



# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 1

A Monthly Publication of the IEEE Orlando Section

August 1996

## 1996 IEEE ORLANDO SECTION INSTALLATION BANQUET

The annual installation banquet of the IEEE Orlando Section was held at Lee's Lakeside on Lake Eola in downtown Orlando on June 15. **Dr. Kalpathy Sundaram**, the Programs Chair, coordinated the evening's events and had invited **Mr. Larry Hume**, of Rollins College to be the speaker for the evening. Mr. Hume who is a nationally recognized motivator gave a brief, interesting and useful presentation on what qualities make a good leader and motivator.



Mr. Larry Hume, nationally recognized motivator

The installation banquet is hosted in order to introduce the new officers to the members in the Section and also to recognize the outgoing officers for their contribution to the Section during the year. **Mr. Dave King** the outgoing Section Chairman presented Certificates of Appreciation to the officers of the various committees listed below:

Student Branch Advisors  
**Dr. Brian Petrasko**

and  
**Dr. Issa Batarseh**  
Student Branch President  
**Mr. Joe Martinez**  
Chapter Chairmen

AES	<b>Dr. Gerry Holst</b>
AP/MTT	<b>Dr. Christos Christodoulou</b>
C	<b>Dr. Udaya Vemulapati</b>
CN	<b>Mr. Jorge Medina</b>
ED/CPMT	<b>Dr. Peter Yuan</b>
LEOS	<b>Dr. Nabil Riza</b>
PE/IA/PEL	<b>Mr. Gary Engmann</b>
SP	<b>Dr. Albert Berg</b>
SRC	<b>Dr. Harley Myler</b>
UFFC	<b>Mr. Mike Garrity</b>

Mr. Dave King presented Certificates of Appreciation to his Vice Chairman, **Dr. Kalpathy Sundaram**, treasurer, **Dr. Takis Kasparis**, Secretary, **Dr. Christos Christodoulou** and Chapters Chairman **Dr. Issa Batarseh** and thanked them for their support during his term as the Chairman.



Outgoing Section Chairman, Mr. David King presents Mr. Jorge Medina, Consultants' Network, with the Outstanding Chairman Award.

Two of the Chapters won the Outstanding Chapter Award this year. These are the Consultant's Network, with Chairman **Mr. Jorge Medina** and the UFFC Chapter with Chairman **Mr. Mike Garrity**. Both chapters did an excellent job holding several meetings throughout the year and with their membership involvement. Congratulations to Jorge and Mike! They were both presented with a plaque by Dave King.



New Vice Chair, Dr. Takis Kasparis, poses with new Section Chairman, Dr. Kalpathy Sundaram and outgoing Section Chairman, David King.

Mr. Dave King introduced the new Section officers for 1996-97. They are:

Chairman **Dr. Kalpathy Sundaram**  
Vice Chairman **Dr. Takis Kasparis**  
Treasurer **Dr. Christos Christodoulou**  
Secretary **Dr. Albert Berg**

He presented the gavel and the Chairman's pin to Dr. Sundaram. Dr. Sundaram expressed his thanks for this opportunity to serve as the Chairman and bid good-bye to all. ♦

## THE ORLANDO SECTION MONTHLY

Published by the  
IEEE ORLANDO SECTION  
EXECUTIVE BOARD

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - sundaram@pegasus.cc.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
823-0188 - aberg@dspsparc.engr.ucf.edu  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

## SOCIETY CHAPTER CHAIRMEN

**AES:** Gerald Holst - VMBox 210, (H) 629-5370  
**AP/MTT:** Dr. C. Christodoulou - VMBox 220  
823-5831 - cgc@engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Michael C. Germain - VMBox 240  
(O)904-326-1483, (H) 678-5599  
**Consultants' Net:** Jorge Medina - VMBox 400  
(O) 260-1676, (F)260-1636 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
823-0188 - aberg@dspsparc.engr.ucf.edu  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFCF:** Michael E. Garrity, Sawtek - VMBox 300  
884-3486 - mg@sawtek.com

## COMMITTEE CHAIRMEN

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-4496, (H)628-4462 - csec@magicnet.net  
**WWW:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - mortazawi@pegasus.cc.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**Membership:** (Vacant - Volunteer Needed)  
**PACE:** Jorge Medina, MSI - VMBox 660  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Programs:** Dr. Kalpathy Sundaram-VMBox 670  
823-5326 - sundaram@pegasus.cc.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Strategic Plan.:** Dr. D. Flinchbaugh-VMBox 690  
(O) 857-8242, (H) 859-4855

## UCF STUDENT BRANCH

**E-mail:** ieee@ece.engr.ucf.edu  
**Web Page:** <http://www-ece.engr.ucf.edu/ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
Dr. Issa Batarseh, UCF - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Chairman:** Joe Martinez - VMBox 720  
678-0437 - ejm@ece.engr.ucf.edu  
**SRC:** Chris Rose - VMBox 730, 657-1755

## IEEE ORLANDO INFORMATION CENTER

**E-mail:** sec.orlando@ieee.org  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail:** (407)260-1676 - Fax (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

## CHAIRMAN'S CORNER

I have great pleasure to serve as the IEEE Orlando Section Chairman for the year 1996-97. The Executive Committee Members are **Drs. Takis Kasparis, Christos Christodoulou, Al Berg and Udaya Vemulapati** who will serve as Vice Chairman, Treasurers, and Chapters Chair respectively. We had a wonderful active year 1995-96. I take this opportunity to thank **Dave King** and **Dr. Parveen Wahid** for their wonderful job during the past year.

IEEE Orlando Section has been recognized as an outstanding section because of its excellent activities in the past years. I would like to keep this name during my tenure. Many of our section chapters were very active in the past year and we hope to see them continuing the same this year. Few chapters were keeping a low profile in the past year and we would like to see their revival this year with some meetings or other activities. We invite new volunteers to join our executive committee so that with their active participation we will be able to keep up the same momentum for our section in the coming years.

Our installation banquet was held on June 15, 1996 at Lee's Lakeside. **Mr. Larry Hume**, our guest speaker, addressed the audience on the topic: *Leadership*. It was an enlightening talk that all the members present enjoyed.

Orlando Section has an excellent monthly Newsletter and our special thanks goes to **Mr. Jorge Medina** for

this. Be sure to check the Newsletter for the calendar of events for each month and get actively involved in the meetings. If you have any specific issues concerning the profession this is the place to convey it to the members. The Executive Committee meetings are held on the first Tuesday of each month at 6 PM at UCF, Room 288, Engineering Building. The Section Officers are strongly encouraged to attend these meetings. Your participation is the success in our endeavor to serve our Section members.

**Dr. Takis Kasparis**, our Programs Chair, is planning our annual outing at Wet'n Wild in the last weekend of September and look for more details in the Newsletters. I am inviting all of you to mark your calendar for this family fun day.

ATTENTION:  
Computer Society  
Members for 10 Years

If you have been a member of IEEE Computer Society for at least 10 years, the Orlando chapter would like to show its appreciation by presenting you with a ten-year pin (depicting the Computer Society logo in gold with number 10 in binary written underneath). Please collect your pins at the next technical meeting. If you have any questions, please call the Chapter Chair.

## REGION 3 BBS

Region 3 has a BBS with a growing base of national and regional information about IEEE. The dial-up numbers are 1-404-446-0740 and 1-800-555-REG3, (7343). Your membership number will be your user password. If you've got job, career or education information that the membership might be interested in, Region 3 would like to include that electronic file on the BBS.

## An Essential Partnership American Engineering and Corporate Citizenship

America's engineers know that technology is a driving force in improving the quality of life for everyone.

And we also know that people make that technology work, make the economy grow, make companies competitive in the global economy, and make our research institutions the best in the world.

For these reasons, we are pleased to join with business, academic and government leaders in the call for responsible corporate citizenship.

The strength of the nation will always be dependent on having highly competent and dedicated engineering and science professionals. Continued economic vitality demands that we nurture employer-employee relationships that retain and motivate experienced engineers and attract new engineering talent. Downsiz-

ing, restructuring and moving jobs offshore are becoming commonplace as U.S. companies face global competition, deregulation and the increased influence of financial leaders and investors. But short-term gain is not the long-range solution for maintaining the nation's economic strength.

As engineers, we believe that productive work requires mutual loyalty. We seek a sense of mission consistent with our employers' goals and our legitimate needs. We strive for excellence based on pride in our work and in our employers' products and services. And we expect just compensation and a reasonable degree of employment security, reflecting engineers' role in the success of our companies.

Government can encourage responsible corporate citizenship through tax incen-

tives and other policies. Pending legislation to expand health-care and pension portability can be part of the solution. In the long run, however, it is up to individual companies to recognize the value of investing in their people and in their communities.

IEEE-USA promotes the professional careers and technology-policy interests of nearly a quarter-million electrical, electronics and computer engineers in the United States. Contact us for a copy of our *Guidelines to Professional Employment for En-*

gineers and Scientists. It's our vision of a mutually responsible corporate citizenship and our commitment to building a stronger America.

IEEE-United States Activities 1828 L

Street, N.W., Suite 1202, Washington,

DC 20036-5104, U.S.A.

Tel: 202-785-0017,

Fax: 202-785-0835

E-mail: [ieeeyusa@ieee.org](mailto:ieeeyusa@ieee.org)

Web: [www.ieee.org/usab](http://www.ieee.org/usab)

## Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

### Accounting and Tax Problems of Small Business

**Sponsor:** Consultants' Network

**Program:**

I. Accounting

- A. Recordkeeping requirements.
- B. Software solutions for accounting.
- C. Form of Business: corporation, sole proprietor.

II. Taxes

- A. IRS update
- B. Small Business issues.

III. Questions and Answers

**Speaker: Mr. Benjamin H. Moore, CPA.** Mr. Moore is a graduate of the University of Florida with a Bachelors degree in accounting. Graduate of the University of Texas with a Masters degree in accounting. Florida CPA since 1972; President and owner of Benjamin H. Moore, CPA, PA, a certified public accounting firm in Winter Park with nine employees.

**Date:** Tuesday, August 13, 1996

**Time:** Refreshments - 6:00 PM

Presentation - 6:30 PM

**Refreshments:** Free pizza and soda.

**Location:** Orlando Public Library, 3rd Floor, Patio Room.

**Reservations:** Jorge Medina 260-1676, David Flinchbaugh 859-4855 or Peter Hoyles 904-737-9686.

For solutions, education, technology, it's the

Your  
path  
to

Greater  
Reliability

Improved  
Quality

Higher  
Yields

Increased  
Productivity

## 1996 EOS/ESD SYMPOSIUM

September 8-12, Buena Vista Palace, Orlando, FL

- Technical papers on the latest EOS/ESD Technology
- Basic, intermediate and advanced seminars and tutorials
- Exhibits of ESD control products and services
- Workshops, authors' corners, training videos

From the basic to the advanced — it's the comprehensive international conference on electrostatic discharge and electrical overstress

For more information, contact  
EOS/ESD Symposium,  
PO Box 913, Rome, NY 13442-0913.  
PH: 315-339-6726 FAX: 315-339-6793



Sponsored by the ESD Association in cooperation with the IEEE.  
Technically co-sponsored by the Electron Devices Society.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL



Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Aug 6** 6:00 PM IEEE Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326  
**Aug 13** 6:00 PM IEEE CN - **Accounting & Tax Problems of Small Businesses** - Orlando Public Library, Patio Room, J. Medina, 260-1676
- Sep 3** 6:00 PM IEEE Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326  
**Sep 9** IEEE - **18th Annual Electrical Overstress/Electrostatic Discharge Symposium** - Buena Vista Palace Hotel, Orlando  
**Sep 10** 6:00 PM IEEE CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676
- Oct 1** 6:00 PM IEEE Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326  
**Oct 8** 6:00 PM IEEE CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676
- Nov 3-6** IEEE ED/MTT - **GaAs IC Symposium** - The Peabody Orlando, Orlando

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

David King, Your IEEE Orlando Jr. Section Chairman  
and President of ParkAve.net, Inc.  
Welcomes You to the Latest in Quality Internet Services

*Park Ave.net*  
— "Your Avenue to the Internet" —

Call 628-8130  
<http://parkave.net>





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 2

A Monthly Publication of the IEEE Orlando Section

September 1996

## Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.  
Members are encouraged to invite and bring guests to these events.

