



# IEEE NEWSLETTER

## KITCHENER - WATERLOO SECTION



May 1996

### SURVEY

Please fill out the form at the end of this newsletter and sent it back in the prepaid envelope. Then we can plan for even better events and services!

### MEETINGS/SEMINARS

Mark these dates on your calendar:

May 23rd: K-W Section Annual General Meeting and Presentation (David Dilts on Internet and Engineering: The State of the Future), University of Waterloo, Davis Centre, Room 1304, 5:30 p.m. (See page 2).

June 6th: Stefan Leue on the Specification and Design of Telecommunications Software Systems, University of Waterloo, Davis Centre, Room 1304, 5:30 p.m. (See page 3).

June 27th: Dave Allan on DSP Applications to Motor Drive Systems, University of Waterloo, Davis Centre, Room 1304, 5:30 p.m. (See page 3).

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<b>Section Officers</b>	
Chair:	Raafat Mansour, (519)622-2300 ext. 246
Vice Chair:	David Wang, (519)885-1211 ext. 3968
Secretary:	Rosalind Hood-Morris, (519)748-2462
Treasurer:	John Mowbray, (519)884-1710 ext. 5371, 5569
<b>Chapter Chairs</b>	
Computers:	Slawo Wesolkowski, (519)884-1710 ext. 5130
Antennas and Prop., Microwave Theory and Tech.:	Len Chow, (519)885-1211 ext. 2822
Circuits and Systems, Electron Devices:*	Arokia Nathan, (519)885-1211 ext. 4803
Signal Processing	Amir Khandani, (519)885-1211 ext. 5324
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**ANNUAL GENERAL MEETING  
KITCHENER-WATERLOO SECTION IEEE**

Date: Thursday May 23, 1996  
 Time: After the presentation which starts at 5:30 p.m.  
 Place: University of Waterloo, Davis Centre Room 1304.

**1. PRESENTATION:**

**Speaker:** David Dilts, Dept. of Management Sciences, Univ. of Waterloo

**Title:** Internet and Engineering: The State of the Future?

**Subject:** Internet and the world wide web (WWW) has exploded on to the world with unprecedented speed and impact. It has revolutionized the transmission of information and it has the potential to dramatically impact such diverse areas as news reporting, financial banking, and business partnerships.

But what does it represent to engineering?

The focus of this interactive talk will be to present some ideas about the uses of WWW in engineering, to demonstrate "live" the application of the technology, and to offer a forecast (and some cautions) about the impact of using this technology.

**Speaker:** David Dilts is a professor of Management Sciences at the University of Waterloo. Former director of the Waterloo Centre for Integrated Manufacturing, he currently offers a course on the impact of technology on engineering and society.

**2. ANNUAL GENERAL MEETING - K-W SECTION, IEEE**

The Nominating Committee (chairman Robert MacPhie) has proposed a slate of names to serve on the K-W Section's Executive Committee from July 1, 1996 to June 30, 1997. The names of the individuals are listed below. Members may nominate other members as alternative candidates under the following conditions:

For each nominee:

- a) obtain agreement in writing to stand,
- b) obtain supporting signatures of two percent of the voting members,\*
- c) submit these documents to the Secretary, Rosalind Hood-Morris, 266 Whitmore Drive, Waterloo, Ontario by May 13th 1996.

If alternate nominations are received, elections will be held at the Annual General Meeting.

\* This section has about 600 voting members.

**SLATE PROPOSED BY THE NOMINATING COMMITTEE FOR 1996-1997**

**Section Officers:**

Chair: David Wang, University of Waterloo  
 Vice Chair: Wei Chang Tang, COM DEV Ltd.  
 Secretary: Rosalind Hood-Morris, Spicer Corporation  
 Treasurer: John Mowbray, NCR Canada Ltd.

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.

Chapter Chairs:

Antennas and Propagation, Microwave Theory and Techniques: Raafat Mansour, COM DEV Ltd.  
 Signal Processing: Amir Khandani, Univ. of Waterloo  
 Circuits and Systems, Electron Devices: Arokia Nathan, Univ. of Waterloo  
 Computers: Slawo Wesolkowski, NCR Canada Ltd.

