



Cleveland

Contact

Publication of the Cleveland Section of the Institute of Electrical and Electronics Engineers.

◆ **IEEE CLEVELAND**
 ◆ **CHAPTER**
 ◆ **(Region 2 - West)**
 ◆ **AWARDS BANQUET**
 ◆ **MAY 17, 2000**
 ◆ **AT BUCA DI BEPPO**
 ◆ **RESTAURANT**

◆ *by Carl J. Dister*

◆ The honor of your presence is requested at
 ◆ the annual IEEE Awards Banquet Dinner, to
 ◆ be held this year on May 17th, at Buca di
 ◆ Beppo Restaurant, Westlake, OH. The
 ◆ IEEE Cleveland Section is delighted to have
 ◆ Sheila Bailey as our guest speaker. Ms.
 ◆ Bailey will present a lively and entertaining
 ◆ talk on "Mars Exploration."

◆ Cost of the dinner will be \$15 per IEEE
 ◆ member, \$15 per IEEE guest and \$5 for
 ◆ IEEE student members.

◆ There will be socializing at 6:30 p.m.,
 ◆ dinner at 7:00 p.m. Dr. Bailey will speak
 ◆ from 8:00 to 8:30, followed by presentation
 ◆ of the awards.

◆ Buca di Beppo specializes
 ◆ in Southern Italian Cuisine. (Check out their
 ◆ website at www.bucadibeppo.com.) It is
 ◆ located at 23575 Detroit Road at the
 ◆ southeast corner of the I-90/Clague Road
 ◆ Interchange, slightly east of Clague Road.

◆ Please e-mail Carl Dister at
 ◆ Carldister@ieee.org or phone him at (440)
 ◆ 255-2977, x. 739, for reservations and
 ◆ additional information. It won't be a party
 ◆ without you!

Millennium Medal Winners To Be Honored at the Awards Banquet

by Jerry Lucak

The following nominees from the Cleveland Section have been awarded an IEEE Third Millennium Medal by the National Awards Committee:

Richard Carlson has been active in the Cleveland Section for more than 20 years. He started as our representative to the National Engineers Week Committee, a position he still holds. Dick is also a past Section Chairman, past CTSC representative and has held other committee positions. Dick concluded a 36-year engineering career with Centerior in 1993, but continues to volunteer his time to various professional organizations.

For more than 25 years, **Dr. Pieter Cath** directed engineering groups at Addressograph, Keithley, Ohio Nuclear, and General Electric. He has published many articles and hold 14 patents. Dr. Cath is now an independent consultant in instrumentation and software. A Life Senior Member of IEEE, Pieter is a past Section Chairman and served as Program Chairman for our 1994 Technical Symposium. He was selected Cleveland Section Engineer of the Year in 1998.

Herbert H. Heller, best known as H3, started his career at Bird Electronics after graduation from Case Institute of Technology. He worked there with Ray and Bruce Bird until his retirement. Herb joined IRE (the predecessor to IEEE) and has held numerous positions including Cleveland Section Chair and Region 2 Director. He is currently Ohio Area Chair for Region 2. A strong interest in music led him to write a monthly column 'Of Sound and Such' in the Section newsletter for many years.

Vincent Lalli has worked at NASA Lewis since 1963, where he is now responsible for Reliability & Failure Analysis. An expert in reliability engineering, Vince has authored numerous papers and tutorials on this subject and participated in technical symposia worldwide. Vince has served as adjunct professor at both CWRU and CSU. He received the first Cleveland Section Engineer of the Year award in 1990, and served as Section Chairman in 1992. An IEEE member for more than 40 years, Vince continues to lead our most active local chapter (MIREA).



