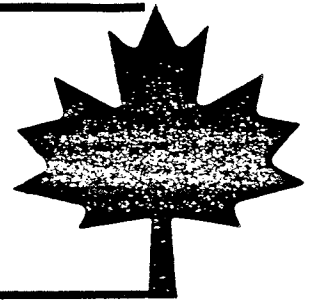




IEEE NEWSLETTER KITCHENER - WATERLOO SECTION



September 1993

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The Kitchener-Waterloo Section of the Institute of Electrical and Electronics Engineers serves all members whose mailing address is in Bruce, Grey, Perth, Waterloo or Wellington Counties.

SIGDOC '93

The 11th International Conference on Systems Documentation

Time: October 5-8, 1993

Hosted by the University of Waterloo

Conference Site: Valhalla Inn, Kitchener

Sponsored by the Association for Computing Machinery, Special Interest Group on Documentation (SIGDOC).

For further information contact Rosalind Hood-Morris at 886-4571.

OBITUARY: PROFESSOR GEORGE SINCLAIR

We are sorry to have to report the death of George Sinclair at the age of 80. He was a Life Fellow of the IEEE.

George Sinclair was the first Director of the Electroscience Laboratory at Ohio State University during World War II. At the University of Toronto he initiated a Ph.D. program in Electrical Engineering.

In 1951, he founded Sinclair Radio Laboratories Ltd. in Aurora, Ontario. The company developed and manufactured antennas and couplers for trains, buses, DME ground stations, the CN tower and cellular telephone stations.

George Sinclair served on committees of the Defence Research Board and the National Research Council of Canada.

CONFERENCES IN CANADA 1993

Sept.27-Oct.1 ISSLS 93 - International Symposium on Subscriber Loops and Services - Vancouver - S. Hussain (604)654-7420

Oct. 3-8 Industry Application Society Annual Meeting - Toronto - Ajit Bapat (416)752-8020

Oct. 5-8 SIGDOC (Association for Computing Machinery) - Kitchener/Waterloo - Rosalind Hood-Morris (519)886-4571

Oct. 12-14 Vehicle Navigation and Information Systems 93 - Ottawa - H. Reekie (613)990-4099

Oct. 12-15 2nd International Conference on Universal Personal Communications (ICUPC 93) - Ottawa - Vino Vinodrai (416)798-5039

Oct. 13-15 International Carnahan Conference on Security Technology - Ottawa - Gerry Levett (613)989-3242

Oct. 13-15 Workshop on Speech Coding for Telecommunications - St. Jovite, Quebec - Paul Mermelstein (514)765-7770

Oct. 18-21 OCEANS 93 - Victoria - Mary O'Rourke (604)721-8470.

SECTIONS CONGRESS 93

The 1993 IEEE Sections Congress was held in Puerto Rico in June. The KW section was, unfortunately, not represented but 212 sections were, from all 10 Regions and more than 50 countries.

The top eight recommendations to come out of the Congress have been passed to Excom and the Board of Directors. They were:

1. Increase support to the Sections in the form of Rebates.
2. Take aggressive action to enhance the self and public image of the engineer through public debate on major issues, measuring compensation and encouraging all engineering associations worldwide to show their role in wealth creation and the solution of society's problems.
3. Develop a variety of programs to encourage employer support of Sections and volunteers.
4. Increase and improve Technical Societies' support to local Chapters (and Sections).
5. Update membership diskettes to include members' companies (employer address).
6. Develop programs for portable benefits, to include health, life, pensions, investments, etc., which are transferable from job to job, are affordable and are applicable (or tailored) for each region of the world.
7. Reinstate \$300 Section rebate for sponsoring of a technical conference.
8. Increase communication between high-level IEEE staff and volunteers and appropriate high-level industry executives, including those industries where senior management is unlikely to include electrical engineers.

VOLUNTEERS SOUGHT FOR LANGUAGE-INDEPENDENT POSIX INTERFACES

PASC, the Portable Applications Standards Subcommittee, has been responsible for the completion of a number of POSIX (Portable Operating System Interface) standards, which have been invaluable in progressing the creation of portable application computer environments.

To date, PASC has focused on standardizing Application Programming Interfaces (APIs) using common language bindings such as C, Fortran and Ada. However, the International Organization for Standardization (ISO) has determined a need to progress the POSIX work using programming language - independent techniques.

The IEEE is looking for volunteers who would be willing to work on such language-independent POSIX standards. If you are interested in this work, please contact Bob Pritchard (908-528-3811). A draft of POSIX specification in language-dependent form is available from IEEE (800) 678-IEEE. The technical editor, Paul Rabin, can be reached via Internet at rabin@osf.org.

CANADIAN COMPANY FINED FOR SOFTWARE THEFT

Rexcan Circuits of Belleville, formerly owned by Northern Telecom and now a subsidiary of Kuriko Electrical Industry Co. Ltd., was charged by the RCMP under the Canadian Copyright Act and fined \$50,000. Software theft can consist of duplicating and loading into several computers software which is only licensed for single use.