Committee Chairs:

Awards: Amir Khandani  
 Education: Rosalind Hood-Morris  
 Program: Shesha Jayaram, Univ. of Waterloo  
 Publicity: Shesha Jayaram  
 Membership: Arvind Vyas, NCR Canada Ltd.  
 Publications: Tom East, TEES  
 Nominations: R.H. MacPhie, Univ. of Waterloo

Student Activities Chairs:

University of Waterloo: George Freeman  
 Conestoga College: Jake Huschilt

Meet your candidates:

**David Wang** is an Associate Professor in the Department of Electrical and Computer Engineering of UW. His research interests include nonlinear control, flexible manipulators, shape memory alloy actuators and the control of human gait.

**Rosalind Hood-Morris** is Information Systems Manager at Spicer Corporation in Kitchener. She has been Secretary of the section for several years and was formerly also Awards Chair.

**John Mowbray** is Electromagnetic Compatibility Engineer at NCR Canada Limited in Waterloo. He has been Treasurer of the section for several years.

**Amir Khandani** is an Assistant Professor in the Department of Electrical and Computer Engineering at UW. His research interests are in the areas of information theory, wireless communications, and source and channel coding.

**Arokia Nathan** is an Associate Professor in the Department of Electrical and Computer Engineering at UW. His research interests are in the analysis and simulation of microsensors, as well as in the characterization of new materials for sensing applications.

**Slawo Wesolkowski** won the IEEE Hackbush Award in 1993 and the Life Member Award in 1994 for student papers: he graduated from the University of Waterloo in 1994 and joined NCR Canada Ltd where he works on the design of check recognition systems.

**Shesha Jayaram** is an Assistant Professor in the Department of Electrical Engineering at UW. Her research interests include the sterilisation of foods by high fields. She has also been involved in encouraging women to enter and remain in Engineering.

**Tom East** is sole proprietor of Tom East Engineering Services, with interests in antennas, radar, technical writing and physics. He has chaired the KW section twice and has edited the newsletter for several years.

**Bob MacPhie** is a Professor of Electrical and Computer Engineering at UW. He is a Fellow of the IEEE, and chaired the KW section in 1988-1989. His research interests include antennas and microwaves.

**Wai-Cheung Tang** has an M Sc degree from the University of Waterloo. He is Vice-President, Engineering at COM DEV and has the responsibility to manage and direct all engineering design efforts including research and development.

**STEFAN LEUE ON THE SPECIFICATION AND DESIGN OF TELECOMMUNICATIONS SOFTWARE SYSTEMS**

Time: Thursday, June 6, 1996, 5:30 p.m.  
 Place: University of Waterloo, Davis Centre room 1304  
 Speaker: Professor Stefan Leue  
 Dinner: Meet the speaker for dinner after the presentation if you wish. Contact Shesha Jayaram for details (519-885-1211 ext 5337).

Refreshments will be served at 5:15 p.m.

Subject: The software engineering process for tele-communications software systems can be greatly enhanced if it is based on formal specifications. Prof. Leue will present the specification of such systems by the specification language SDL and by Message Sequence Charts, using an Automatic Teller Machine and a communication protocol example, and discuss advantages of, as well as problems with, the specification based on these techniques.

Speaker: Dr. Leue is an Assistant Professor at the University of Waterloo, Department of Electrical and Computer Engineering. He received a Diploma in Informatics from Hamburg University, Germany and a Ph.D. from Berne University, Switzerland. His research interests include software engineering for distributed and reactive systems, including formal methods, software reliability and the specification of real-time properties. He has published a number of papers on message sequence charts and parallel protocol implementation.

**DAVE ALLAN ON DSP APPLICATIONS TO MOTOR DRIVE SYSTEMS**

Time: Thursday, June 27, 1996, 5:30 p.m.  
 Place: University of Waterloo, Davis Centre room 1304  
 Speaker: Dave Allan, SAF Drive Systems Ltd.  
 Dinner: Meet the speaker for dinner after the presentation if you wish. Contact Shesha Jayaram for details (519-885-1211 ext 5337).

Refreshments will be served at 5:15 p.m.

Subject: In order to stay competitive in the industrial drive field, controllers must be fast, relatively inexpensive, reliable and versatile. Due to the increasing mathematical requirements required to perform drive oriented motor control, modern controllers must utilise some form of Digital Signal Processing (DSP). Mr. Allan will present three applications of DSPs to this area. 1) Motorola 96002 is implemented in a maximum power point tracker for a photovoltaic array. 2) A

96002 is used to calculate the Flex Vector equations used in controlled an Induction Motor. 3) A Texas Instruments 320C50 is the processor behind the SAFphire programmable analogue controller manufactured by SAF Drive Systems. Programming is done by a windows based graphical block language. One of these controllers has been donated to the University's Power Lab and is currently used for undergraduate labs. Mr. Allan will also present a structural overview of these two types of DSPs.