IEEE Cleveland Section CHAIRMAN'S COLUMN

Haven't Received the Cleveland "Contact" Lately?

by Allen Morinec

The IEEE Cleveland Contact has not been regularly mailed through the United States Post Office since last year. It is posted electronically on our Section's Web page, <http://www.ewh.ieee.org/r2/cleveland/> to keep our finances under budget. If you have not been receiving a newsletter posting or information from us, it is because we do not have your correct e-mail address. Please update the Cleveland Section and IEEE National with your correct e-mail address. To do so, you must contact our Database Manager Jim Sens at jdsens@infinet.com or 216-642-1230 ext 1287. You can obtain a lifetime e-mail alias such as jsmith@ieee.org. This can be done through <http://www.ieee.org/membership/keyurls.html>. If you do not have access to the Internet and need to receive a hard copy or faxed newsletter, contact IEEE Cleveland Chair Allen Morinec at powerquality@ieee.org or 330-384-2559. Do not notify the newsletter editors of your e-mail address; they cannot update the database.

The IEEE Cleveland Section would like to give a warm welcome to two new Cleveland Section volunteers. Ray Heintel is our new Webmaster. Ted Takacs is our new Representative for the Cleveland Technical Society Council (CTCS).

Is anyone interested in having an IEEE Family Picnic this summer? Maybe we could all meet at a water park like Pioneer Waterland or someplace similar. Contact Allen Morinec at powerquality@ieee.org if you have an idea or would be interested.

Please attend our Awards Banquet on May 17th. It has always been a lot of fun, a great way to network and an excellent night out. The IEEE is focusing on Industry Support for our members, which may include paying dues, using office facilities, helping with travel expenses. Next year, we will be developing additional awards for outstanding industry support.

Region 2 Dayton Section is hosting the National Aerospace and Electronics Conference October 10-12 in Dayton. A call for Papers is out, with abstract due by July 1, 2000. Contact <http://www.naecon.org> or Barbara Moore at 937-667-4972 or Lidaray@siscom.net. The 2001 IEEE Power Engineering Society Meeting will be held in Columbus. Let's see if our members can participate.

Mr. Ray Muzic from CWRU and University Hospitals is interested in forming a Medical Imaging Chapter. Please contact Ray at (216) 844-3543 or muzic@ieee.org if you have an interest in this fast growing field.

Mr. Vincent Lalli from NASA is interested in holding the IEEE AUTOTESTCON Conference in Cleveland in 2004 at the IX center. Please contact him for more information.

IEEE Cleveland Section Grants Science Fair Awards At the 2000 Northeast Ohio Science & Engineering Fair

by Jerry Lucak

The 2000 Northeast Ohio Science and Engineering Fair was held at Cleveland State University on March 7th. The IEEE Cleveland Section granted three Special Awards for the best projects in Electricity, Electronics or Magnetism.

This year's winner in the 11th-12th grade group is Christine Hlavka, a junior at Beaumont School. Her project was "The Rust Stops Here: A Study of the Effect of Electricity on Exposed Steel." She showed a reduction in corrosion under certain conditions when an electric current was applied. This project expanded on an idea Christine developed for last year's Science Fair. She is interested in the sciences, particularly chemistry, and hopes to work as a NASA intern during the summer.

Alana Robbie, a freshman at Lakewood High School, captured the award in the 9th-10th grade category. Her project, "Measuring the Earth's Magnetic Pulse," used a laser pointer and small permanent magnets to detect slight variations in Earth's magnetic field. Alana based this on an article in "Scientific American," using additional information from scientists she contacted on the Internet. This was her first appearance in the Science Fair, and she plans to develop the idea further for next year.

An experimental comparison of CMOS Logic vs. Potentiometer won the 7th-8th grade category for Julia Gurary of Solon. She picked this project because she likes learning new things. After some initial research, she contacted local companies to find a mentor to help her wade through the technical terminology. Having breadboarded and tested these circuits, she expects to work on a different topic for next year's Fair.

There were more than 500 excellent exhibits in this year's competition. Our three winners showed significant initiative, presented well organized reports and displayed the tenacity to keep working when initial results were disappointing. Each will receive a cash award and a Certificate of Recognition. Congratulations to our winners and all who participated in this worthwhile educational experience.



