

SCANFAX

April 2000

Volume 52, Issue 4



IEEE

Networking the World™

A publication of the
Institute of Electrical & Electronics Engineers
— Chicago Section —

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Y2K

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Printed By

Town & Country Printers
Columbus, WI

SCANFAX (ISSN #0018-1297) is a monthly publication (except July and August) of the Chicago Section Institute of Electrical and Electronics Engineers, 8196 Cass Ave., Darien, IL 60561, (800) 898-4333 or (630) 493-4333. It is published by **Slack Attack Advertising**, 6400 Gisholt Dr., Suite 203, Madison, WI 53713, (608) 222-7630. Printing is by **Town & Country Printers**, Columbus, WI 53925. For **advertising information**, contact Slack Attack Advertising.

Subscriptions included in IEEE membership dues; non-member subscriptions: \$25 per year.

Address corrections should be sent to the IEEE office, 8196 Cass Ave., Darien, IL 60561.

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CHICAGO SECTION EXECUTIVE COMMITTEE MEETING
Tuesday, April 11, 7:15 pm
Northrop Grumman, 600 Hicks Rd., Rolling Meadows, IL
Call or e-mail E.G. Bogus to register. Provide name, employer, phone & citizenship.

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Chairman's Message

The IEEE Chicago Section Annual Awards Banquet will be held this month on Saturday, April 15, 2000 at the Fountain Blue Banquets in Des Plaines. Tickets are \$37.50 per person. IEEE student members pay only \$30.00. At this annual event, newly elected

IEEE Fellows from the Chicago Section are presented with their Fellow Award Plaques and awards are given to outstanding student-members from our 6 Student Chapters. In celebration of the Third Millennium, the IEEE has created an Institute-wide award to recognize a select

Edward G. Bogus, PhD.
IEEE Chicago Section, Chairman

group of members that have contributed to the IEEE. Therefore this year, Chicago Section recipients of the Millennium Medal will be honored at the Awards Banquet.

The election for Chicago Section officers is taking place this month. The ballot is on page 7. All members of the Section are eligible to vote. The ballot lists the candidates for the various positions. There is also a space provided for write-in candidates. Please take the time to cast your vote in this election.

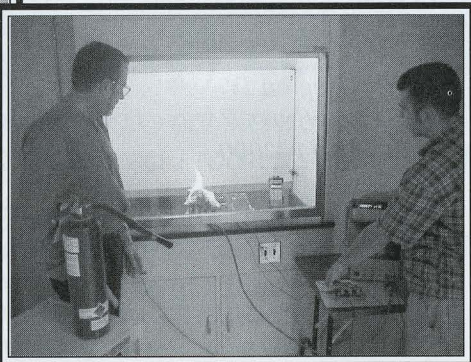
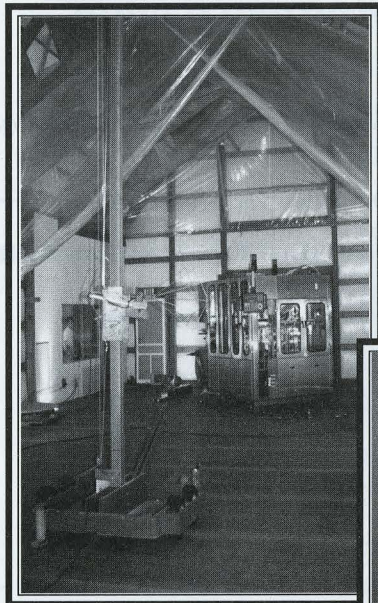
The IEEE Region 4 Regional Committee meeting was held in Chicago at the Ramada Hotel O'Hare in February. Region 4 is made up of 25 sections and 5 subsections. It covers 10 states and Windsor Area Canada. In the US it spans an area from Minnesota in the north to Illinois in the south, and from Nebraska in the west to Ohio in the east. I attended that meeting along with other Chicago Section members which included Patrick Murphy—Section Treasurer, Dennis Lamont—Region 4 Central Area Chair, Bert Orszula—Region 4 Life Members Ad Hoc Committee Chair, and Jim Fancher—Region 4 Past Director. Representatives from other sections in the region were also present. Bob Adams—Region 4 Director, chaired the meeting. The agenda for the meeting included reports on PACE, RAB, Awards, Student activities, and IEEE GOLD. Section representatives were given an opportunity to report on their activities as well as to identify areas that need work. These presentations were followed by an open discussion led by Area Chairmen, Dennis Lamont and Don Bramlett. This discussion focused on ways that the Region can assist Sections to improve membership involvement and growth. There was also an opportunity for James

Continued on page 7.