Speaker: Mr. Allan is currently employed as a Project Engineer at SAF Drive Systems located in Kitchener, Ontario. SAF Drive Systems mainly provides Engineering and Hardware for Industrial Motor Drive oriented applications. Previous to this position Mr. Allan designed digital and analogue data acquisition and processing equipment for systems used in non destructive testing of materials using ultrasonics, eddy current and x-rays. He received his B.A.Sc. and M.A.Sc. degrees from the University of Waterloo in 1985 and 1988 respectively. His area of study for his master's degree was pulse-width modulation algorithms for a 3-phase inverter to control induction motors. Since 1988 he has written and presented approximately 10 papers related to his areas of interest specified above.

### CHAIR'S REPORT

Raafat Mansour

As my two-year term as Chairman of the IEEE Kitchener-Waterloo Section comes to a close, I would like to express my appreciation to all members of the executive committee of our Section for their help and support during this period. It has been a very enjoyable and certainly a very rewarding experience.

In my last report, I mentioned about the intention of our Section to submit a proposal to IEEE Canada for hosting the 1998 Canadian Conference on Electrical and Computer Engineering (CCECE) in Kitchener-Waterloo. The 1996 CCECE Conference will be held in Calgary, Alberta, while the 1997 conference will be held in St. John's, Newfoundland. Our Section's proposal was submitted to IEEE Canada on October 30, 1995.

I am pleased to report to you that our proposal has been accepted by the Conference Advisory Committee of IEEE Canada. The 1998 CCECE Conference is now scheduled to be held in Waterloo. The proposed theme of the conference is "University and Industry - Partners in Success". The conference will run for three days and will feature plenary sessions, keynote addresses and concurrent technical sessions. The attendance level is expected to be between 500-600 people.

The conference will be organized primarily by IEEE volunteers from the University of Waterloo, Wilfrid Laurier University and our local industry. Our local IEEE student branches have also shown a great deal of enthusiasm for helping out at this conference. The proposed list of volunteers for the conference organizing committee is given below:

Conference Chair	George H. Freeman	Univ. of Waterloo
Technical Program Chairs	Magdy Salama Len Chow	Univ. of Waterloo
Treasurer	John Mowbray	NCR Canada Ltd.
Local Arrangements	David Wang	Univ. of Waterloo

Publications	Tom East Raafat R. Mansour	TEES COM DEV Ltd.
Publicity	Richard Hornsey K. Tuer	Univ. of Waterloo CAI
Registration	Shesha Jayaram	Univ. of Waterloo

A large number of other IEEE members from the University of Waterloo, Wilfrid Laurier University and local industry have also stepped forward to volunteer in the organization efforts of this conference. We anticipate that this excitement will result in a conference which our Section will be proud to be associated with.

This issue of our Section's Newsletter includes a survey to be completed by the members of our Section. I urge each member to take the time to complete this survey. Completion of this survey will help your IEEE Section to serve you better.

In closing, being on the executive committee of the IEEE K-W Section has been a wonderful experience. I highly recommend that each member in our Section finds a way to devote some of his/her time to IEEE volunteer activities. It is a key of being member of our profession.