INVENTION PROMOTERS

by Michael W. Garvey

Eureka! You've invented a better rat poison; it's harmless to humans and fatal to varmints. Now, all you have to do is get a patent and potential licensees will flood the road to your garage. Ah, if only it were that easy!

Selling or licensing an invention is like starting a small business. Rarely do licensees come offering to pay an inventor royalties. More often, the patent owner must seek out licensees and market his invention to them. But even done this way, success is rare. The inventor is much more likely to succeed by manufacturing and selling the product himself.

The key elements to making money from an invention are: a good concept, a good patent, a good product, and good marketing. Thus, a patent is not the only, nor the most important, part of profiting from an invention.

There are many people who can help the individual inventor with different aspects of this process. Among these are "invention promoters" who purport to provide some or all of the assistance necessary to turn an invention into cash.

Some invention promoters might provide valuable support services to the inventor who will commit his time and energy to the success of the invention. On the other hand, many of these invention promoters are fly-by-night operations that take inventors' money and disappear. More commonly, they provide legitimate services to the inventors, but the services are not what the inventor thinks they are, or the costs are unreasonably high. For example, to "help" an inventor license an invention, an invention promoter might simply provide a confidential disclosure agreement form for the inventor to use when approaching potential licensees. To help the inventor manufacture his product, the promoter might simply provide a list of contract manufacturing firms. The promoter might do a patentability search that is less than thorough, possibly more expensive. The invention promoter might file an application and obtain a design patent for an inventor without explaining how it differs from a utility patent.

To combat the illegitimate invention promoters, Congress included an "Inventors' Rights" section of the American Inventor Protection Act (AIPA). Beginning at the end of January 2000, the AIPA requires invention promoters to disclose their past success rates. Under the AIPA, it is also easier to sue crooked invention promoters; the award to a prevailing inventor can be much greater than in the past.

In addition, the AIPA requires the Patent Office to receive and publish complaints against invention promoters. The Patent Office has issued interim procedures for handling these complaints.

Complaint forms are available from the Patent Office at "www.uspto.gov". Any complaint against a promoter will be forwarded to the promoter, who will have an opportunity to respond. The Patent Office does not investigate invention promoters and will not act on behalf of inventors.

There will always be some people who prey on the naiveté and optimism of small inventors. I hope that this new law will deter some of them.

Michael Garvey is a patent attorney with Pearne, Gordon, McCoy & Granger LLP in Cleveland.

IEEE IAS CLEVELAND CHAPTER (Region 2 - West) Upcoming Events in 2000

by Carl J. Dister

The Cleveland Section of the IEEE IAS Society will hold the following meetings throughout the rest of this year. Meetings take place at the Hofbrau Haus restaurant, 1400 East 55th Street, Cleveland, OH, from 11:30 a.m. to 1:00 p.m. Please note: lunch is available at the Hofbrau Haus for \$9.00 (German Buffet) starting at 11:30 a.m. Guest speakers will present from 12:00 to 12:30 p.m. A question and answer session runs from 12:30 to 1:00 p.m. For additional information, contact Carl Dister, IEEE IAS Section Chairman.

Date: 5/17/2000

"Understanding the Mechanical Forces Acting on an Induction Motor and Load Resulting from Operation Under Inverter Power," with Ed Labrush from Dynacor.

Date: 7/19/2000

"Replacing Microcontrollers with Logic Devices for Modern Power Electronic Products," presented by Brian Avsec from Altera.

Date: 9/20/2000

"Update on High Power, High Speed Switched Reluctance Generators," with Dr. Howard Jordan.

Date: 11/15/2000

"Partnering: IEEE Cleveland Section Efforts to Promote Industry/University/IEEE Cooperative Efforts," presented by Carl J. Dister, IEEE IAS Chairman, Cleveland Section.