### Networking Meeting and Member's Presentation

**Sponsor:** Consultants' Network

**Program:** The IEEE Orlando Consultants' Network is inviting each and every one of its new members to present a briefing of his or her consulting practice. The following new members have been invited to present an overview of their consulting background and services at this meeting.

**Speakers:**

**Mr. Steven L. Purucker, P.E.** of MSoft Developers, Inc. is an expert in working with utility personnel and end users to develop computer systems that meet the needs of your company. Expertise includes project management, client server software, expert systems, reliability centered maintenance software, SCADA and equipment instrumentation for all size utilities. Specialize in providing practical solutions for power system problems. Mr. Purucker can be reached at 407-875-2787, Fax: 407-875-2787, E-mail: 71173.1500@compuserve.com

**Mr. Francisco Lorenzo-Luaces** is a professional engineer experienced in analog circuits, instrumentation and aerospace-quality system design. This includes determining system topology/architecture, specifying, selecting and test-

ing of required components, and analyzing, testing and troubleshooting system to ensure performance requirements met. Have technically overseen transitioning of systems from bench breadboards to fielded production units. Mr. Luaces can be reached at 407-281-0373, E-mail: 76043.2617@compuserve.

**Date:** Tuesday, September 10, 1996

**Time:** Refreshments - 6:00 PM

Presentation - 6:30 PM

**Refreshments:** Free pizza and soda.

**Location:** Orlando Public Library, 3rd Floor, Patio Room.

**Reservations:** Jorge Medina 260-1676, David Flinchbaugh 859-4855 or Peter Hoyles 904-737-9686.

**E-mail:** medina@parkave.net

### Optimal Subband Coders for Data Compression

**Sponsor:** SP and COM/VT

**Speaker:** IEEE Distinguished Lecturer Prof. P. P. Vaidyanathan of the California Institute of Technology.

**Date:** Tuesday, September 17, 1996

**Time:** 5:30 PM

**Refreshments** will be served

**Location:** UCF Engineering building room 288

**Contact:** For more information, please contact Al Berg at 306-6986 or John Seybold at 275-3600.

### Tour of GM Test Track at EPCOT

**Sponsor:** PE/IA/PEL

**Date:** Tuesday, September 10, 1996

**Time:** 6:30 PM

**Contact:** J. Murphy (O) 824-4194

### Introduction of Personal Communications Systems to Orlando

**Sponsor:** PE/IA/PEL

**Speaker:** Mr. Ricardo Loo, PCS/Primco

**Date:** Tuesday, October 8, 1996

**Time:** 6:30 PM

**Location:** Orlando Central Public Library

**Contact:** S. Croup (O) 422-4911

### Elect. Utility Hurricane Preparedness

**Sponsor:** PE/IA/PEL

**Speaker:** Mr. Ed Brinson, Florida Power Corp.

**Date:** Tuesday, November 12, 1996

**Time:** 6:30 PM

**Location:** Orlando Central Public Library

**Contact:** S. Croup (O) 422-4911

**THE ORLANDO SECTION MONTHLY**

Published by the  
**IEEE ORLANDO SECTION**  
**EXECUTIVE BOARD**

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
 823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
 823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
 823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
 306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
 823-2638 - u.vemulapati@ieee.org

**SOCIETY CHAPTER CHAIRMEN**

**AES:** Gerald Holst - VMBox 210, (H) 629-5370  
**AP/MTT:** Dr. C. Christodoulou - VMBox 220  
 823-5198 - tvi@engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
 823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
 (W)275-3600, (H)812-4323 - jsseybold@tasc.com  
**Consultants' Net:** Jorge Medina - VMBox 400  
 (O)260-1676, (F)260-1636-medina@parkave.net  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
 823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
 658-6800 - riza@mail.creol.ucf.edu  
**Neural Net:** Dr. M. Georgiopoulos - VMBox 500  
 823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
 419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
 306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
 823-5098 - myler@pegasus.cc.ucf.edu  
**UFFC:** Michael E. Garrity, Sawtek - VMBox 300  
 884-3486 - mg@sawtek.com

**COMMITTEE CHAIRMEN**

**Awards:** Dave King, CSEC - VMBox 600  
 (O)628-4496, (H)628-4462 - dave@parkave.net  
**WWW:** Dr. Ali Atashroo, UCF - VMBox 610  
 823-2229 - atashroo@pegasus.cc.ucf.edu  
**Conference:** Dr. Issa Batarseh - VMBox 620  
 823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
 823-5957 - mortazawi@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkaid - VMBox 640  
 823-5793 - belkaid@pegasus.cc.ucf.edu  
**Membership:** (Vacant - Volunteer Needed)  
**PACE:** Jorge Medina, MSI - VMBox 660  
 (O)260-1676, (F)260-1636-medina@parkave.net  
**Programs:** Dr. Takis Kasparis - VMBox 670  
 823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
 (O)260-1676, (F)260-1636-medina@parkave.net  
**Strategic Plan:** Dave King, CSEC - VMBox 690  
 (O)628-4496, (H)628-4462 - dave@parkave.net

**UCF STUDENT BRANCH**

E-mail: ieee@ece.engr.ucf.edu

Web Page: <http://www-ece.engr.ucf.edu/ieee>

**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
 823-2786 - petrasko@pegasus.cc.ucf.edu  
 Dr. Issa Batarseh, UCF - VMBox 620  
 823-0185 - batarseh@pegasus.cc.ucf.edu

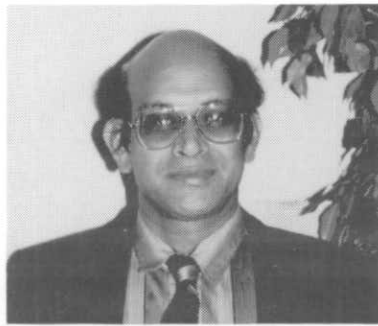
**Chairman:** Joe Martinez - VMBox 720  
 678-0437 - ejm@ece.engr.ucf.edu  
**SRC:** Chris Rose - VMBox 730, 657-1755

**IEEE ORLANDO INFORMATION CENTER**

E-mail: sec.orlando@ieee.org

Web Page: <http://ieee-os.engr.ucf.edu>

Voice Mail (407)260-1676 - Fax (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

**CHAIRMAN'S CORNER**

The first executive committee meeting for the year was held on August 5, at 288 Engineering Building, UCF. Unfortunately, many chapter chairs were not present for the meeting. Therefore, major items like Treasurer's report and minute of June 196 meeting could not be approved due to lack of a quorum. I am happy to announce that we have a new chair for the COM/VT chapter and **Dr. John Seybold** has volunteered to take up the position.

There is a change of venue for the Florida Council Meeting this year and the first meeting will be held at Tampa on August 24, Saturday. The 1996 National Pace Conference will be held at Phoenix, Arizona during the Labor Day weekend and our Pace chairman, **Mr. Jorge Medina**, will be representing our section. The Sections Congress 1996 will be held at Denver, Colorado during November 1-4 and I will be representing the section.

The Orlando Section has an excellent video library collection with more than 100 titles. I request the members to utilize this facility and look for the list of video on page 3 of this newsletter. The Strategic Planning Committee, under the leadership of **Mr. David King** is planning the action items for the Engineer's Week 1997 in February. If any one is interested in volunteering for this committee, please call David King.

The annual Family Fun Day will be held

at Wet'n Wild and is scheduled for September 28, Saturday. Our Programs chair, **Dr. Takis Kasparis** is working hard to make it a success.

Our next executive meeting will be held on September 3, Tuesday at 288 Engineering Building, UCF. Please join us.

*Family Fun Day!*  
**at Wet'n Wild**  
**September 28, 1996**  
**For Information Contact**  
**Dr. Takis Kasparis**  
**823-5913**  
**tnk@ece.engr.ucf.edu**

## Looking for Consultants?

**IEEE-USA's Directory of Electrotechnology Consultants** is a must for any company or institution that uses technical or management consultants. The **Directory** lists independent consultants who are operating as sole practitioners or in small businesses and also gives detailed information regarding specific areas of expertise.

Prepared by the Coordinating Committee of the Alliance of IEEE Consultants'

Networks, the **Directory** is available as a searchable database on the Web at <<http://www.ieee.org/usab/DOCUMENTS/CAREER/AICN/dbform.html>>.

Or, for a free hard-copy version, contact Bill Anderson at:



THE INSTITUTE OF ELECTRICAL  
 AND ELECTRONICS ENGINEERS, INC.

**IEEE United States Activities**

1828 L Street, NW, Suite 1202  
 Washington, DC 20036-5104

Phone: 202-785-0017 Fax: 202-785-0835  
 Email: [w.anderson@ieee.org](mailto:w.anderson@ieee.org)

# IEEE ORLANDO SECTION VIDEO LIBRARY

EDUCATIONAL COMMITTEE - Dr. Amir Mortazawi, 823-5957, E-mail: mortazawi@ece.engr.ucf.edu.

The Orlando Section Video Library now has over 100 technical video tapes. To borrow any of the videos listed below, simply contact the Educational Committee Chairman, Dr. Amir Mortazawi, 823-5957,

E-mail: mortazawi@ece.engr.ucf.edu. There is no charge to the IEEE Orlando Section Chapters for their use. The Chapter will be responsible for return postage for the video, for providing a meeting room and projection equipment, and for making copies of any handouts which may accompany the video. Making copies of the video tapes is prohibited.

Videoconference materials are available only to IEEE Orlando Section Chapters with attendance limited to IEEE members. These are selected programs from IEEE's ongoing Seminars via Satellite series on timely engineering topics. Each video runs several hours and would be suitable for a day long program.