### CONFERENCES IN CANADA

#### 1996

- May 22-24 Fourth International Conference on Assessment of Software Tools. J. Wigglesworth 416-448-3856, e-mail: wiggles@vnet.ibm.com
- Jun 2-5 18th Biennial Symposium on Communications, Queen's University. Kingston, Ontario, 613-531-9210, e-mail: events@adan.kingston.net Deadline for abstracts to H.T. Mouftah 613-545-2934, e-mail mouftah@eleceng.ee.queensu.ca, Jan 22 1996.
- Jun 16-19 1996 IEEE International Symposium on Electrical Insulation. Montreal. R. James 615-574-6213
- Jun 19-22 ICCI 8th International Conference of Computing and Information. Waterloo, Ont. Farhad Mavaddat 519-885-1211. e-mail: rhurley@trentu.ca
- Jun 25-28 INET'96 - 6th Annual conference of the Internet Society. Montreal. Internet Soc Secretarial 703-648-9888, e-mail: inet96@isoc.org
- Jul 8-10 Wireless 96 - 8th International Conference on Wireless Communications. Calgary. L. Southwood 403-289-3140, e-mail: leila@cal.trilabs.ca
- Jul 9-11 3rd Workshop on Finite Element Methods in Electromagnetic Wave Problems. Halifax. Z.D. Chen fax 902-422-7535 or G.Pelosi e-mail: FEW96@ingfil.ing.unifi.it
- Jul 29-Aug 1 ICAPT'96 - International Conference on Applications of Photonic Technology. Montreal. G.A. Lampropoulos 416-923-4425, e-mail: lampro@gpu.utoronto.ca
- Aug 15-16 Selected Areas in Cryptography. Queen's University. Stafford Tavares 613-545-2945, email: SAC96@ee.queensu.ca Deadline for papers June 7 1996

- Aug 18-21 IEEE International Engineering Management Conference EM 96. Vancouver. W.A. Wallace 518-276-6854, e-mail: wallaw@rpi.edu
- Aug 26-27 International Conference on DSP in Telecom. Toronto. GAO Research & Consulting 416-292-0038.
- Oct 21-25 ICECCS 96 Second IEEE Int'l Conf on Eng. of Complex Computer Systems. A. Stoyenko 201-596-3366, e-mail: alex@vulcan.njit.edu
- Oct 23-25 15th IEEE Symp. on Reliable Distributed Systems. Niagara-on-the-Lake. W.K. Fuchs e-mail: fuchs@crhc.uiuc.edu

**1997**

- May 20-22 IEEE Instrumentation & Measurement Technology Conference IMTC 97. Ottawa. R. Myers 301-287-1463, e-mail: bob.myers@ieee.org
- Jun 8-12 ICC'97 - IEEE International Conference on Communications. Montreal. Celia Desmond 905-615-6507. e-mail: c.desmond@ieee.org
- Jul 14-18 IEEE AP-S International Symposium and URSI Radio Science Meeting. Montreal. Stanley Kubina 514-848-3093 or G. Delisle 514-765-8202, e-mail: delisle@inrs-telecom.quebec.ca
- Oct 7-10 IEEE Ultrasonics Symposium. Toronto. S. Foster e-mail: stuart@owl.sunnybrook.utoronto.ca

**1998**

- May 4-7 1998 IEEE/IAS Industrial and Commercial Power Systems Technical Power Conference (I&CPS). Edmonton. M. Bince 403-468-6673

**1999**

- Jul 18-22 1999 IEEE Power Engineering Society Summer Meeting. Edmonton. D. Fraser 403-448-3554

**IEEE/IEE ELECTRONIC LIBRARY ON CD-ROM**

IEEE has announced IEL, the IEEE/IEE Electronic Library. It is a full-image, CD-ROM database: it contains full-page images of the entire collection of IEEE/IEE publications, including over 10,000 journal and magazine issues, transactions, conference proceedings, standards and colloquia published since 1988.

IEL can be searched using a Windows search interface, developed through an agreement with Sony Electronic Publishing Company. IEEE chose Verity Topic Agents and Adobe Acrobat software as the foundation of the end-user system.

For information on subscribing to this service, contact Information Handling Services, Inc. (IHS), phone 303-397-2507. (fax, e-mail or Web site not known).

The Institution of Electrical Engineers (IEE), headquartered in the UK, is the largest professional society in Europe with over 135,000 members in electrical, electronic and manufacturing science and engineering. It produces the INSPEC data base.

**VOLUNTEERS NEEDED FOR COMPUTER MUSEUM**

The Computerseum is being set up in Waterloo, and is planned to open in temporary quarters July 6th - August 23rd. It will house mainframes only: it already has 60 tonnes of them.

The museum will need volunteers to attend the exhibition and answer visitors' questions: if you can devote half a day (or one day) per week, please contact Kevin Stumpf. You would be trained in interpretation skills and given information about the exhibits.

Volunteers are also needed soon for cataloguing the artifacts.

For further information contact Kevin Stumpf at:

phone: 519-744-2900  
e-mail: ccm@sentex.net

or access the Web site:

<http://www.sentex.net/~ccmuseum>

**ICR ONE-DAY COURSE**

(For further information contact Jean Webster, ICR, University of Waterloo, Tel: (519) 885-4530, Fax: (519) 885-1208, email: jrwebste@icr.uwaterloo.ca)

**An Introduction to Specification and Description Language (SDL)**

**May 9, 1996**

Stefan Leue, Ph.D.