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By Terri Biloff

Five, four, three, two one! Happy New Year!!!!

Where were you when the clock struck twelve o'clock midnight on January 1st 2000? We all waited with bated breath to see what would happen. Would power go out, would the elevator stop in between floors, but to our amazement nothing happened, nothing at all!

But how many of us were prepared anyway with extra water, flashlights, batteries and even some non-perishable food...just in case? I know I was, but then again, I'm a realist, anything can happen and usually does.

As I watched Asia, Australia, England and others reach the stroke of midnight long before the United States and saw nothing happened to them, well I felt pretty sure we'd be ok too. But just in case, I kept the flashlight next to the couch, snuggled with my kids and watched the New Years celebrations on T.V.

Finally the big hour approached and as all the balloons dropped and the final piece of confetti fluttered daintily to the ground, I looked around and saw my life wasn't any different than it had been just sixty seconds before.

My lights were on, the water was running, the heat kicked on to warm my chilled bones, everything was in tact, just as though nothing had happened.

Hardship or Hype?

Millions of dollars changed hands courting Y2K issues. I have to admit being a marketing guru myself, I capitalized on the hype created by everyone else. From sales promotions to "Y2K A-OK" slogans, global marketers fully utilized anything and everything remotely associated with Y2K, and why not? Creativity is why marketing exists in the first place.

But marketers aren't the only one's who capitalized. The technology industry by far took Y2K to the extreme. Touting massive programming changes and must do system upgrades of old system, some (not all) firms took full advantage of their clients lack of knowledge and made a bundle of money.

The problem seemed so large and so widespread that programmers flocked to get re-acquainted with COBOL code long forgotten since PC's took over mainframe systems. We not only had a technical issue, we had eighteen months of down right media frenzy and borderline hysteria. Talk about capitalism as a result of programming fixes, some Y2K consultants I spoke to were paid as much as \$150 per hour, while consultants with skills far less in demand (for the time) were forced to accept their \$80 to \$90 an hour rate.

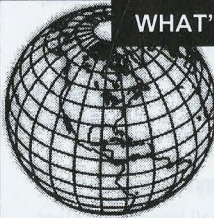
Many Y2K consultants have now been let go since the buildings in which

they worked are still standing, and they've been deemed Y2K A-OK! Sure they made great money for eighteen month, but how many of them will have the ability to jump back into the market as easily as consultants that kept up with the daily changes of our current technology?

That's not to say that "instant gratification" doesn't have it's rewards, or that all Y2K consultants will be standing in the unemployment line, but after all the hype how will they top the adrenaline rush that must have occurred when they stood in front of the system they spent months re-programming when the system clock turned over to 2000?

So was the hype worth it? Well maybe, but more importantly I think it proves that computers are not fool proof and that even they make mistakes. Of course this wasn't the com-

Continued on page 6.



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Y2K-ARE WE SURVIVING?

Continued from page 5

puters fault, but rather human error when coding the century, still we must realize computers and technology in general do have limitations.

Computers are only as good as the human who built, programmed, or upgraded it. After all, they may have a brain (CPU), but without constant human intervention and normal maintenance, they too age and eventually stop processing, just like humans.

Venturing Out The Next Day

Ok, so I knew my house was ok, but what about the rest of the world, what about everyone else? My grocer, gas stations, my clients! After all I did have a vested interest in their well being. I needed to eat, put gas in my car and without clients, well let's just say, that would be a problem!

Other than a few people staggering around from the night before, I saw no noticeable impact of the New Year. Street lights worked, I got gas, and even did a little grocery shopping. Surely with all the media hype someone must be impacted. As I made my

way to the check outs at the grocery store I found myself grinning almost, waiting for the rejection of my TYME card as I tried to pay for my food purchases.

I was prepared to declare there to be a problem, but swipe, all clear, even my grocer was prepared! Next came parking structures, railroad crossings, elevator rides and garage door openers. Nothing, natta, zilch!

So now we're into the new year almost 60 days. I've continued to get my utility bills with the correct amount due, bank statements looked ok (although I have less than I want in my checking account) and oh yeah, my Discover card has been on time and with the correct balance too!

