file a U.S. patent application. Therefore, you have time in which you may gauge the commercial success of the invention before deciding to pursue a patent. Of course, you may always file your application in the U.S. before making any disclosure.

In addition, if you do file a U.S. application before any public disclosure or commercial exploitation of the invention, you can often rely on that U.S. application date to file for foreign patents approximately one year later. This is because a patent treaty among the U.S. and most of the economic powers of the world. You will be limited, however, to countries that participate in the treaty. Any country not participating in the treaty will likely require that you file your application in that country before any public use.

If you feel that you must disclose your invention to a limited audience, one stop-gap measure that you should try to employ is a confidence and non-disclosure agreement. Basically, this agreement requires that the party to whom you are disclosing your invention will keep it confidential. While this is not a cure-all, it can be useful in preserving some of your rights.

If you do face such a situation, be cautious. Unfortunately, law is not nearly as rational as engineering. So, it is a good idea to consult your patent attorney before making any disclosure.

* Bill Vobach is an electrical engineer and patent attorney with Santangelo Law Offices in Fort Collins. The opinions expressed in this column are those of the author and should not be attributed to Santangelo Law Offices. This column is not intended as legal advice but rather is intended to merely bring issues to the attention of the reader. Therefore, the reader should seek advice from his/her attorney in order to address a specific factual situation.

Microwave Week comes to Denver
1997 marks the historic return of the IEEE MTTS-S International Microwave Symposium (IMS) to Colorado. As a major telecommunication hub of the wireless, cable TV, and spaceborne TV industries, Denver is a great reflection of the new, commercial face of the RF/microwave industry. A comprehensive program including hundreds of technical presentations and dozens of workshops, as well as the largest exhibition in the industry, will review the latest advances in RF and microwave technology, with particular emphasis on wireless communications. Ten thousand registrants attended last year's symposium! It all comes together this week of 8-13 June in the Colorado Convention Center. So, come join us at the world's foremost microwave technical conference and exhibition!

Technical Workshops
The 1997 IMS provides an exciting and timely workshop program to augment the continuing education of engineering professionals. These workshops offer the opportunity to interact with specialists during extended full-day and half-day sessions, as well as over lunch and during refreshment breaks. This year, you can choose from among 24 workshops that range in format from tutorials on emerging technology to working forums where experienced professionals examine critical issues within their fields. In addition to hot technical areas such as point-to-point television distribution and personal communication technology, this year we introduce workshops to cover business issues and teach timely workshops. You will find new workshops on FCC procedures, emerging business issues in the rapidly changing microwave industry, and training for World Wide Web site development. See the back side for more details.

Plenary Session
The 1997 IMS Plenary Session highlights two telecommunications infrastructures that will revolutionize the microwave/RF industry. Mr. Bernard Bossard, Chief Technical Officer and co-founder of CellularVision Corporation in New York City, is the inventor of the local multipoint distribution system (LMDS), a 28 GHz multi-channel broadband wireless cellular television service. He will address the opportunities open to this technology, which many experts predict to evolve into a primary means of high-speed data, voice, video and into and out of the home. Pioneering a spread spectrum personal communications system (PSC) in the same city is Omnipoint Corp., whose Chief Scientist, Mr. Robert Dixon, will also address the Plenary Session. Mr. Dixon, author of the key text on spread spectrum technology and a well-known lecturer, will discuss the impediments to real technological innovation in PCS in a talk posing the question, "Will the Real PCS Please Stand Up?" The IMS Plenary Session, on Tuesday morning, June 10, is a rare look into your microwave future.
Charterization of Broadband Telecommunications Components & Systems

In conjunction with the 1997 IEEE MTT-S International Microwave Symposium (IMS), the Automatic RF Techniques Group will hold its 49th Conference at the landmark Brown Palace Hotel in Denver, Colorado, on Friday June 13, 1997. ARFTG has a tradition of the best in RF technology, with a focus on measurements. For twenty-five years, RF has been our middle name!

With all of the major players in RF technology gathering at high-bandwidth, two-way digital networks to homes and businesses, broadband telecommunications is becoming one of the hottest areas for microwave and RF technology. Whether based on wireless or coaxial transmission, these systems demand RF components and subsystems of exceedingly high performance. The 49th ARFTG Conference will highlight these technologies, with particular attention on cable television and the new 28 GHz local multipoint distribution systems (LMDS). Parallel to the single-track Technical Session, an accompanying exhibition features the latest in instrumentation (please contact the Chair for information on exhibiting).

Session A: CATV 1 (8:30-10:30 AM)
- RF Measurements for Broadband Networks (Keynote Address), Syd Fluck (Hevel-Lackpack Co., Santa Rosa, CA)
- Framing and Measuring Uplink Cable Plants with Digital Signal Analysis Techniques, Tom Williams (Holtzmann Engineering, Longmont, CO)
- Performance of QAM on a Hybrid Fiber-Coax CATV System, C. Bianchi (Sarner Associates), G. Lentz (Lentzeng Technologies), and R. Welter (Cablevision NY)

Session B: CATV 2 (10:30 AM - NOON)
- CATV Tap and Splitter Linearity Improvement for Broadband Information Networks, M.W. Goodwin (Lentzeng Technologies, N. Andover, MA)
- Characterization of Cable Amplifiers for Broadband Network Applications, J. Steel, A. Parker, and D. Skellern (Macquarie University, Australia)
- Optimal Control of Intermodulation Distortion in Hybrid Fiber Coaxial CATV Systems, Gary D. Alley and Yen Long Ku (Lentzeng Technologies, N. Andover, MA)
- CATV topic to be announced

Workshops

Workshops are scheduled on Friday June 13. Please contact the Chair for information on exhibiting.