## VIDEOS

### AES

- Role of Artificial Intelligence in Manufacturing
- Desktop Publishing for Technical Writers

### AP/MTT

- GaAs Monolithic Microwave IC
- Microwave Opto-Electronics
- Noise in Microwave Circuits
- Some Relations Between Microwave and Optics
- Nonlinear GaAs FET Modeling
- Gallium Arsenide - Key to Modern Microwave Technology
- Sensors from Microwave to Electro-Optical

### COMMUNICATIONS

- Adaptive Resonance
- Competitive and Cooperative Learning Systems

- Spread Spectrum Communications
- Error Correcting Codes for DSP
- Introduction to Modem Technology, Theory and Practice of Bandwidth Efficient Modulation from Shannon and Nyquist to date

### COMPUTERS

- Parallel Processing
- Communications and Synchronization in Parallel Processing Systems
- Distributed Supercomputing
- Distributed Software Engineering
- Concurrent Software Analysis
- 11 Rules of Supercomputer Design

### ED/CHMT

- Submicron BiCMOS Process Technology
- Submicron CMOS Technology Scaling
- What is all this about GaAs
- Gallium Indium Arsenide Hetero-structures of Low Noise Amplification, High Speed Logic Circuits and Light Detection
- Advanced Silicon Processing for Device Engineers
  - Part 1: Deposition Techniques
  - Part 2: Advanced Lithography Techniques
  - Part 3: Etching
  - Part 4: Single Wafer Processing and Cluster Tools
- Heterostructure Transistors

### LEO

- Light Wave Communications
- Photonic Switching
- MBE and MOCVD New Structures/Devices

### NEURAL NETWORK GROUP

- Artificial Neural Systems
- Neural Networks: Adaptive Pattern Recognition
- Neural Networks: Algorithms and Microhardware
- Neural Networks: Optical

- Neurocomputers
- Learning, Recognition and Prediction by Self-Organizing Neural Networks
- Adaptive Signal Processing and Adaptive Neural Networks
- Adaptive Vector Quantization and Neural Networks
- Neural Network Based Speech Recognition

### POWER

- Three Phase Short Circuits
- Unsymmetrical Short Circuits
- Applications to Industrial Power Distribution
- Adjustable Speed Drives

### SP

- Digital Signal Processing
- The Structure of FFT and Convolution Algorithms
- Synthetic Aperture Radar Viewpoint
- High Resolution and Higher Order Spectral Analysis
- VLSI for Signal Processing

### SRC

- Dynamical System Review
- Modeling and Control of Automated Manufacturing Systems
- Networking for Computer-Integrated Manufacturing
- Sensor Based Planning and Control in Robotics
- Adaptive Sensor-Motor Control
- Adaptive Pattern Recognition
- Vision
- H and  $\mu$  Methods for Robust Control
- Nonlinear Circuit Analysis and Design
- Introduction to Mechatronic System Design with Applications

### TEXT BOOKS

- Microcomputer Control of Power Electronics and Drives
- Modern Power Electronics
- Power Transistors: Device Design and Applications

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL



Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: medina@parkave.net - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Sep 3** 6:00 PM IEEE Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326  
**Sep 9-12** IEEE - **18th Annual Electrical Overstress/Electrostatic Discharge Symposium** - Buena Vista Palace Hotel, Orlando  
**Sep 10** 6:00 PM IEEE CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676  
**Sep 10** 6:30 PM IEEE PE/IA/PEL - **Tour of GM Test Track at EPCOT** - J. Murphy (O) 824-4194  
**Sep 17** 5:30 PM IEEE SP-COM/VT - **Optimal Subband Coders for Data Compression** - UCF, Eng. Bldg. Room 288, A. Berg, 306-6986  
**Sep 28** IEEE Orlando Section - **Family Fun Day** - Wet'n Wild, T. Kasparis, 823-5326  
**Oct 1** 6:00 PM IEEE Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326  
**Oct 8** 6:00 PM IEEE CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676  
**Oct 8** 6:30 PM IEEE PE/IA/PEL - **Introduction of Personal Communications Systems to Orlando** - O.C.P.L, S. Croup (O) 422-4911  
**Nov 3-6** IEEE ED/MTT - **GaAs IC Symposium** - The Peabody Orlando, Orlando  
**Nov 5** 6:00 PM IEEE Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326  
**Nov 12** 6:00 PM IEEE CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676  
**Nov 12** 6:30 PM IEEE PE/IA/PEL - **Elect. Utility Hurricane Preparedness** - Orlando Central Public Library, S. Croup (O) 422-4911

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### EE POSITION AVAILABLE

Electronic Design Engineer:

Optronic Laboratories - leader in full spectrum optical radiation measurement instrumentation, is seeking a degreed engineer with hands-on design experience in high speed digital, PLD's, microprocessor, and low level analog. Desirable but not necessary experience includes CCD imaging circuitry, OrCAD, SMT production, PIC design, EMC compliance experience. Forward resume to: Dir. of Engineering, Optronic Laboratories, 4470 35th St., Orlando, FL 32811.

David King, Your IEEE Orlando Jr. Section Chairman  
and President of ParkAve.net, Inc.  
Welcomes You to the Latest in Quality Internet Services

*Park Ave.net*  
— "Your Avenue to the Internet" —

Call 628-8130  
<http://parkave.net>





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 3

A Monthly Publication of the IEEE Orlando Section

October 1996

## Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

### Laser Rangefinders: Military Technology Transitions to Commercial Manufacturing

**Sponsor:** AES

**Abstract:** Mr. Jim Porter, President of Laserange Inc., will discuss the steps he and his three co-founders took in founding, financing, developing, and production planning of a small laser rangefinder aimed at the sports market. The talk will cover the successes, mistakes, and lessons learned. Before joining Tektronix, he was a member of Lockheed Martin's laser department.

**Speaker:** Jim Porter (tel: 660-2727)

**Date:** Wednesday October 9, 1996

**Time:** 6:00 PM

**Refreshments:** will be served

**Location:** Tektronix, Inc., 151 Southhall Lane, Suite 170 (in Maitland Center) Maitland, FL 32751

**Contact:** Gerald C. Holst 629-5370

### National CN Conference Planning Meeting

**Sponsor:** Consultants' Network

**Program:** All CN members are invited to attend this meeting to help us plan for another successful National Consultants' Network Conference in Orlando for 1997.

**Date:** Tuesday, October 8, 1996

**Time:** Refreshments - 6:00 PM

Presentation - 6:30 PM

**Refreshments:** Free pizza and soda.

**Location:** Orlando Public Library, 3rd Floor, Patio Room.

**Reservations:** Jorge Medina 260-1676, David Flinchbaugh 859-4855 or Peter Hoyles 904-737-9686.

**E-mail:** medina@parkave.net

### Introduction of Personal Communications Systems to Orlando

**Sponsor:** PE/IA/PEL

**Speaker:** Mr. Ricardo Loor, PCS/Primco

**Date:** Tuesday, October 8, 1996

**Time:** 6:30 PM

**Location:** Orlando Public Library

**Contact:** S. Croup (O) 422-4911

### Elect. Utility Hurricane Preparedness

**Sponsor:** PE/IA/PEL

**Speaker:** Mr. Ed Brinson, Florida Power Corp.

**Date:** Tuesday, November 12, 1996

**Time:** 6:30 PM

**Location:** Orlando Central Public Library

**Contact:** S. Croup (O) 422-4911

### 1996 PACE Conference & Workshop Summary

Jorge Medina

IEEE Orlando Section PACE Chairman

The Network of Professional Activities Committees for Engineers (PACE) of the IEEE United States Activities Board (USAB) conducts an annual PACE conference and Workshop to orient and train PACE representatives. This year's conference and workshop were held at The Pointe Hilton Resort at Squaw Peak in Phoenix, Arizona. As in the past, the meeting was held over Labor Day weekend, August 30 - September 2.

The theme of the 1996 PACE Conference and Workshop was *Changing Environments: The Proactive Engineer*. The program began on Friday evening, August 30, with a reception, dinner, and keynote address. This was followed on Saturday, Sunday, and Monday by speakers, panel presentations, and workshops. The conference was closed shortly before noon on Monday, September 2. All topics were addressed with a view to developing programs at the region, council, area, section, society, and chapter level. Two-way communication between PACE leaders and other IEEE-USA volunteers was emphasized.

Two innovations were introduced this year. First, some of the sessions

*Continued on page 2*

## THE ORLANDO SECTION MONTHLY

Published by the  
IEEE ORLANDO SECTION  
EXECUTIVE BOARD

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

## SOCIETY CHAPTER CHAIRMAN

**AES:** Gerald Holst - VMBox 210, (H) 629-5370  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
(W)275-3600, (H)812-4323 - jsseybold@tasc.com  
**Consultants' Net:** Jorge Medina - VMBox 400  
(O)260-1676, (F)260-1636 - medina@parkave.net  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFFC:** Michael E. Garrity, Sawtek - VMBox 300  
884-3486 - mg@sawtek.com

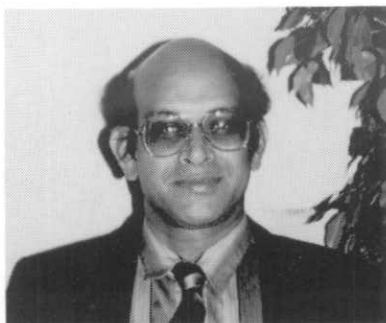
## COMMITTEE CHAIRMAN

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-4496, (H)628-4462 - dave@parkave.net  
**WWW:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**Membership:** (Vacant - Volunteer Needed)  
**PACE:** Jorge Medina, MSI - VMBox 660  
(O)260-1676, (F)260-1636 - medina@parkave.net  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
(O)260-1676, (F)260-1636 - medina@parkave.net  
**Strategic Plan:** Dave King, CSEC - VMBox 690  
(O)628-4496, (H)628-4462 - dave@parkave.net

## UCF STUDENT BRANCH

E-mail: ieee@ece.engr.ucf.edu

**Web Page:** <http://www-ece.engr.ucf.edu/~ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
 Dr. Issa Batarseh, UCF - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Chairman:** Joe Martinez - VMBox 720  
678-0437 - ejm@ece.engr.ucf.edu  
**SRC:** Chris Rose - VMBox 730, 657-1755  
**IEEE ORLANDO INFORMATION CENTER**  
**E-mail:** sec.orlando@ieee.org  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

## CHAIRMAN'S CORNER

Our second executive meeting was held at UCF on September 3. Several chapter activities are planned with tech-nical meetings and should be showing up on the calendar and our web page. IEEE Florida Council award nominations are due by October 1 and our Award Chair **Dave King** is working on this. Our PACE chair **Jorge Medina** attended the National Pace Meeting during Labor Day weekend at Phoenix, Arizona and he reported several issues which were discussed at this meeting. If any one is interested to know further details please call Jorge,

The IEEE Florida Council met on Saturday, August 24 at the Florida Power Coordinating Group Office at Tampa. I attended this meeting and several issues were discussed. There was considerable discussion about the leadership training for section members. The council is willing to fund one member from each section to participate in this training. It was recommended that IEEE members who are eligible should upgrade their status to senior member. If you have been an active IEEE member with at least ten years of active professional practice, you should apply for senior member status. You can get the necessary form from me. There is a downward trend in IEEE membership in Florida, particularly among student membership. The council recommended to canvas for more students to become members.

In other news from Florida Council meeting, the subject of Southcon was raised. The Southcon 97 is moved to Raleigh, NC with Southcon 98 to comeback to Orlando again.

There was also discussion to bring out

a bimonthly FL Council Magazine with advertisement and articles. Sections were requested to report the feedback from their members on this issue. Our section has a mixed feeling. The next IEEE Florida Council meeting will be held in November during the Section Congress Meeting at Denver, Colorado.