Life Goes On

So do I expect to still see some problems as a result of Y2K? Well the next big movement to watch will be the IRS. You know, they're the guys who have a tendency to procrastinate and bury themselves in paperwork! Last I heard, they were way behind schedule in complying with Y2K.

Of course there are many branches of the government and I expect while some branches jumped on things right

away, others, less visible may not have been so swift to comply. How about our state and/or local government? I know in Wisconsin the governor made it very clear early on that the state would be compliant in time. To date I have no reason to believe otherwise. I guess time will tell when I file my state taxes.

There may still be some side effects not yet felt and may not be felt until mid year in 2000. Take for example insurance or any bill that is on an annual or semi annual mode that hasn't come up for billing yet. And let's not forget our investments. Some investment including 401K's and the like, calculate activities that occurred last year in 2000. Just keep an eye on you're statements and just be aware of some of the little things that still have time to creep up this year.

As for now, I see 2000 starting out just like any other year. Stock market fluctuations, natural disasters, the elation of a new mother giving birth! Life goes on. With or without us, and so the story goes!

Oh yeah, it's not a new millennium, that's next year in 2001. Another media frenzy I presume? ■

Next month
THE STORY OF MAGNETICS

Technology Management

The Stuart School's M.S. in Operations & Technology Management program is designed to advance the careers of experienced working engineers, scientists, and other technical professionals. This AACSB-accredited program applies business and management concepts directly to the areas of service operations, manufacturing, TQM, logistics, R&D, new product development, MIS, and e-commerce.

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- Financial Management, Budgeting, & Control



CHAIRMAN'S MESSAGE

Continued from page 4

Woodyard—Southeastern Michigan Section Chair and Burt Loupee—State Government Activities Coordinator, candidates for the Region 4 Delegate/Director-Elect position for the 2001-2002 term, to present their statements for seeking office. They provided a description of their passed activities in IEEE and offered their vision and goals that they would like to implement in the Region.

Region 4 will hold its first annual conference on Electro/Information Technology. This year it will be held in Chicago at the Marriott O'Hare, June 8-11. The conference will consist of workshops and paper sessions focusing on basic and applied research in the fields of electrical and computer engineering as they relate to Information Technology. Additional details can be found on

page 12 and at www.ewh.ieee.org/reg/4/eit2000.htm. All are invited and encouraged to attend this conference.

The PACE conference will take place September 1-4 in Scottsdale Arizona. Conference sessions will cover topics such as management skills, communication, and networking. Attendance at the conference by section representatives is encouraged. ■



Networking the World™

IEEE Chicago Section 2000/2001 Official Ballot

Show your interest in section activities by voting.

Ballots must be
postmarked by
April 20th.

ELIGIBILITY REQUIREMENTS:

- All members of the IEEE Chicago Section who are FULL members for 2000-2001 are eligible to vote.
- Student members and Associate members are not eligible to vote.

VOTING INSTRUCTIONS:

- Vote for a candidate by checking the box immediately to the left of the candidate's name.
- Write-in candidates are accepted for any office. Write-in candidates must be full members as defined above.
- To enter a write-in candidate, place the office title, candidate name, and member number

in the area provided. Additional write-in candidates may be submitted on a separate piece of paper (please sign).

- You may vote for only one candidate for each office.

We have several open positions and are looking for volunteers. Please help keep his organization strong by becoming involved as an IEEE Chicago Section officer or committee chair. We need you! For more information contact Ed Bogus at e.g.bogus@ieee.org or 847-259-9600, ext. 4738.

BALLOT INSTRUCTIONS:

- Enter your name, membership number, and mailing address in the space provided.
- After voting, sign the ballot on the line at the bottom.
- Ballots **must be mailed** to the IEEE Business Office, Attn: Section Secretary, 8196 Cass Ave., Darien, IL. Please mark "Ballot" on the envelope.