CAAST, the Canadian Alliance Against Software Theft, is involved in this case. Its members include Autodesk, Claris, Computer Associates, Lotus, Microsoft, Novell, Quarterdeck and Symantec.

TECHNOLOGY LAB 2000

A new facility at Kitchener Collegiate Institute

by Linda Okum

An advancement in technological education, Lab 2000 offers the skills and experience that are not given in the average classroom.

It consists of four technology islands - Manufacturing, Transportation, Communications and Construction. Each island consists of MacIntosh computers, known for their exceptional graphics and user friendly programs.

In the communications island are electrical circuits, motorized lego, video usage and graphic images. Manufacturing illustrates the use of Superpaint, piloting paper airplanes, the use of a satellite and presentation design. Construction has stress testing, hydroponics, pneumatics and Claris Cad. See through machines, flying with the computer, and the use of the wind tunnel are all parts of the transportation island.

The students are placed into pairs and they remain partners throughout the course. Hands-on experience is the focus of Lab 2000 while using critical thinking, problem solving and decision making. It goes at the pace of the students and the teachers are used for guidance.

Each different station is accompanied by a TLM (Transtech Learning Module) which takes you through step by step for a better understanding.

After each station, a report must be handed in concerning what you have accomplished as well as valuable notes taken. Digitizing (use of computers to produce a photograph) is often used for reports to show the teachers what was built.

A worthwhile program and an awesome achievement for K.C.I.

CELLPHONE PRIVACY LAW

Under a law which received Royal Assent in June, intercepting cellular phone conversations is illegal: you could spend two years in jail, be fined \$25,000 and have to pay \$5,000 to the person whose conversation you intercepted.

Another law will require all telephone companies in Canada to be at least 80% Canadian owned.

THE VERY LARGE BASELINE ARRAY - A WORLD SCALE TELESCOPE

A radio telescope consisting of ten reflectors coupled together was dedicated in August. Each reflector is 25 m diameter, focal length about 30m (f/1.2), and they are spread over the surface of the earth from longitude 63 W to 156 W and from latitude 47 N to 20 N.

The instrument will operate from about 300MHz to 40 GHz. Its large extent gives it extremely high resolution, comparable to that of an optical telescope. Since it is broken up into ten parts, with large gaps in between, there is the possibility of ambiguity, but this would not be a problem when observing intense point sources.

Since the reflectors are not all on the same tectonic plate, it will be possible to detect relative movements as a sideline to astronomical observations.

ERASE YOUR DISK BEFORE YOU SELL IT

We have all heard of strange things being left in furniture which is bought and sold, such as documents in desk drawers. (I know of a person who bought an old house in Ontario and found a 10 ounce gold bar in the basement - it paid off a loan for his down payment! - Ed.)

The latest story is about a man in Edmonton who bought a used disk drive and found it contained personnel files on Alberta civil servants, including addresses, SIN numbers and salaries. Le plus ca change, le plus c'est le meme chose.

IEEE Canada Awards

| NAME | AWARD | DEADLINE | CRITERIA |
|---|---|----------|---|
| McNaughton Award | Gold Medal Certificate 3-volume biography Expense paid trip | May 31 | Exceptional Canadian Engineer (Member or Non-member) |
| Council Merti Awards (one per Council) | Silver Medal Certificate | May 31 | Nominated from within councils |

IEEE Canada Student Awards

| | | | |
|-----------------------------------|--|----------|---|
| McNaughton Scholarship | Final year tuition fees | Feb 15 | Demonstrated exceptional involvement in McNaughton Center |
| George Armitage Award | Plaque & \$200 | May 31 | Outstanding St. Branch - nominated by Counsellor |
| Outstanding St. Branch Counsellor | Certificate & \$500 | Feb 28 | Nominated by students |
| Life Member Award* | Certificate & \$250 Expense paid trip | March 31 | Best overall St. Paper in each Council |
| Hackbusch Award* | Certificate & \$150 Expense paid trip | March 31 | Best paper from University in each Council |
| Palin Award* | Certificate & \$150 Expense paid trip | March 31 | Best paper from College in each Council |

***The winning schools receive a plaque**

IEEE Awards

| | | | |
|----------------------|----------------------|--------|--|
| RAB Innovation Award | Plaque & Certificate | August | Individual(s) judged to have prime responsibility for the achievement honoured |
|----------------------|----------------------|--------|--|

| NAME | AWARD | DEADLINE | CRITERIA |
|---------------------------------|--|----------|--|
| IEEE Student Awards | | | |
| RAB Larry K. Wilson Award | Plaque & 3 yrs free basic IEEE membership | March 31 | Extraordinary accomplishment in student activity |
| Charles L. Fortescue Fellowship | \$24,000 (awarded every 2 years) | Jan 15 | Outstanding student entering graduate studies |

IEEE Field Awards

For more details, contact Professor S. Jayaram, Department of Electrical & Computer Engineering, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, N2L 3G1