Please remember our Summer Fun Day, at Wet'n Wild on Saturday, 28 September. For more information please call our Programs Chair **Takis Kasparis**. See you there!

from page 1

## 1996 PACE Conference...

focused on the needs and interests of young professionals (engineers with ten years or less of professional experience). Each section was invited to recruit a young professional who is a promising future IEEE leader to accompany each PACE representative to the conference.

The second innovation was to grant Continuing Education Units (CEUs) approved by the International Association for Continuing Education and Training (IACET) for the conference itself and for five special training sessions that IEEE-USA committees offered on Friday preceding the official opening of the conference. Certificates also were given, on request, to P.E.s who wish to earn Professional Development Hours (PDHs) to satisfy state requirements.

A special PACE leaders' Training session was held on Friday prior to the formal opening of the conference. This training was designed especially for first and second-year PACE leaders. It covered the structure and purpose of IEEE, IEEE-USA, and the PACE Network; the role of the PACE leader; and how to organize PACE activities at the local level. It also gave new PACE representatives a road map to help them get the most from the 1996 PACE conference.

If you are interested in joining the IEEE Orlando Section PACE committee or need additional information please contact **Jorge Medina** at (407) 260-1676, E-mail: [j.medina@ieee.org](mailto:j.medina@ieee.org).

# NEWS BREAKER

6200 INTERNATIONAL DR. ORLANDO, FL 32819

## *Wet'n Wild*

(407) 351-1800 • FAX (407) 363-1147

# I.E.E.E.

## SUMMER SPLASH BASH



**SATURDAY, SEPTEMBER 28, 1996**

**PARK HOURS: 10:00AM- 6:00PM.**

**Ticket Price: Adults \$10.00**

**Children 3-13 years and students \$5.00.**



### YOUR EVENT INCLUDES:



An all-you-can-eat Cookout served at 12:30pm-1:30pm, with all the fixin's, and desert, in the International Pavillion.



Free unlimited soft drinks from 11:30am-4:30pm.



Free Congo River Adventure Golf featuring two 18-hole miniature golf courses included in your admission 12:00 Noon -5:00pm!



Please be reminded that cotton or denim shorts, cut-offs, or any clothing item with metal fasteners, rivets, zippers or buckles, will not be allowed on the rides.



Call Takis Kasparis at 823-5913 or e-mail: [tnk@ece.engr.ucf.edu](mailto:tnk@ece.engr.ucf.edu) for tickets and information.



Parking \$4.00 per automobile.



Picnic baskets are welcome, however glass and alcoholic beverages are prohibited.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL

07139413 06/29/1996  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: medina@parkave.net - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Sep 28** Orlando Section - **Summer Splash Bash** - Wet'n Wild, T. Kasparis, 823-5326
- Oct 1** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326
- Oct 8** 6:00 PM CN - **National Conference Planning Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676
- Oct 8** 6:30 PM PE/IA/PEL - **Introduction of Personal Communications Systems to Orlando** - O.C.P.L, S. Croup (O) 422-4911
- Oct 9** 6:00 PM AES - **Laser Rangefinders: Military Technology Transitions to Commercial Manufacturing** - G. Holst 629-5370
- Nov 3-6** ED/MTT - **GaAs IC Symposium** - The Peabody Orlando, Orlando
- Nov 5** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326
- Nov 12** 6:00 PM CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676
- Nov 12** 6:30 PM PE/IA/PEL - **Elect. Utility Hurricane Preparedness** - Orlando Central Public Library, S. Croup (O) 422-4911
- Dec 3** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### EE POSITION AVAILABLE

Electronic Design Engineer:

Optronic Laboratories - leader in full spectrum optical radiation measurement instrumentation, is seeking a degreed engineer with hands-on design experience in high speed digital, PLD's, microprocessor, and low level analog. Desirable but not necessary experience includes CCD imaging circuitry, OrCAD, SMT production, PIC design, EMC compliance experience. Forward resume to: Dir. of Engineering, Optronic Laboratories, 4470 35th St., Orlando, FL 32811.

### POSITION WANTED

MSEE - 5/96. Passed the Engineer Intern Exam - 10/89. Robotics, embedded computers, automation, image processing, machine vision, and intelligent control. Ada, Assembly Language, BASIC, C, DOS, Fortran, Linux, Microstation, Windows (inc. Excel and Word), and UNIX.

Contact:

Lawrence D. Gaber  
(407) 679-4473, [l.gaber@ieee.org](mailto:l.gaber@ieee.org)





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 4

A Monthly Publication of the IEEE Orlando Section

November 1996

## Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.  
Members are encouraged to invite and bring guests to these events.

### Two Dimensional Device Modeling for Improving Device Performance

**Sponsor:** AP/MTT & ED/CHMT

**Abstract:** Dr. Curtice will discuss the use of two dimensional device modeling for improving device performance and the elimination of serious device deficiencies (such as premature avalanche breakdown) will also be described. The talk will be tutorial and will not rely heavily upon device equations.

**Speaker:** Dr. Walter R. Curtice  
Fellow of the IEEE

**Date:** Wednesday November 6, 1996  
**Time:** 6:00 PM

**Refreshments:** served at 5:30 PM

**Location:** University of Central Florida  
College of Engineering, room 107E  
Orlando, FL-32816

**Contact:** Toni Ivanov (407) 823-5198

### Elect. Utility Hurricane Preparedness

**Sponsor:** PE/IA/PEL

**Speaker:** Mr. Ed Brinson, Florida Power Corp.

**Date:** Tuesday, November 12, 1996  
**Time:** 6:30 PM

**Location:** Orlando Public Library

**Contact:** S. Croup (O) 422-4911

### Networking Meeting and Member's Presentation

**Sponsor:** Consultants' Network

**Program:** The IEEE Orlando Consultants' Network is inviting each and every one of its new members to present a briefing of his or her consulting practice. The following new member has been invited to present an overview of his consulting background and services at this meeting.

**Consultant Member:**

**Mr. Steven L. Purucker, P.E.** of MSoft Developers, Inc. is an expert in working with utility personnel and end users to develop computer systems that meet the needs of your company. Expertise includes project management, client server software, expert systems, reliability centered maintenance software, SCADA and equipment instrumentation for all size utilities. Specialize in providing practical solutions for power system problems. Mr. Purucker can be reached at 407-875-2787, Fax: 407-875-2787, E-mail: 71173.1500@compuserve.com

**Date:** Tuesday, November 12, 1996

**Time:** Refreshments - 6:00 PM

Presentation - 6:30 PM

**Refreshments:** Free pizza and soda.

**Location:** Orlando Public Library, 3rd Floor, Patio Room.

**Reservations:** Jorge Medina 260-

1676, or Peter Hoyles 904-737-9686.

**E-mail:** j.medina@ieee.org

### Structured Design of Surface MEMS

**Sponsor:** Computer Chapter

**Speaker:** Dr. Gary K. Fedder, Assistant Professor, Electrical & Computer Engineering and Robotics, Carnegie Mellon University.

**Abstract:** Dr. Fedder will describe his efforts to apply structured VLSI-like design methods to MEMS in order to shorten the development cycle to days and to enable design of more complex systems comprised of hundreds to thousands of MEMS.

**Date:** Friday, November 1, 1996

**Time:** 1:30 PM

**Refreshments:** served at 1:15

**Location:** CSB 231, UCF

**Contact:** Udaya Vemulapati 823-2638

**E-mail:** u.vemulapati@ieee.org

### Executive Committee Meeting

**Sponsor:** Orlando Section

**Date:** Tuesday, November 5, 1996

**Time:** 6:00 PM

**Location:** UCF, Eng. Bldg. Room 288

**Contact:** K. Sundaram (O) 823-5326

## THE ORLANDO SECTION MONTHLY

Published by the  
IEEE ORLANDO SECTION

## EXECUTIVE BOARD

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

## SOCIETY CHAPTER CHAIRMAN

**AES:** Gerald Holst - VMBox 210, (H) 629-5370  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
(W)275-3600, (H)812-4323 - jsseybold@tasc.com  
**Consultants' Net:** Jorge Medina - VMBox 400  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFFC:** Michael E. Garrity, Sawtek - VMBox 300  
884-3486 - mg@sawtek.com

## COMMITTEE CHAIRMEN

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-4496, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**Membership:** (Vacant - Volunteer Needed)  
**PACE:** Jorge Medina, MSI - VMBox 660  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-4496, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

## UCF STUDENT BRANCH

**E-mail:** ieee@ece.engr.ucf.edu  
**Web Page:** http://www-ece.engr.ucf.edu/ieee  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
 Dr. Issa Batarseh, UCF - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Chairman:** Joe Martinez - VMBox 720  
678-0437 - ejm@ece.engr.ucf.edu  
**SRC:** Chris Rose - VMBox 730, 657-1755  
**IEEE ORLANDO INFORMATION CENTER**  
**E-mail:** sec.orlando@ieee.org  
**Web Page:** http://ieee-os.engr.ucf.edu  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

## CHAIRMAN'S CORNER

The October meeting of the Executive Meeting was held on Tuesday, October 1, at UCF. Again the annual fun day at Wet'n Wild was a grand success due to fine weather and more members showing up than last year. Thanks to **Dr. Takis Kasparis**, our Programs Chair, for organizing the event. Our students' advisor, Dr. Batarseh, informed the increase in student's membership this year. Still, we have a long way to go and we must make every effort to increase the overall student membership number of our section. The student branch is planning several activities and prepared a budget for the year 1997 that has to be approved by the section.

The 1998 Southeastcon will be held in Orlando. Some of the organizing committee members of this event from our section will be attending the 1997 Southeastcon in Virginia. This participation is necessary to learn more about the organization of the event and student's contest. A formal budget of \$3,460 was approved for their participation in the event.

Our section is yet to receive the profit share from NTC and IAS conferences. All chapter chairs are requested to prepare the budget for 1997 and present it at the next executive meeting.

**Jorge Medina**, Consultants' Chair, has informed the request from US Activities Board for looking into the expansion of Consultants' Network at the international level. Jorge is interested in pursuing this effort. Jorge again is planning to organize a one-day national conference of the Consultants' Network early next year.

Our Next executive meeting will be held on Tuesday, November 5, at 6:00 PM in the Engineering Building. Please join us.

Introducing the **IEEE-USA National Job-Listing Service**The Information Superhighway  
...The Road to Your Next Job!

IEEE United States Activities has developed an electronic job-listing service that gives members free information on job openings across the nation.

To access current job listings, send an e-mail message to any of these Internet addresses (no subject line or text message is needed; files will automatically return to your e-mail address):

Regions 1-6: info.ieeeusa.jobs.r[insert IEEE region number: 01-06]@ieee.org  
 Nationwide & non-U.S.: ...jobs.other@ieee.org

If you don't have Internet access, ask your Section officers for assistance. For additional information, contact Bill Anderson at 202-785-0017, 202-785-0835 (fax) or w.anderson@ieee.org (Internet).

THE INSTITUTE OF ELECTRICAL  
AND ELECTRONICS ENGINEERS, INC.

## IEEE UNITED STATES ACTIVITIES

1828 L Street, N.W., Suite 1202  
Washington, DC 20036-5104, U.S.A.

## Orlando Consultants' Network Web Site

The Orlando Consultants' Network web site is taking shape under the leadership of Jorge Medina. The URL is:

**www.parkave.net/users/medina/ieee**

The 1996 Region 3 Consultants' Network database is now on-line, along with links to the IEEE and other sites of interest. There is a link to other consultants' network web sites; at present, at least eight are up and running. The list of all IEEE consultants' networks is at [www.ieee.org/usab/](http://www.ieee.org/usab/).