Chicago Section Nominations 2000-2001

OFFICERS:

- | | |
|---------------|--|
| Chairman | ☐ Pat Murphy |
| Vice Chairman | ☐ Pat Hennelly |
| Treasurer | ☐ Pat Hennelly |
| Secretary | ☐ Dennis Lamont |

COMMITTEES:

- | | |
|-----------------------|--|
| Awards | ☐ Norm Phoenix |
| Conference | ☐ Dorene Lehner |
| Finance | ☐ Chuck Nochumson |
| Government Activities | ☐ Bert Orszula |
| Member Services | ☐ Jack Sherman |
| PACE | ☐ John Waters |
| Program | ☐ OPEN POSITION |
| Publication | ☐ Gerry Ryan |
| Special Events | ☐ Joe Feitler |
| Student Activities | ☐ Peter Look |

Write-in Candidates:

Office	_____
Name	_____
IEEE Memb. #	_____
Office	_____
Name	_____
IEEE Memb. #	_____
Office	_____
Name	_____
IEEE Memb. #	_____

Ballot submitted by:

Name	_____
IEEE Memb. #	_____
Address	_____
Phone	_____

Signature (required) _____

Calendar of Events

Date	Event
April 12, 2000	IAS / IES Joint Meeting with Northwest Subsection and PES POWER FACTOR CORRECTION CAPACITORS
April 15, 2000	IEEE Chicago Section ANNUAL AWARDS BANQUET
April 26, 2000	EMC EMI AND THE PCB— FUNDAMENTAL CONCEPTS AND DESIGN TECHNIQUES
April 26, 2000	Fox Valley Subsection / Computer Society Chapter THE GRID: ADVENTURES IN WIDE AREA COMPUTING
May 22-23, 2000	EMC MINISYMPOSIUM 2000
June 8-11, 2000	IEEE Region IV ELECTRO/INFORMATION TECHNOLOGY CONFERENCE

IEEE Chicago Section ANNUAL AWARDS BANQUET

SATURDAY APRIL 15, 2000

Fountain Blue Banquets • 2300 S. Mannheim Road • Des Plaines, IL (Corner of Mannheim & Touhy Ave.)

— AWARDS —
IEEE Fellow Awards
IEEE College/University Student Chapter Awards
Millennium Awards

Cocktails at 6 pm / Dinner at 7 pm

Entertainment: *The Magic Wizardry of Will Tremont*

Dance to: *The Frank K. Orchestra*

Ticket cost: \$37.50/person
(\$30.00 for IEEE Student Members and their guests)

FOR TICKET INFORMATION CONTACT:

Joe Feitler, Ticket Chairperson, PO Box 5072, River Forest, IL 60305, 708-383-8773, e-mail: j.feitler@ieee.org or IEEE office (800) 898-4333.

Please request any special meals by April 8, 2000.

IAS/IES

JOINT MEETING WITH NORTHWEST SUBSECTION AND PES

Power Factor Correction Capacitors

Wednesday, April 12, 2000

EVENING MEETING

Stephen Colvin, Product Unit Manager Low Voltage Network Quality

About the Speaker:

Education: MSEE, University of Virginia; MBA, Midwestern University; BS, Physics, Longwood College.

Present Position: ABB Control Inc., Product Unit Manager Low Voltage Network Quality

Stephen manages the Low Voltage Network Quality group engineers and sells power factor correction equipment, passive and active filters, and thyristor switched capacitor banks. The group performs harmonic analysis, filter design, and final product design.

Stephen works with the IEEE standards group on power factor capacitors and is a member of the team developing a guide for low voltage filters.

About the Topic:

The presentation will review the concepts of power factor and discuss the application of power factor correction capacitors. The major benefits of capacitors including reduced power losses, reduced operating costs, increased system capacity, improved voltage and higher motor performance will also be discussed. In addition, a comparison

between the different types of capacitors will be given. Information on how to properly size and install capacitors will also be provided.

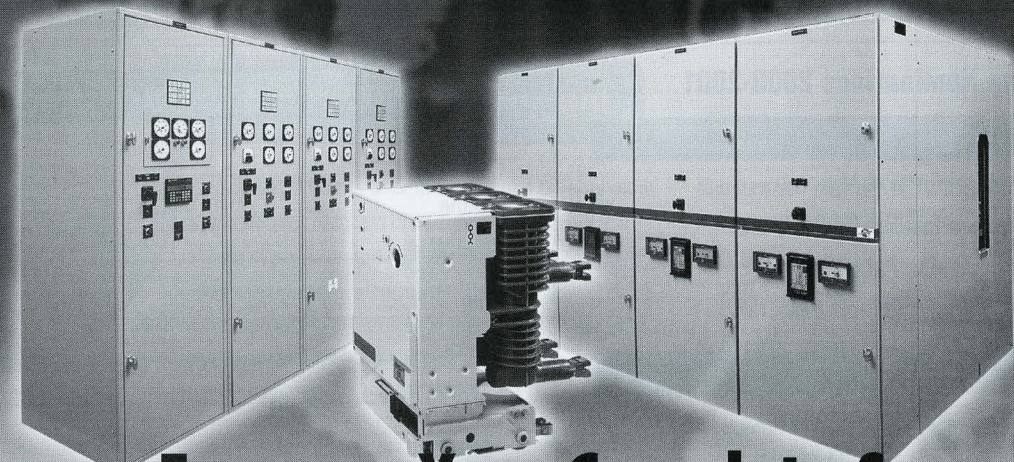
Location: Como Inn, 564 North Milwaukee Ave., Chicago, IL. The Como Inn is located on Milwaukee Ave. just off the Kennedy Expressway (I-90/94) near Grand Ave. and Halsted St.