Precise, unambiguous and formally founded descriptions of software requirements and designs are key factors for the engineering of high quality software products. This course provides an introduction into the Specification and Description Language SDL, a specification technique standardised by the International Telecommunications Union Telecommunications Standards Sector ITU-T (formerly CCITT) in recommendation Z.100. SDL has become an industrial de facto standard for requirements and design specifications of telecommunications software systems, mainly due to its appealing graphical syntax, its standardization, as well as the good commercial tool support provided for SDL.

We will give an introduction into the basic SDL concepts and discuss examples of communication systems specifications. We will then present extensions made to the language in the course of the last revision of the SDL standard in 1992, which led to the definition of SDL-92, and finally point at a recently defined ITU standard (Z.105), which links the data type definition language ASN.1 to SDL.

About the Instructor.

Stefan Leue is a Faculty Member in the Department of Electrical and Computer Engineering of the University of Waterloo. He received his Master's degree in computer science from the University of Hamburg (Germany) and his Ph.D. from the University of Berne (Switzerland). Before joining the University of Waterloo, he was a research associate at the University of Berne and had previously worked as an information technology consultant in the German life insurance industry. His primary research interests are in software engineering for telecommunications systems, in particular in the use of formal methods.

Cost per one-day course: \$200 + GST (employees of ICR Corporate Partners/Corporate Associates free)

### EIC AWARDS MEDAL TO WALLY READ

The Engineering Institute of Canada has awarded its highest award, the Julian C. Smith Medal to Wally Read, President of the IEEE, for "achievement in the development of Canada". Wally Read is from Newfoundland and has been active for many years in IEEE Standards.

### STUDENT PAPERS NIGHT 1996

The Annual Student Papers Night was held at the Davis Centre, University of Waterloo on March 20th. About 50 people were present altogether.

The three judges were Dan Miller, Steven Spicer and George Bulik.

Two teams from Conestoga College competed for the Ken McKenzie Award. The results of the judges' decisions were:

First prize: Todd Butler, Trevor Butler and Steve Weber for their paper "Earth Coverage Antenna". They spoke about an antenna which they had designed, fabricated and tested.

Second prize: Michelle Moy, Kevin Sylvester and Henry Loughlin for "Real Time Digital Serial Link". They described the link which they designed and built.

A third paper was withdrawn because it contained proprietary information.

The University of Waterloo contest was for the George Dufault Award. The results were:

First prize: Ernest Yeung (year 3B) for "Image Compression using Wavelets". He described a technique for image compression, and gave several nice examples which demonstrate the advantage over the JPEG scheme.

Second prize: Randy Bareham (year 4B) for "Compact High-power Megavolt Variable Load Resistor". He described the device which was needed to provide a test bed for a high power megavolt source being designed for TRIUMF (Tri-University Meson Facility managed as a joint venture by Simon Fraser University and the Universities of Alberta, British Columbia, and Victoria). It consisted of a length of tubing containing a chemical dissolved in water.

Third prize: John Craig (year 3B) for "Multimedia Meltdown! Requirements and Solutions for Multimedia Networks". He compared and contrasted a number of different techniques to meet the requirements for multimedia networks to function properly.

In each contest, the prizes were: first \$100, second \$75, third \$50: NCR Canada Ltd. contributed to the cost of the prizes.

Papers which earned first prize can progress to the Canadian papers competition where the prize is the McNaughton Scholarship. The winner of the first prize from UW at our 1994 contest was Slawo Wesolkowski, who went on to win the Central Canada Council Life Member award in the 1994 IEEE Canada Student Paper Competition. Slawo now works at ATT-GIS (NCR) and is nominated to head the Computer Chapter in our section at the AGM in May.

### CAM - THE IEEE CAREER ASSET MANAGER

Review by Tom East

In these days of restructuring and downsizing, many engineers and managers can no longer leave it up to their employers to guide them through their careers: you are on your own.

The US activities Board of the IEEE has developed the IEEE Career Asset Manager, described as "A unique guide to career management". It consists of a three ring binder which features a step-by-step process for defining personal career goals, preparing a professional development plan and maintaining records for convenient resume generation.