## Unlimited Internet Access to Orlando IEEE Members

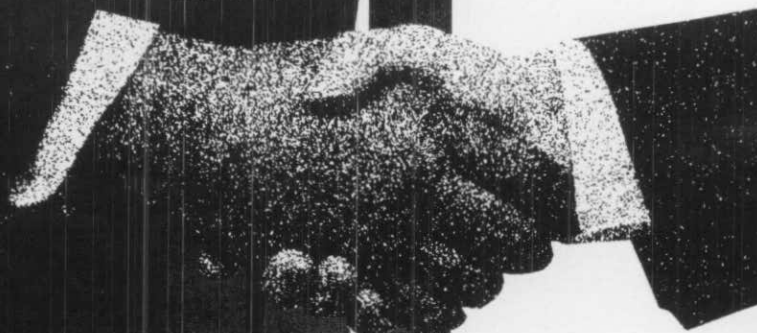
Parkave.net is pleased to offer a special group discount to IEEE members of the Orlando Section. Only \$15 per month for unlimited Internet access! Contact Dave King at 628-8130 (dave@parkave.net) or Jorge Medina at 260-1676 (medina@parkave.net).

Dave King 628-8130

Maria Delosio 408-562-6376 IEEE

# MEMBER!

96  
campaign



# GET A MEMBER

**KNOW** that you've played an important part in the on-going success of the IEEE.

There is no denying it—the best person to recruit new members to the IEEE is YOU. Your interest and involvement in the world's leading technical society is our best asset in bringing new members to the IEEE. Please make a commitment this year to share the benefits of IEEE membership with your non-member colleagues!

**PLUS**—if you write your name and member number in the IEEE membership application member recruiter box—you will receive a small gift in appreciation for bringing a new IEEE member on board. The more new members you recruit, the better your gift will be!

## 8 GREAT REASONS WHY YOUR COLLEAGUE SHOULD JOIN THE IEEE

- A subscription to *Spectrum* and *The Institute*
- Low member prices on ALL IEEE publications and products
- Continuing education opportunities
- A chance to network with technical experts who are changing the world
- Professional prestige and career benefits
- Value-added benefits on financial services with the IEEE Financial Advantage Program

To receive a special Member-Get-A-Member recruiting packet:

**CALL 1(800)678-IEEE**

or 1(908)562-5539

Fax 1(908)981-0225

E-mail [new.membership@ieee.org](mailto:new.membership@ieee.org)



IEEE

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.  
445 Hoes Lane  
PO Box 1331  
Piscataway, NJ 08855-1331  
USA

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL

07139413 06/29/1996  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: medina@parkave.net - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Nov 1** 1:30 PM Computer - **Structured Design of Surface-MEMS** - UCF, CSB. Room 231, U. Vemulapati, (O) 823-2638  
**Nov 3-6** ED/MTT - **GaAs IC Symposium** - The Peabody Orlando, Orlando  
**Nov 5** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, (O) 823-5326  
**Nov 6** 6:00 PM AP/MTT & ED/CHMT - **Two Dimensional Device Modeling** - UCF, Eng. Bldg. Room 107E, T. Ivanov, (O) 823-5198  
**Nov 12** 6:00 PM CN - **Networking/Member's Spotlight** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, (O) 260-1676  
**Nov 12** 6:30 PM PE/IA/PEL - **Elect. Utility Hurricane Preparedness** - Orlando Central Public Library, S. Croup, (O) 422-4911  
**Dec 3** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, (O) 823-5326  
**Dec 10** 6:00 PM CN - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, (O) 260-1676

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

## ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

## POSITION WANTED

MSEE - 5/96. Passed the Engineer Intern Exam - 10/89. Robotics, embedded computers, automation, image processing, machine vision, and intelligent control. Ada, Assembly Language, BASIC, C, DOS, Fortran, Linux, Microstation, Windows (inc. Excel and Word), and UNIX.

Contact:

Lawrence D. Gaber  
(407) 679-4473, [l.gaber@ieee.org](mailto:l.gaber@ieee.org)





# THE ORLANDO SECTION MONTHLY

A Monthly Publication of the IEEE Orlando Section

Volume XXX, Number 5

December 1996

*Our warmest wishes for this holiday  
season and throughout the new year!*

The IEEE Orlando Section Executive Board

## 2nd Annual Conference of the IEEE Consultants' Network of Orlando March 1, 1997 Orlando, Florida

Sponsored by  
IEEE Consultants' Network of Orlando  
IEEE Orlando Section

**1997 THEME: "MAKING PROGRESS IN CONSULTING"**

The conference will be held March 1, 1997, at the University of Central Florida in Orlando, Florida. The proceedings will be published by the IEEE Consultants' Network of Orlando.

Whether you have already been in the consulting business, are just starting out, or are just thinking about it, the 2nd Annual Conference of the IEEE Consultants' Network of Orlando provides an opportunity to present techniques, methods, or results of case studies to other consultants and to practitioners who can put them to use.

The 2nd Annual Conference of the IEEE Consultants' Network of Orlando also provides a unique opportunity to learn from practitioners about issues and problems encountered in the consulting business.

Practitioners have the opportunity to present results and lessons learned to other consultants and want-to-be consultants.

### Call for Papers

Papers and panel proposals are solicited in relevant areas including:

- Marketing
- Contracts
- International Consulting
- Running a Consulting Practice
- Fee Setting
- Networking

Special consideration will be given to presentations that directly address the conference theme. Paper abstracts must be RECEIVED by January 15, 1997, and the full paper submitted by February 1, 1997.

Paper Abstracts should be submitted to:  
Jorge Medina, Conference Chair  
Medina Software, Inc.  
P.O. Box 521917  
Longwood, FL 32752-1917  
Tel: (407) 260-1676  
Fax: (407) 260-1636  
E-mail: j.medina@ieee.org

## ★ STAR SEARCH ★ ORLANDO SECTION AWARDS

**Purpose** - To encourage and facilitate the identification of potential candidates for Orlando Section Awards by providing a simple avenue for preliminary consideration by the Awards Committee.

**Procedure** - The submitter fills out the form on page 3 and suggests nominations and endorses to support the nomination. After a review process, some candidates will be selected for nomination. If the submitter is willing to prepare the nominations forms, the Committee will provide the necessary materials by return mail. If not, the Committee will attempt to locate a suitable nominator. The members of the Awards Committee are not permitted to nominate or endorse any candidates.

**Qualifications** - The **Outstanding Engineer Award** is designed to recognize a member of the Section who, through his/her technical and professional abilities, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Engineering Educator Award** is designed to recognize a member of the Section who has shared his/her technical and professional abilities through teaching (in industry, government or in an institution of higher learning) and in so doing has made an outstanding contribution to the electro-technology profession.

The **Outstanding Service Award** is designed to recognize a member of the Section who, through his/her service to the Region and to the Institute, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Entrepreneur Award** is designed to recognize a self-employed member of the Section who, through his/her consulting abilities has made outstanding contributions to the electro-technology profession.

**Eligibility**- 1) Only IEEE members with 3 years residency in the Orlando Section are eligible. 2) A nominee cannot be considered for more than one award simultaneously. 3) Current members of the Section Executive Board are not eligible. 4) Previous award recipients, even from other Sections, are not eligible for the same award. 5) The candidate need not be a member of a Group or Society.

**Candidate Search Form** - See page 3

**THE ORLANDO SECTION MONTHLY**  
Published by the  
**IEEE ORLANDO SECTION**  
**EXECUTIVE BOARD**

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

**SOCIETY CHAPTER CHAIRMEN**

**AES:** Gerald Holst - VMBox 210, (H) 629-5370  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
(W)275-3600, (H)812-4323 - jsseybold@tasc.com  
**CN SIG:** Jorge Medina - VMBox 400  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFCF:** A. Zajac, Sawtek - VMBox 300  
884-3486 - az@sawtek.com

**COMMITTEE CHAIRMEN**

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-4496, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**Membership:** (Vacant - Volunteer Needed)  
**PACE:** Jorge Medina, MSI - VMBox 660  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
(O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-4496, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

**UCF STUDENT BRANCH**

**Web Page:** <http://www-ece.engr.ucf.edu/ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
Dr. Issa Batarseh, UCF - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Chairman:** Laurine Muzzey - VMBox 720  
677-5531 - laurine@au.net  
**SRC:** Jeremy McKinney - VMBox 730  
306-0306 - jmm@au.net

**IEEE ORLANDO INFORMATION CENTER**

**E-mail:** sec.orlando@ieee.org  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



*Dr. Kalpathy Sundaram, Section Chairman*

**CHAIRMAN'S CORNER**

The November meeting of the Executive Meeting was held on Tuesday, November 5, at UCF. For the first time this year, a lot of members were present and some very important issues were discussed. I had the chance to represent Orlando Section in the Sections Congress 96 held at Denver, Colorado, November 1-4. Several important issues were discussed in this meeting concerning the future of IEEE. I participated in several tutorials and workshops which are relevant to our section interests namely, Leadership Development, Students, Membership Development, Volunteer Recruitment, Section Management, Financial Self-Sufficiency etc.

The executive committee approved the students' branch budget for 1997. The executive committee decided to increase the budget from \$1,825 to \$3,500 for the students' branch in anticipation of our profit share which our section will receive from IAS conference. This increase in budget will help the students' branch to come up with more activities which may attract more students membership for our section.

All of us know that the annual family picnic at Wet'n Wild has been very successful for the past several years. In order to see more participation by the members in the monthly executive committee meetings, the committee came up with a nice idea. It has decided to offer discount coupons of \$5 to every one who shows up for the monthly meetings. The chapter chairs in turn may distribute these coupons to any one who show up for their respective chapter meetings. Each member can use one coupon for the next year's event. It is hoped that this will encourage more people to participate in the executive as well as chapter meetings.

Our Awards' Chair, Mr. David King has forwarded nominations from our section for Educator, Engineer, and Service awards to the Florida Council and Region-3 awards. Our next executive meeting will be held on Tuesday, December 3, at 6:00 PM in the UCF Engineering Building 288. Please join us.

**AICN NEWS**

The Alliance of the IEEE Consultants' Network (AICN) will become a "Special Interest Group" within IEEE-USA with a separate dues structure, similar to the Technical Societies. The SIG would report to the Board of Directors of IEEE-USA through a Vice President. The local networks will have a role similar to that of Chapters. The SIG dues will entitle members to receive a periodical publication, be listed in the consultants' database, received discounts on conferences, other products, etc. The SIG has the planned option for non-IEEE members to join it as Affiliates. Non-US members would also have this option.

These changes should be made in 1997 so that the SIG dues option will be on the 1998 IEEE membership renewal notice.

For information about the IEEE Consultants Network of Orlando (ICNO) please contact Jorge Medina at (407) 260-1676, Fax: (407) 260-1636, Email: j.medina@ieee.org, or visit the ICNO home page at

[www.parkave.net/users/medina/ieee/](http://www.parkave.net/users/medina/ieee/)

**STUDENT BRANCH NEWS**

The IEEE Student Branch now has an office in the Engineering building, Room ENGR-441. We hope this will provide better access to Student Branch activities to the general EE student body.