Time: Social: 5:30 pm
Dinner: 6:00 pm
Presentation: 7:00 pm

Cost: Your cost includes the presentation and your choice of chicken (\$25) or pasta (\$20) 4 course dinner.

Reservations: Please call the IEEE Business Office at (800) 898-IEEE or (630) 724-0200 with your entree preference.

Note: For P.E. licenses that require continuing education for renewal, attendance at IEEE Technical Meetings is acceptable as one Professional Development Hour (PDH) per meeting. The upcoming 1999-2000 IEEE-IAS meeting date is May 17th.



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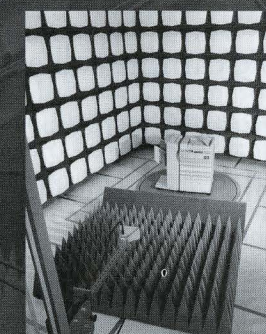
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IEEE / EMC

EMI and the PCB—Fundamental Concepts and Design Techniques

Wednesday,
April 26, 2000

IEEE
FOX VALLEY
SUBSECTION

IEEE COMPUTER
SOCIETY CHAPTER

The Grid: Adventures in Wide Area Computing

Wednesday,
April 26, 2000

EVENING MEETING

Mark Montrose, Principal Consultant of Montrose Compliance Services, Inc.

About the Topic:

This presentation will be on The Medical Directive—An Update.

This presentation illustrates, in simple form, how and why EMI gets developed within a printed circuit board (PCB) and the manner in which propagation occurs, radiated and conducted. Basic concepts are examined to remove the mystery on why problems are designed into the product, and how one can prevent making mistakes from happening time and time again. A major focus on this talks deals with the subject "Maxwell Made Simple."

About the Speaker:

Mark Montrose is Principal Consultant of Montrose Compliance Services, Inc. He is a senior member of IEEE, a current member of the Board of Directors for the IEEE EMC Society, and a Distinguished Lecturer for the society.

Location:

Lucent Technologies Indian Hill South (Rear Door)—Conference Dining Room. On Warrenville Road, 2 lights west of Naperville Road (or Naper Boulevard).

Time: Social: 6:30 pm
Presentation: 7:30 pm

Reservations:

To make reservations or for more information, contact Carla Robinson at 847-262-2494.

EVENING MEETING

Ian Foster, Argonne National Laboratory

About the Topic:

Many of today's most challenging problems in engineering and scientific disciplines—such as computational chemistry, climate modeling, media-rich remote collaboration, and distributed real-time online instrumentation systems, require vast resources in computational power, data storage and access, network availability and throughput. Computational grids, like their namesake the electric power grid, provide quasi-ubiquitous access to capabilities that cannot easily be replicated at network endpoints: for example, high-performance devices (networks, computers, storage devices, visualization devices, etc.) and unique services that depend on these devices, such as virtual data, smart instruments, collaborative design spaces, and metacomputations. In this talk, I will review the applications that are motivating widespread interest in Grid concepts within the scientific and engineering communities, discuss some of the technical challenges that arise when we attempt to build such Grids, and outline some of the efforts to develop Grid infrastructure and explore Grid applications, nationally and internationally.

About the Speaker:

Ian Foster is a Senior Scientist and Associate Director in the Mathematics and Computer Science Division at Argonne Nation-

al Laboratory, and Professor of Computer Science at the University of Chicago. He is on the Editorial Board of IEEE Transactions in Parallel and Distributed Systems. He has been active in research in parallel and distributed computing for many years and has authored four books, the most recent being "The Grid: Blueprint for a New Computing Infrastructure", published by Morgan Kaufmann in 1999 as well as numerous conference proceedings and journal articles.