Cleveland Engineering Society (CES)

April Events for 2000

5 Breakfast seminar featuring Betsy Yingling, planning engineer at Northeast Ohio Regional Sewer District (NEORS), speaking on "Doan Brook Watershed Study," 7:30 to 9 a.m. at the Cleveland South Hilton at I-77 and Rockside Road. Cost: \$20 for CES members, \$30 non-members, \$25 affiliate members, \$12 student members, \$150 for a table of eight. Sponsored by CES Environmental Division.

18 Luncheon forum featuring Sharon Rutledge, research engineer at NASA Glenn Research Center, speaking on "Artwork Restoration" and NASA's involvement in restoring artwork, 11:30 a.m. at Spaghetti Warehouse in Cleveland Flats. Cost: \$12 CES members, \$13 affiliate members, \$15 non-members, \$10 student members. Sponsored by CES Senior Division.

19 Project Management course featuring Robert Peterson, Associate Professor of Business Management at Kent State University, speaking on numerous aspects of project management, including "Roles and Functions of a Project Manager," "Developing an Effective Project Team," "Determining the Project Statement" and much more. Includes four classes: April 19, April 26, May 3 and May 10. All classes meet from 6 to 9 p.m. at Unified Technologies Center, 2415 Woodland Ave., Cleveland. Cost: \$50 CES members, \$70 non-members, \$60 affiliate members. Sponsored by CES Educational Division.

25 MoT seminar featuring Jeff Glass.

For more information or to register for any of the above events, call the Cleveland Engineering Society (CES), (216) 361-3100, or contact us online at www.cesnet.org.

The Cleveland Engineering Society is pleased to share with our Section these additional events of interest. Please contact the person listed at the end of each paragraph for more information.

April 1 – Construction Industry Service: Construction seminar, "Preventing Mobile Crane Failures," featuring Ron Kohner, President of Landmark Engineering Services, Ltd., 8 a.m. to noon at Holiday Inn at Rockside Road in Cleveland. Program includes breakfast at 7:30 a.m. Cost: \$60 Management and Journeymen, \$30 Apprentice, \$160

Non-contributor. (For more information, contact Jim Brown at 216-398-9860.)

April 3 through April 8 – Ohio Department of Development: Home trade show and conference, "Affordable Comfort," featuring short courses and information on designing, building, remodeling, repair, and diagnosis of homes for comfort and safety. The show will be held at the Hyatt Regency in downtown Columbus. (For more information, call Aileen Gow at 517-646-6354, or email AiGow@aol.com.)

April 6 – Smart Solutions, Inc.: "Safety in the Workplace Seminar," featuring a presentation on web enabled systems for equipment isolation, including the process of building the isolation database. 7:30 to 9:30 a.m. at 3755 Orange Place in Beachwood, OH. Cost: Free. (For more information, contact Rajiv Mukerji at (216) 765-1122.)

April 8 – National Society of Black Engineers: Meeting, 11 a.m. to 1 p.m. at Maple Heights Regional Library, 5225 Library Lane, Maple Heights. (Contact Toni Spring at 216-932-1340 for more information.)

April 11 – American Welding Society: Plant tour of Herron Testing Lab. (Contact Lisa Rini of Lincoln Electric at 216-383-4191 for more information.)

April 19 – American Society of Certified Engineers of NE Ohio: "Spring Fling" dinner meeting, location TBA. Festivities start at 6 p.m. with cash bar; dinner begins at 7 p.m. (For more information, contact Roy Sanderson at 440-546-3310.)

April 25 – Cleveland Society of Professional Engineers: Monthly board lunch meeting, 11:30 a.m., restaurant TBA, followed by 1 p.m. tour of Eastlake Power Plant. (For more information call 440-884-3100.)



MILLENNIUM MEDAL WINNERS *Continued from front cover*

Charles Lawrence became involved in the Cleveland Section in 1982, when he served as a CSU student branch officer. He works in the Transmission Planning department of First Energy Corporation, where he has performed various engineering functions for the past 18 years. Chuck has served as Cleveland Section Chairman and Power Section Chapter Chairman. He coordinated Educational Activities for the Cleveland Section for five years and received the Section Engineer of the Year award in 1999.