The Student Branch is also planning a Christmas Party, date to be set. For information please contact Joe Martinez at 678-0437, Email: ejm@ece.engr.ucf.edu.

The new Student Branch officers are:  
**Chair:** Laurine Muzzey  
**Vice Chair:** Stan Buchanan  
**SRC Chair:** Jeremy McKinney

# THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

## ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

1. AWARD: ☐ Outstanding Engineer Award  
☐ Outstanding Engineer Educator Award  
☐ Outstanding Service Award  
☐ Outstanding Entrepreneur Award

Please Return Form by 1/15/97

To: Dave King  
 230-1 S. New York Ave.  
 Winter Park, FL 32789

2. NOMINEE: \_\_\_\_\_

Professional Affiliation and Title: \_\_\_\_\_

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

Work Phone: (    ) \_\_\_\_\_ Home Phone: (    ) \_\_\_\_\_

3. PROPOSED CITATION (30 words or less) FOR: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. IEEE SOCIETY/BOARD RELEVANT TO ACHIEVEMENT CITED: \_\_\_\_\_

5. SUBMITTED BY: \_\_\_\_\_

IEEE Position and Grade: \_\_\_\_\_

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

Work Phone: (    ) \_\_\_\_\_ Home Phone: (    ) \_\_\_\_\_

6. ARE YOU WILLING TO PREPARE THE NOMINATION FORMS YOURSELF? YES NO

7. POTENTIAL ENDORSERS (two required who are familiar with nominee, who can attest to his/her contributions and to the importance thereof):

A. Name:
Position/Title:
Address:
City/ZIP
Phone:

A. Name:
Position/Title:
Address:
City/ZIP
Phone:

A. Name:
Position/Title:
Address:
City/ZIP
Phone:

8. BRIEF EVIDENCE TO SUPPORT NOMINATION/YEAR ACHIEVEMENT/IMPORTANCE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. SUGGESTED NOMINATOR(S) IF DIFFERENT FROM #5.: \_\_\_\_\_

\_\_\_\_\_

Submittal of this form does not replace the necessity of a completed nomination form. See page 1 for candidate qualifications.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

## TIME SENSITIVE MAIL

07139413 06/29/1996  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Dec 3** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
- Jan 7** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
- Jan 14** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
- Feb 4** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
- Feb 11** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
- Feb ??** TBA Orlando Section - **Awards Banquet** - TBA, D. King, 628-4496, dave@parkave.net
- Mar 1** 8:00 AM CNSIG/OS - **2th Annual Conference of the ICNO** - UCF, Bus. Adm. Bldg., J. Medina, 260-1676, j.medina@ieee.org
- Mar 4** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
- Mar 11** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

## ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

## NEED ANY ASSISTANCE?

The Referral Service of the IEEE CONSULTANTS NETWORK OF ORLANDO has over 60 engineering, technical and managerial consulting professionals available to help you with your particular problem. The Network's ethical code ensures the highest professional standards. There is **NO CHARGE** for referrals.

Tel: (407) 260-1676, FAX: (407) 260-1636

E-mail: [j.medina@ieee.org](mailto:j.medina@ieee.org)

<http://www.parkave.net/users/medina/ieee>





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 6

A Monthly Publication of the IEEE Orlando Section

January 1997

## 2nd Annual Conference of the IEEE Consultants' Network of Orlando March 1, 1997 Orlando, Florida

Sponsored by  
IEEE Consultants' Network of Orlando  
IEEE Orlando Section

### 1997 THEME: "MAKING PROGRESS IN CONSULTING"

The IEEE Consultants' Network and the IEEE Orlando Section present the 2nd Annual Conference of the IEEE Consultants' Network of Orlando for both new and experienced consultants. Some of the advanced program topics to be covered include:

- How to Start and Set up a Consulting Practice
- Consulting as a Business
- Networking
- Using the Internet to Advance your Practice
- International Consulting
- Protection of Individual Intellectual Property
- To Incorporate or not to Incorporate, That is the Question
- Setting Rates
- Starting a New Consulting Network

Audience questions and participation are invited at all panel sessions.

The conference will be held at the University of Central Florida in Orlando, Florida, Business Administration Building, Room 147, from 8:00 AM to 5:00 PM on Saturday, March 1, 1997. The conference includes buffet lunch, coffee breaks, conference records and networking.

Whether you have already been in the con-

sulting business, are just starting out, or are just thinking about it, the 2nd Annual Conference of the IEEE Consultants' Network of Orlando also provides a unique opportunity to learn from practitioners about issues and problems encountered in the consulting business.

For more information: send e-mail to: [j.medina@ieee.org](mailto:j.medina@ieee.org), leave a message on the IEEE Orlando Voice Information Center (407) 260-1676 mailbox 2, or send fax to (407) 260-1636.

Early Registration Before February 15, 1997:

• IEEE Students	\$35
• IEEE Members	\$50
• Non-Members	\$75

Late Registration After February 15, 1997:

• IEEE Students	\$45
• IEEE Members	\$60
• Non-Members	\$85

Please make checks payable to the IEEE and mail them to the attention of:

Jorge Medina, Conference Chairman  
Medina Software, Inc.  
P.O. Box 521917  
Longwood, FL 32752-1917

## ★ STAR SEARCH ★ ORLANDO SECTION AWARDS

**Purpose** - To encourage and facilitate the identification of potential candidates for Orlando Section Awards by providing a simple avenue for preliminary consideration by the Awards Committee.

**Procedure** - The submitter fills out the form on page 3 and suggests nominations and endorses to support the nomination. After a review process, some candidates will be selected for nomination. If the submitter is willing to prepare the nominations forms, the Committee will provide the necessary materials by return mail. If not, the Committee will attempt to locate a suitable nominator. The members of the Awards Committee are not permitted to nominate or endorse any candidates.

**Qualifications** - The **Outstanding Engineer Award** is designed to recognize a member of the Section who, through his/her technical and professional abilities, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Engineering Educator Award** is designed to recognize a member of the Section who has shared his/her technical and professional abilities through teaching (in industry, government or in an institution of higher learning) and in so doing has made an outstanding contribution to the electro-technology profession.

The **Outstanding Service Award** is designed to recognize a member of the Section who, through his/her service to the Region and to the Institute, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Entrepreneur Award** is designed to recognize a self-employed member of the Section who, through his/her consulting abilities has made outstanding contributions to the electro-technology profession.

**Eligibility**- 1) Only IEEE members with 3 years residency in the Orlando Section are eligible. 2) A nominee cannot be considered for more than one award simultaneously. 3) Current members of the Section Executive Board are not eligible. 4) Previous award recipients, even from other Sections, are not eligible for the same award. 5) The candidate need not be a member of a Group or Society.

Candidate Search Form - See page 3

**THE ORLANDO SECTION MONTHLY**

Published by the  
**IEEE ORLANDO SECTION**  
**EXECUTIVE BOARD**

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
 823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
 823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
 823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
 306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
 823-2638 - u.vemulapati@ieee.org

**SOCIETY CHAPTER CHAIRMEN**

**AES:** Gerald Holst - VMBox 210, (H) 629-5370  
**AP/MTT:** Tony Ivanov - VMBox 220  
 823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
 823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
 (W)275-3600, (H)812-4323 - jsseybold@tasc.com  
**CN SIG:** Jorge Medina - VMBox 400  
 (O)260-1676, (F)260-1636 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
 823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
 658-6800 - riza@mail.creol.ucf.edu  
**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
 823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
 419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
 306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
 823-5098 - myler@pegasus.cc.ucf.edu  
**UFCF:** A. Zajac, Sawtek - VMBox 300  
 884-3486 - az@sawtek.com

**COMMITTEE CHAIRMEN**

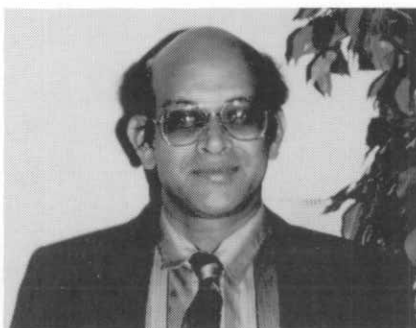
**Awards:** Dave King, CSEC - VMBox 600  
 (O)628-4496, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
 823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
 823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkaid - VMBox 640  
 823-5793 - belkaid@pegasus.cc.ucf.edu  
**Membership:** (Vacant - Volunteer Needed)  
**PACE:** Jorge Medina, MSI - VMBox 660  
 (O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
 823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
 (O)260-1676, (F)260-1636 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
 (O)628-4496, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
 823-2229 - atashroo@pegasus.cc.ucf.edu

**UCF STUDENT BRANCH**

**Web Page:** <http://www-ece.engr.ucf.edu/ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
 823-2786 - petrasko@pegasus.cc.ucf.edu  
 Dr. Issa Batarseh, UCF - VMBox 620  
 823-0185 - batarseh@pegasus.cc.ucf.edu  
**Chairman:** Laurie Muzzey - VMBox 720  
 677-5531 - laurine@au.net  
**SRC:** Jeremy McKinney - VMBox 730  
 306-0306 - jmm@au.net

**IEEE ORLANDO INFORMATION CENTER**

**E-mail:** sec.orlando@ieee.org  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

**CHAIRMAN'S CORNER**

**O**n behalf of IEEE Orlando Section, I wish every one of you a Happy and Prosperous New Year! I hope we will have an active year in front of us.

The December meeting of the Executive Committee was held on Tuesday, December 3, at UCF. Since none of the section chapters put forward a formal 1997 budget, the executive committee decided to follow the same procedure as that of 1996. Each chapter will be given matching funds (up to \$500) for the amount that national chapter allocates for that chapter society. If the national chapter does not allocate funds, each chapter will be given a nominal starting budget of \$250. Those chapters who plan to have more activities must plan ahead and request for additional funding which must be approved by the executive committee.

The students section of the LEOS chapter presented its ambitious project on Laser Projection Screen to be installed in the College of Engineering Building at UCF and requested additional funding from the section. The executive committee suggested that they should initiate the funding request through the Students Branch of our section.

The annual Award Banquet will be held on February 22, Saturday. Watch for additional information in the newsletter. Look in the newsletter for various awards and the rules. Please nominate your candidates and submit the filled forms to our awards chairman **Mr. David King** by January 15, 1997.

Our next executive meeting will be held on Tuesday, January 7, at 6:00 PM in the UCF, Engineering Building 288. Please join us.

## Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.  
 Members are encouraged to invite and bring guests to these events.

### *Is There a Role for the U.S. Government in Technology Development?*

#### **IEEE-USA 1996 PACE Conference Video Presentation**

**Sponsor:** PACE and Consultants' Network

**Abstract:** The 1996 Technology Policy Council Symposium focused on a timely and particularly critical issue: the U.S. Government's role in technology development. The format consisted of a series of roughly 30-minute presentations by distinguished experts with a wide variety of perspectives, each followed by discussion. The major topics were: Public Interest Viewpoints, Industrial Technology, Government Technology and Other Viewpoints. In addition, welcoming remarks were presented by Wallace Read (IEEE President), and Robert Powers (Chair, IEEE-USA Technology Policy Council). Closing remarks were offered by Mark Pullen (Chair, Technology Policy Council Symposium and Co-Vice Chair, Technology Policy Council).