Location:

Lucent Technologies Indian Hill South (Rear Door)—Conference Dining Room. On Warrenville Road, 2 lights west of Naperville Road (or Naper Boulevard).

Time: Social: 7:00 pm
Presentation: 7:30 pm

Reservations: Call the IEEE office at (800) 898-4333 before 5pm on Monday, April 24. For further information, please send e-mail to Adrienne Novick at ahnovick@ieee.org. As always, the public is invited. To subscribe to the Fox Valley Section and Computer Society e-mail list, see our web page at <http://www.computer.org/chapter/Chicago>.

2ND ANNUAL
CHICAGO

EMC Mini Symposium

May 22 & 23, 2000

The Chicago IEEE EMC Society Chapter is presenting a two-day Electromagnetic Compatibility Minisymposium. The event will consist of an EMC tutorial followed by presentations on EMC matters and design fundamentals for domestic and international EMC regulations. In addition, the exhibitors are invited to do actual demonstrations on their equipment or product, and invite technical questions.

The purpose of this event is to offer EMC and regulatory information to individuals interested in the field of EMC who would not normally attend one of the national or international EMC meetings. In addition to the symposium, there will be over twenty vendor exhibits highlighting EMC related products, test equipment, and services. Exhibitors include technical representatives from test facilities, test equipment

and simulator companies, component suppliers, EMC modeling vendors, and consultants.

Topics will be announced shortly. Please check our webpage for details: <http://www.esh.ieee.org/soc/emcs/chicago>.

Location: Holiday Inn, 860 West Irving Park Rd., Itasca, IL (630-773-2340). Package discounts available which include hotel arrangements.

Admission: The MiniSymposium admission fee includes breakfast rolls, coffee, lunch, and entry into a raffle for a few door prizes. Last year a Palm Pilot was given out to one lucky attendee.

Members and non-members of the IEEE EMC Society are invited to all chapter activities and meetings.

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1ST IEEE...

Electro/ Information Technology Conference

June 8-11, 2000

The Electro/Information Technology Conference, sponsored by the IEEE Region IV, is the first technical conference focusing on presenting basic/applied research results in the fields of electrical and computer engineering as they relate to Information Technology. This conference is a first attempt to have an annual conference for the IEEE where researchers and industrial colleagues can present their latest findings. There will also be exhibits where the leading-edge electro/information technology tools and products will be showcased. At this time three workshops are planned for June 8 (noon-5 p.m. approximately.) Paper sessions (average of 4 papers each) will present results in Soft Computing, Wireless Communications, Wavelet Transforms, Micro Electro-mechanical Systems & Mechatronics, Reconfigurable Systems, Middleware Architecture in the IT World, Power Electronics, Electronic Design Automation, Solid State, Consumer Electronics (including Automotive), Intelligent Control, Mathematical Modeling, Error Reduction, and Reliability/Ethical Issues. The advance program, to be available soon, will include Thursday afternoon arrival, workshops, reception; Friday paper sessions, main plenary, panel discussion, exhibits, banquet; Saturday paper sessions, panel discussions, exhibits, and other activities.

We are happy to announce that following scholars/researchers have agreed to be keynote/invited speakers at the conference: Fazlollah Reza, McGill University (Information Theory); Martha Sloan, Michigan Technological University (Computers); Mark J. T. Smith, Georgia Institute of Technology (Wavelets); and Lotfi Zadeh, UC Berkeley (Soft Computing).

In addition, President Elson S. Floyd of Western Michigan University will join IEEE Region IV host organization to welcome conference participants and to moderate one of the panel discussion sessions.

Registration: Regular Advance (by May 19) Registration Fee of \$300 (please see our Web site, www.ewh.ieee.org/reg/4/eit2000.htm, for forms and latest information and other categories) will include paper sessions, workshop(s), panel discussions, exhibits admission, Friday banquet (with speaker), reception, breaks and conference proceedings. For hotel reservation, (773) 693-3164, you need to mention E/IT Conference to get special rate of \$129 per night. For further information, contact Dr. Hossein Mousavinezhad, General Chair, hosein.mousavinezhad@ieee.org

We hope to see you in Chicago in June for this exciting technical conference with world-wide contributions in the field information technology!

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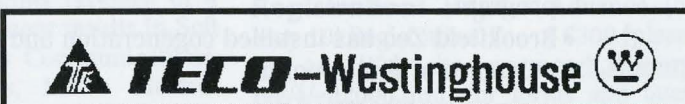
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