Advanced fees are $80 for Full-Day and $50 for Half-Day. Prices include meals, breaks, and a bound set of notes.

For full details, visit us at http://www.boulder.nist.gov/ims/arftrg

http://www.boulder.nist.gov/ims/arftrg
Advance Conference Registration

1997 IEEE MTT-S MICROWAVE WEEK EVENTS
June 8–13, 1997 + Denver, CO + IMS + RFIC + ARFTG

Each Conference Attendee must submit a separate registration form. A copy of this form may be used. The deadlines for advanced registration is May 12, 1997. Afterwards, on-site fees apply. On-site fees will be approximately 30% higher.

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Tues. Wed. & Thurs.
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+ $( ) ☐ IMS Digest Single-Topic Registration ☐ IMS Digest No Digest ☐ $105 ☐ $105

+ Qualifying Student, Resident, Life Member (No Digest) ☐ $40 ☐ $45 ☐

+ RFIC Symposium
Saturday, Monday & Tuesday (includes RFIC Recitation and Digests)

+ ARFTG-AUTOMATIC RF TECHNIQUES CONFERENCES
Excludes IMS Digest, ARFTG Digest and ARFTG Exhibition

+ ARFTG Member ☐ $130 ☐
+ ARFTG Non-member ☐ $150 ☐
+ Qualifying Student, Resident ☐ $65 ☐

+ Additional Dues
IMS Digest Qty. ☐ $375 ☐ $50
IMS CS-ROM Qty. ☐ $40 ☐ $50
RFIC Digest Qty. ☐ $135 ☐ $50

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(nondigest) Qty. ☐ ☐ $45 ☐ ☐

+ PANEL SESSIONS (Excludes box lunch)
PA: Portable Power Amplifiers ☐ $15 ☐
PB: Wireless Personal Networks ☐ $15 ☐
PC: Commercial Application IC Reliability Needs ☐ $15 ☐
PD: Packaging for Optical/Microwave Modules ☐ $15 ☐
PE: Low Cost Packaging ☐ $15 ☐
PF: RF Identification Tag and Data Cards ☐ $15 ☐

+ RUMP SESSIONS (Excludes beverages and hors’ d’oeuvres. Tuesday 7-9 pm)
RH: HF to UHF Design and Applications ☐ $30 ☐

The only acceptable forms of payment are check, money order, MasterCard or VISA.

PISCATAWAY, N.J., 15 Jan. -- The Institute of Electrical and Electronics Engineers, Inc. (IEEE) is introducing a slogan to help provide a stronger identity for the Institute among its members and customers. “IEEE Networking the World (SM)” will soon begin appearing on many communications from the Institute. The slogan was approved by the IEEE Board of Directors in December.

The new slogan underscores the ability of the Institute’s members to share technical and professional information by virtue of their bond as colleagues in the world’s largest technical professional society. This bond includes activities such as developing standards, taking advantage of opportunities for career enhancement, and building professional and personal relationships with others in their chosen field.

“Networking the World” captures the essence of the IEEE,” said 1997 IEEE President Donald D. Alexander. “With more than 300,000 members in 150 countries, the Institute has become a vast global network of people, conferences and technical meetings, print and electronic publications, standards, and many other activities that enable members to work even more effectively in an increasingly borderless engineering community.

“Through this network,” he continued, “engineers worldwide can easily exchange technical information, develop professional interests and expand skills to help ensure themselves a long and vital engineering career.”

The IEEE Corporate communications and Creative Services departments will soon release guidelines on the proper use of the slogan for presentations, publications, Internet pages, letterhead and other materials. The guidelines will be distributed to key entities and volunteers, as well as to staff. The use of “IEEE: Networking The World” will be encouraged wherever appropriate and as quickly as economically feasible within the corporate IEEE infrastructure. Plans call for its inclusion on the IEEE Web site, in IEEE Spectrum, The Institute, Staff Circuit and other publications, on corporate letterhead and envelopes as well as the postage indicia, among other places.

For additional information contact Terry Burns, IEEE Marketing, (908) 562-5520 and Helen Horwitz, IEEE Corporate Communications, (908) 562-6621.

IEEE to Network the World With New Slogan

National Job Listing Service

Travel the Information Superhighway to Your Next Job!

IEEE-USA has developed an electronic job-listing service that gives IEEE members free information on job openings in every region of the country.

To obtain current job listings, set your web browser to URL www.ieee.org/jobs.html or send a message to any of the following e-mail addresses (no subject line or text message is needed):

Region 1: info.ieeeusa.jobs@r1.ieee.org
Region 4: info.ieeeusa.jobs@u4.ieee.org
Region 5: info.ieeeusa.jobs@r5.ieee.org
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