**Date:** Tuesday, January 14, 1997

**Time:** Refreshments - 6:00 PM

Video Presentation - 6:30 PM

**Refreshments:** Snacks and soda.

**Location:** Orlando Public Library, 3rd Floor, Patio Room.

**Reservations:** Jorge Medina 260-1676, David Flinchbaugh 859-4855 or Peter Hoyles 904-737-9686.

**E-mail:** medina@parkave.net

# THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

## ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

1. AWARD: ☐ Outstanding Engineer Award  
☐ Outstanding Engineer Educator Award  
☐ Outstanding Service Award  
☐ Outstanding Entrepreneur Award

Please Return Form by 1/15/97

To: Dave King  
 230-1 S. New York Ave.  
 Winter Park, FL 32789

2. NOMINEE: \_\_\_\_\_

Professional Affiliation and Title: \_\_\_\_\_

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

Work Phone: (    ) \_\_\_\_\_ Home Phone: (    ) \_\_\_\_\_

3. PROPOSED CITATION (30 words or less ) FOR: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. IEEE SOCIETY/BOARD RELEVANT TO ACHIEVEMENT CITED: \_\_\_\_\_

5. SUBMITTED BY: \_\_\_\_\_

IEEE Position and Grade: \_\_\_\_\_

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

Work Phone: (    ) \_\_\_\_\_ Home Phone: (    ) \_\_\_\_\_

6. ARE YOU WILLING TO PREPARE THE NOMINATION FORMS YOURSELF? YES NO

7. POTENTIAL ENDORSERS (two required who are familiar with nominee, who can attest to his/her contributions and to the importance thereof):

A. Name:

Position/Title:

Address:

City/ZIP

Phone:

A. Name:

Position/Title:

Address:

City/ZIP

Phone:

A. Name:

Position/Title:

Address:

City/ZIP

Phone:

8. BRIEF EVIDENCE TO SUPPORT NOMINATION/YEAR ACHIEVEMENT/IMPORTANCE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. SUGGESTED NOMINATOR(S) IF DIFFERENT FROM #5.: \_\_\_\_\_

\_\_\_\_\_

Submittal of this form does not replace the necessity of a completed nomination form. See page 1 for candidate qualifications.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL

07139413 06/29/1996  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

Jan 7	6:00 PM	Orlando Section - <b>EXCOM</b> - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
Jan 14	6:00 PM	CNSIG/PACE - <b>Is There a Role for the U.S. Government in Technology Development?</b> - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
Feb 4	6:00 PM	Orlando Section - <b>EXCOM</b> - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
Feb 11	6:00 PM	CNSIG - <b>Networking Meeting</b> - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
Feb 22	TBA	Orlando Section - <b>Awards Banquet</b> - TBA, D. King, 628-4496, dave@parkave.net
Mar 1	8:00 AM	CNSIG/OS - <b>2nd Annual Conference of the ICNO</b> - UCF, Bus. Adm. Bldg., J. Medina, 260-1676, j.medina@ieee.org
Mar 4	6:00 PM	Orlando Section - <b>EXCOM</b> - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
Mar 4	6:00 PM	PE/IA/PEL - <b>NEC/NESC Seminar: Insulated Conductor Cable Types</b> - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
Mar 11	6:00 PM	CNSIG - <b>Networking Meeting</b> - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
Mar 11	6:00 PM	PE/IA/PEL - <b>NEC/NESC Seminar: Hazardous [Classified] Locations</b> - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
Mar 18	6:00 PM	PE/IA/PEL - <b>NEC/NESC Seminar: Selected Topics from 1997 NESC</b> - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
Mar 25	6:00 PM	PE/IA/PEL - <b>NEC/NESC Seminar: Special Occupancies</b> - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:  
IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

### NEED ANY ASSISTANCE?

The Referral Service of the IEEE CONSULTANTS NETWORK OF ORLANDO has over 60 engineering, technical and managerial consulting professionals available to help you with your particular problem. The Network's ethical code ensures the highest professional standards. There is **NO CHARGE** for referrals.

Tel: (407) 260-1676, FAX: (407) 260-1636  
E-mail: [j.medina@ieee.org](mailto:j.medina@ieee.org)  
<http://www.parkave.net/users/medina/ieee>





# **THE ORLANDO SECTION MONTHLY**

Volume XXX, Number 7

A Monthly Publication of the IEEE Orlando Section

February 1997

## **IEEE Awards Banquet**

**Saturday, February 22, 1997**

**University Dining Room  
at the UCF Student Center**

**6:00 PM Cash Bar**

**7:00 PM Dinner and Presentations**

**Choice of Entrees:**

**Beef or Chicken**

**Side dishes, dessert and coffee**

**IEEE Members: \$15.00**

**IEEE Students: \$10.00**

**IEEE Fellows: Free**

**IEEE Fellows' Spouses: \$15.00**

**RSVP: Dr. Takis Kasparis 823-5913**

## THE ORLANDO SECTION MONTHLY

Published by the  
IEEE ORLANDO SECTION  
EXECUTIVE BOARD

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu

**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu

**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu

**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com

**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

## SOCIETY CHAPTER CHAIRMEN

**AES:** Gerald Holst - VMBox 210, (H) 629-5370

**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu

**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org

**COM/VT:** Dr. John S. Seybold - VMBox 240  
(W)275-3600, (H)812-4323 - jsseybold@tasc.com

**CN SIG:** Jorge Medina - VMBox 400  
(O)260-1676, (F)260-1636 - j.medina@ieee.org

**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu

**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu

**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu

**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com

**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com

**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu

**UFCF:** A. Zajac, Sawtek - VMBox 300  
884-3486 - az@sawtek.com

## COMMITTEE CHAIRMEN

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-8130, (H)628-4462 - dave@parkave.net

**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu

**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu

**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu

**Membership:** (Vacant - Volunteer Needed)

**PACE:** Jorge Medina, MSI - VMBox 660  
(O)260-1676, (F)260-1636 - j.medina@ieee.org

**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu

**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
(O)260-1676, (F)260-1636 - j.medina@ieee.org

**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-8130, (H)628-4462 - dave@parkave.net

**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

## UCF STUDENT BRANCH

**Web Page:** <http://www-ece.engr.ucf.edu/~ieee>

**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu

Dr. Takis Kasparis - VMBox 620  
823-5913 - tnk@ece.engr.ucf.edu

**Chairman:** Laurine Muzzey - VMBox 720  
677-5531 - laurine@ao.net

**SRC:** Jeremy McKinney - VMBox 730  
306-0306 - jmm@ou.net

## IEEE ORLANDO INFORMATION CENTER

E-mail: [sec.orlando@ieee.org](mailto:sec.orlando@ieee.org)

Web Page: <http://ieee-os.engr.ucf.edu>

Voice Mail (407)260-1676 - Fax (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

## CHAIRMAN'S CORNER

**H**appy new year to every one! The first meeting of the Executive Committee in 1997 was held on Tuesday, January 7, at UCF. We are preparing for our annual awards banquet on February 22, Saturday at UCF. The dinner price will be less than last year. I hope that many of you will be attending the banquet to see that many of our local engineers are recognized at the function. This is our largest formal social event of the year.

I am glad to inform you that our section received the profit shares of both NTC and IAS conferences at the same time before Christmas. A Christmas gift! With this, the financial position of our section looks more healthy. I hope with this bonus we will be able to support more section activities and other conferences in the future.

It is the time of year when the section must send its financial and activities report to national headquarters. If there are any outstanding chapter meeting reports for 1996 pending, please send them to our secretary **Dr. Al Berg** as soon as possible.

We are still looking to see someone to take the chairman of Membership Development for our section. If somebody is interested in serving this position please get in touch with me. Our next executive meeting will be held on Tuesday, February 4, at 6:00 PM in the UCF, Engineering Building 288. Please join us.

Meeting  
Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

Computer System Reliability  
& Performance:  
Field Experiences

**Sponsor:** Computer Chapter

**Speaker:** Dr. Ravi Iyer, University of Illinois, Urbana-Champaign

**Date:** Friday, February 21, 1997

**Time:** 1:30 PM

**Refreshments:** Will be served.

**Location:** UCF, CSB 211

**Contact:** Dr. Udaya B. Vemulapati,  
823-2638, email: [u.vemulapati@ieee.org](mailto:u.vemulapati@ieee.org)

Rapid Acquisition of Direct  
Sequence Spread Spectrum  
(DSSS) Signals

**Sponsor:** Jointly by COM/VT and SP

**Abstract:** DSSS communications techniques accommodate multiple users through code division multiple access (CDMA). In order to acquire and track the signals of interest, an internally generated replica of the signal must be brought into close alignment with the received signal. This process is called coarse acquisition and is crucial to acquiring and tracking the signal so that it can be demodulated. Coarse acquisition is also the most time consuming part of signal acquisition and thus there is keen interest in optimizing search strategies. This talk will present an overview of CDMA, and a discussion and characterization of popular code search techniques.

**Speaker:** Dr. John Seybold

**Date:** Tuesday, February 11, 1997

**Time:** 5:30 PM

**Location:** UCF Engineering room 288

**Contact:** Dr. John S. Seybold, 275-3600, email: [jsseybold@tasc.com](mailto:jsseybold@tasc.com)

### Memo to COM/VT members

Our local COM/VT chapter is in danger of losing its status as a chapter due to lack of participation. This year we are holding joint meetings with the SP chapter to try to bolster attendance and are considering merging with SP. Please let me know if you have any thoughts on the matter. We have three meetings planned for the next few months. The February meeting will discuss spread spectrum techniques and is described in this issue of the newsletter. In the following months, we have planned a talk on stepped frequency radar signal processing and synthetic aperture radar imaging, as well as a tour of internet service provider ParkAve.Net. Please plan to attend. I hope to hear from you or see you at one of our chapter meetings this Spring.

### Precollege Education Activities

The IEEE-USA Precollege Education Committee has set as one of its primary goals for the next two years to increase the participation of IEEE members in K-12 education and related activities at the local level. To highlight this goal, we are soliciting abstracts for 20-minute presentations at the next PACE Conference, which will take place in St. Petersburg, Florida, from August 29 to September 1, 1997.

The abstract should be no more than one page (single-spaced) in length and should describe a program in which engineers help local schools, students, or teachers in some way in the areas of math, science, or technology education or in which they are involved in a school board or other education policy body.

At most, two abstracts will be selected and the authors (one per paper) will be invited to attend the 1997 PACE Conference to make a presentation. Their travel and lodging expenses will be covered by the Precollege Education Committee.

*Please send your abstracts to Ann Hartfiel at the IEEE-USA Office by February 15 (U.S. Mail: 1828 L Street N.W., Suite 1202, Washington, D.C. 20036; Internet: a.hartfiel@ieee.org; Fax: 202/785-0835).*

Writers whose abstracts are selected for presentation will be notified by March 30. Extended abstracts of their presentations must be received by June 1 in order to be included in the 1997 Professional Activities Conference Proceedings.