Gerald Lucak is a graduate of both CWRU and CSU engineering programs. After 20 years with Keithley Instruments, spearheading the development and marketing of high tech instrumentation, he is now involved in a local startup venture to manufacture cable TV equipment. Jerry has been an IEEE member for more than 30 years, and was Cleveland Section Engineer of the Year in 1992, and Chairman in 1994. He regularly participated in student branch activities and continues to volunteer in other areas for the Section.

Allen Morinec is a specialist in power quality at First Energy Corporation. He frequently lectures on power quality and the National Electrical Code for both First Energy and local trade groups. A registered Professional Engineer (P.E.), certified electrical safety inspector, and licensed electrical contractor, Allen participated in the development of four IEEE power quality standards. He received the Cleveland Section and National Engineers Week Young Engineer of the Year Award in 1995. Allen has headed the Power Engineering Chapter here since 1992, and is currently Cleveland Section Chairman.

For many years, **Michael Patena** served as Professional Activities coordinator for the Cleveland Section. More recently, he was Region 2 Officer Training Specialist. Mike received a US Activities Board (USAB) Citation of Honor in 1995. He is

employed by First Energy Corporation.

Dr. Stephen Phillips joined the faculty of Case Western Reserve University in 1988, as assistant professor in the EEAP department. He currently is an associate professor and director of the Center for Automation and Intelligent Systems Research. His research interests include feedback control, microelectromechanical systems, robotics, aerospace and manufacturing. Stephen is a senior member of IEEE and has served the Cleveland Section as secretary, treasurer, vice-chair, chair, education coordinator and CWRU student branch counselor.

Dr. William Schultz is a BS, MS & PhD graduate of CWRU's EEAP program. He worked there as a design engineer, assistant professor and associate director of the Center for Automation & Intelligent Systems before starting Schultz Engineering in 1988. Bill headed the IEEE Edison Lecture committee for three years, served as Cleveland Section Chairman in 1998, and is Cleveland Section Engineer of the Year 2000. He continues to teach at CWRU and volunteers at the Region level in various functions, primarily to increase student participation in IEEE.

Warren Wickes retired from Centerior after 39 years in their engineering department. While at Centerior, Warren also taught engineering courses for 25 years at Cuyahoga Community College. After retirement, he became a part-time instructor at Cleveland State University. Warren served two consecutive terms as Section Chairman, from 1987-1989. He has held several other appointed and elected positions at the Section level, including Employment Assistance coordinator. Recently, he has worked in a similar capacity for Region 2.

These awards will be presented at the Section's May Awards Banquet. Please join us in honoring our members on this day.

COMPUTER SOCIETY MEETINGS

by Allen Morinec

The Computer Society meets each month in conjunction with the SPIN Group on the first Wednesday of each month at Mather Mansion at CSU. Contact Steve Belovich at (216) 267-1881 for details.

Next IEEE Executive Meeting

by Allen Morinec

The next IEEE executive meeting will be held on Wednesday, April 19th, at 6:00 p.m. at the Flat Iron Cafe on Center St. in Cleveland. The address is 1114 Center Street, off Old River Rd. on the southeast side of the Flats. Parking is free. The Flat Iron phone number is 216-696-6968. Guest are welcome.

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For member address changes, please call
the IEEE Hotline, (800) 678-IEEE.
Do not call the newsletter editor. For
advertising rates, contact Lee Bernasek.

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****MLE:** Microwave Theory &
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**Please note: if you are
trying to contact the IEEE
Cleveland Section by FAX,
dial 440-473-6557.**

**The line is open twenty-
four hours per day.**

IEEE Cleveland Section 2000 Officers

ELECTED SECTION OFFICERS

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Secretary	Mike Branicky	216-368-6430
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