The book is divided into three parts. The first 20 or so pages give lots of sound advice for engineers at the start, and especially in the middle, of their careers: it discusses life long learning, SWOT (strengths, weaknesses, opportunities and threats) and what to expect to face in interviews. The middle section contains 24 forms for listing, among other things, goals, qualifications, experience, and plans: this would be very useful in preparing resumes, for example. The last section contains job search aids and specimen resumes, and useful IEEE documents about ethics, employment practices and the Societies.

This package is not trying to emulate the many good books on career decision making and job search skills. It "is a resource that will impose structure and guidance on the often-overlooked and under-practiced activity of personal development planning". If it had been available to me during my long career, I would have used it to become better organised, and would have found it helpful in making career decisions.

The single copy member price is \$34.95 US, plus \$4.00 S&H - product number CD-100; phone 1-800-678-IEEE. For further information e-mail g.latzko@ieee.org. It is planned to bring out a software edition next year.

### NEWS FROM INDUSTRY

EMJ Data Systems Ltd of Guelph (<http://www.emj.ca>) has acquired Prime Data Products. It has also acquired Hookup Communication Corporation of Oakville, an Internet service provider: Hookup has recently acquired 21 companies and is making a public offering of shares. EMJ has branch offices in Hungary and Brazil, and several in Canada and the US. EMJ specializes in UNIX, Point Of Sale, Apple, Internet and Telephony applications.

Open Text Corporation has merged with Odesta. They have announced Livelink Intranet: an intranet is similar to the Internet but is confined to a single organisation and is protected by a "firewall". Livelink Intranet allows individuals who are widely separated geographically to work together as a group. The Open Text Index, a comprehensive index of the World Wide Web, is available at <http://www.opentext.com>.

### METRIC MILLENNIUM

Tom East

The IEEE Standards Board, with its metric policy, is perhaps dragging the USA kicking and screaming into the 21st century. All IEEE Standards are to follow this schedule:

Date	Practice	Example
1996 Jan 1:	SI included	2 in (51 mm)
1998 Jan 1:	SI preferred	51 mm (2.0 in)
2000 Jan 1:	SI exclusively	50 mm

SI is the International Standard for units. See Standards Board Implementation Plan for Policy 9.20, 3/16/95 (that means 1995 March 16th).



## WIN A FREE BOOK ON "ELECTRICITY - THE MAGIC MEDIUM"

Simply complete and mail the questionnaire below in the enclosed self-addressed envelope (University of Waterloo members please use inter-office mail). Your name will be included in a draw to select five winners. Each will receive a free copy of a book on "Electricity - The Magic Medium". In this book, six authors, with diverse background experiences, tell a remarkable story of the hundreds of Canadians who contributed to the progress of Electricity in Canada. The book was a centennial project of the Canadian Region of IEEE.

Your response will help the IEEE Kitchener/Waterloo Section to serve you better in the future. Either way, you win!

- **How many K-W IEEE meetings/events did you attend over the past three years?**
  - 0 - 2             6 - 10
  - 3 - 5             more than 10
  
- **How do you know about the K-W IEEE meetings/events?**
  - K-W IEEE Section Newsletter.
  - From a colleague/friend.
  - Posting at University.
  - Posting at Work.
  
- **Are you getting the IEEE K-W Section Newsletter regularly?**
  - Three issues a year or more.
  - Two issues a year or less.
  
- **What type of presentations would you like to see in K-W IEEE Chapter/Section meetings?**
  - Highly technical.
  - Of general interest to electrotechnology professionals with a reasonable amount of technical details.
  - Of general interest to electrotechnology professionals with no technical details.
  
- **Which day/time is convenient to you to participate in a K-W IEEE meeting or event?**
  - Weekday evening: 5-7 p.m.
  - Weekday evening: 7-9 p.m.
  - Weekday afternoon: 3-5 p.m.
  - Saturday morning.
  - Saturday evening.

- **Are you interested in watching video covering a technical subject rather than a live presentation?**  
 Yes       No
  
- **Are you interested in facility touring?**  
 Yes       No
  
- **Which nights of the week would be preferred for meetings and events?**  
\_\_\_\_\_
  
- **Let us know which topic/subject you would like us to schedule for you.**  
\_\_\_\_\_
  
- **Tell us about any ideas or comments to make your K-W IEEE Section more efficient?**

Please complete the following to be eligible to enter the drawing for the free book.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_

E-mail: \_\_\_\_\_