## NEC/NESC Seminar Program

During the month of March, the Orlando Chapter of the IEEE Power Engineering/ Industry Applications/Power Electronics Society will be hosting a seminar series on the National Electrical Code (NEC) and the National Electrical Safety Code (NESC). The seminars will take place at the Pershing Street Training Facility of the Orlando Utilities Commission. The seminars will be held from 6:00 to 9:00 on Tuesday evenings beginning March 4, 1997 and ending on March 25, 1997. One Continuing Education Unit (CEU) will be awarded by the IEEE for those who attend the full seminar program. The seminar registration fee for IEEE members is as follows: \$95 for Non-Students members and \$15 for Student members. For non-IEEE members, the registration fee will be as follows: \$145 for non-student, non-members and \$40 for student non-members. The deadline for registering by mail is February 21, 1997. In class registration will be permitted if space is available. For further information, contact the program coordinators: Robert Ashley (Westinghouse) @ 281-3418 or Gary Engmann (Black & Veatch) @ 419-3500.

The schedule for the seminar series is listed below:

Date	Topic
March 4, 1997	Insulated Conductor Cable Types
March 11, 1997	Hazardous [Classified] Locations
March 18, 1997	Selected Topics from 1997 NESC
March 25, 1997	Special Occupancies

Registration: Send check, payable to IEEE Power Engineering Society, Orlando Chapter, for appropriate above mentioned amount to:

**Robert Ashley**  
**Westinghouse, MC 100**  
**4400 Alafaya Trail**  
**Orlando, Florida 32826-2399**

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

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

Telephone (H) \_\_\_\_\_ (W) \_\_\_\_\_

Firm: \_\_\_\_\_

IEEE#, If Member: \_\_\_\_\_

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL

07139413 06/29/1996  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Feb 4** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**Feb 11** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org  
**Feb 11** 5:30 PM COM/VT & SP - **Rapid Acquisition of DSSS Signals** - UCF Eng. Room 288, J. Seybold, 275-3600, jsseybold@tasc.com  
**Feb 21** 1:30 PM Computer - **Computer Systems Reliability & Performance** - UCF CSB 211, U. Vemulapati, 823-2638  
**Feb 22** 6:00 PM Orlando Section - **Awards Banquet** - UCF Dining Room D. King, 628-4496, dave@parkave.net
- Mar 4** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**Mar 4** 6:00 PM PE/IA/PEL - **NEC/NESC Seminar: Insulated Conductor Cable Types** - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500  
**Mar 11** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org  
**Mar 11** 6:00 PM PE/IA/PEL - **NEC/NESC Seminar: Hazardous [Classified] Locations** - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500  
**Mar 18** 6:00 PM PE/IA/PEL - **NEC/NESC Seminar: Selected Topics from 1997 NESC** - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500  
**Mar 25** 6:00 PM PE/IA/PEL - **NEC/NESC Seminar: Special Occupancies** - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

### POSITION AVAILABLE

- **RF/ANALOG ENGINEER** - Fast growing fiber optics communications company seeking RF/Analog Design Engineer, 5-10 years experience. Detailed design and project engineering responsibilities. High speed digital communications experience a plus.
- **PRODUCTION TEST TECHNICIAN** - 1-5 years experience. Learn fiber optics on the job.

Excellent company benefits and insurance. Please send resume to Personnel, BCP, 305 East Drive, Melbourne, FL 32904. EOE





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 8

A Monthly Publication of the IEEE Orlando Section

March 1997

## Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.  
Members are encouraged to invite and bring guests to these events.

### *Tour of Internet Service Provider Parkave.net*

**Sponsor:** SP and COM/VT

**Date:** Tuesday, March 11, 1997

**Time:** 6:00 PM

**Location:** Parkave.net, 230 S. New York Ave., Winter Park

**Directions:** 3 blocks north of Fairbanks and 1 block west of Park Avenue (just north of Farmer's Market)

**Contact:** Dr. Al Berg, 365-2214, [aberg@dpsparc.engr.ucf.edu](mailto:aberg@dpsparc.engr.ucf.edu)

### *A New SIMD Computer Vision Architecture*

**Sponsor:** AES

**Abstract:** A new SIMD computer vision architecture will be described that is being developed to meet the explosive growth and diverse commercial and military application requirements for computer vision technology in the near future.

**Speaker:** Robert D. Johnson, Manager, Lockheed Martin Image and Signal Processing Division

**Date:** Tuesday, February 25, 1997

**Time:** 6:00 PM

**Location:** Orange County Public Library, 101 East Central Blvd., Orlando, 3rd floor conference room.

**Contact:** Gerald C. Holst, 629-5370, [jcdgch@aol.com](mailto:jcdgch@aol.com).

### *NETWORKING MEETING*

#### **PART I:**

#### **MEMBER'S PRESENTATION**

**Sponsor:** Consultants' Network

**Program:** The IEEE Orlando Consultants' Network is inviting each and every one of its new members to present a briefing on his or her consulting practice. The following new member has been invited to present an overview of his consulting background and services at this meeting.

**Speaker: Mr. Ben Rubin.** Ben received his BS in Mechanical Engineering from Purdue University and his MBA from University of South Carolina. He worked for Owens-Corning Fiberglass as a process engineer and R&D engineer at several plant locations. Then he joined Xomed Surgical Products in Jacksonville, Florida as a product development engineer. His projects in design, documentation (to FDA and UL requirements) involved electro-mechanical surgical products. Among his accomplishments are the development of several products with over a million dollars in international sales and three patents. For the last year, he has founded a consulting

firm specializing in product design, manufacturing engineering and project management with both large and small manufacturing clients. His presentation will cover the decision to become a consultant, the business aspects and technical details on selected projects.

#### **PART II:**

#### **1996 FEE SURVEY RESULTS**

**Sponsors:** Consultants' Network and PACE

**Abstract:** The second part of this network meeting will be a presentation of the summary of the 1996 survey of fee charged by our members. The Orlando Consultants' Network asked all its Region 3 members who have served clients during the 1996 period to respond to a questionnaire on consultants' fees. Our goal is to establish a realistic appraisal of the prevailing rate structure in our areas of expertise and should be beneficial to both ourselves and our clients.

**Date:** Tuesday, March 11, 1997

**Time:** 6:00 PM

**Location:** Orange County Library, 3rd Floor, Patio Room.

**Reservations:** Jorge Medina 260-1676, ext. 002

## THE ORLANDO SECTION MONTHLY

Published by the  
IEEE ORLANDO SECTION  
EXECUTIVE BOARD

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

## SOCIETY CHAPTER CHAIRMEN

**AES:** Gerald Holst - VMBox 210  
629-5370 - jcdgc@aol.com  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
(O)275-3600, (H)812-4323 - jsseybold@tasc.com  
**CN SIG:** Jorge Medina - VMBox 400  
260-1676 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFFC:** A. Zajac, Sawtek - VMBox 300  
884-3486 - az@sawtek.com

## COMMITTEE CHAIRMEN

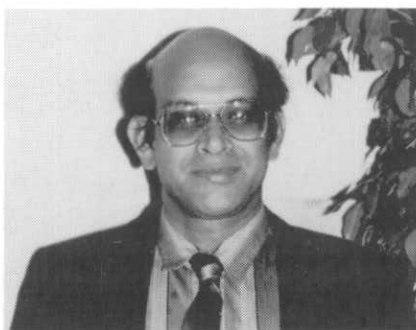
**Awards:** Dave King, CSEC - VMBox 600  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**PACE:** Jorge Medina, MSI - VMBox 660  
260-1676 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
260-1676 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

## UCF STUDENT BRANCH

**Web Page:** <http://www-ece.engr.ucf.edu/~ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
Dr. Takis Kasparis - VMBox 620  
823-5913 - tnk@ece.engr.ucf.edu  
**Chairman:** Laurine Muzzey - VMBox 720  
677-5531 - laurine@ao.net  
**SRC:** Jeremy McKinney - VMBox 730  
306-0306 - jmm@ou.net

## IEEE ORLANDO INFORMATION CENTER

**E-mail:** [sec.orlando@ieee.org](mailto:sec.orlando@ieee.org)  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

## CHAIRMAN'S CORNER

The February meeting of the Executive Committee was held on Tuesday, February 4 at UCF.

Dr. Christodoulou and Dr. Berg submitted the annual financial report and the secretaries report to IEEE headquarters for the year 1996 before the deadline dates. Thanks to both them for their timely work. We got an additional check for \$2,896.09, the remainder of the surplus from the 1995 IEEE NTC Conference held in Orlando. With this, our section received a total sum of \$6,896.09 from the surplus of the above conference. The Executive Committee selected the award winners for various categories. These awards will be given during our Annual Banquet on February 22.

The turn out for the Faraday Lecture was not very good even though all arrangements were made for the satellite reception at UCF. The program was taped and for further details please contact our students advisor Dr. Petrasko. Our Education Chairman, Dr. Amir Mortazawi would like to be relieved from his position because of his busy schedules. Thanks Amir for serving this position for the past three years. Dr. Parveen Wahid has agreed to serve as Education Chairman. Welcome back Parveen!

The various chapters are planning several meetings and seminars this year. Please watch for the important dates in the newsletter. Our next executive meeting will be held on Tuesday, March 4, at 6:00 PM in the UCF, Engineering Building 288. Please join us. ♦

Surfer Survey:  
The Future of IEEE  
Communications

The key to the success of every organization is good communications. Today communication is made easier by cheap access to many types of electronic media. The IEEE must decide on the correct combination of people, message, process and technology to communicate its issues. This month's Surfer Survey asks:

*How can the IEEE best combine and use its many communications resources to effectively relay an important message and invoke feedback from the membership?*

Send your responses and comments to Perspectives' Managing Editor Georgia Stelluto at [g.stelluto@ieee.org](mailto:g.stelluto@ieee.org).

IEEE-USA Launches  
New Professional Magazine

IEEE-USA will begin publishing TODAY'S ENGINEER, a new, non-technical IEEE professional magazine for all engineering disciplines. The 48-page quarterly will provide engineers with information that enhances their learning opportunities for career satisfaction and advancement, encourages a business perspective, promotes high standards of professionalism and ethical performance, prepares them for technical and general management, and raises the stature of the engineering profession in society.

Gus Gaynor, president of the IEEE Engineering Management Society, will serve as editor, and Georgia Stelluto, IEEE-USA publications manager, will be deputy managing editor. The first two issues will appear in August and November.

## New Employee-Benefits Projects

As the largest constituent member of the American Association of Engineering Societies (AAES), IEEE-USA is supporting several new initiatives of the AAES designed to advance engineers' technology- and career-policy goals. Following are highlights of current projects:

- **Engineering Summit Conference:** AAES will convene a workshop of leaders of the engineering community, industry, government and academia to draft an agenda for a possible Engineering Summit Conference this fall. The summit would help define and communicate an agenda of engineers' policy priorities for Congressional and other policy-makers.

- **Engineers and Scientists Joint Committee on Pensions (ESJCP) Policy Statement on Occupational Retirement Plans:** In December, the AAES board of Governors approved a new ESJCP policy statement urging collaboration among member societies to develop occupational retirement plans that meet the changing needs of engineering, scientific and technical professionals. A policy statement on needed reforms in the Social Security system is now in development.

- **Engineering Workforce Commission (EWC) Annual Survey of Degree Awards:** The EWC's survey of 637 U.S. engineering programs showed that a record number of engineering bachelor's degrees during the 1995-96 school year went to women (18 percent) and under-represented minorities (10.6 percent). In all, more than 65,000 undergraduate degrees were granted, while more than 31,000 master's degrees and almost 6,800 doctoral degrees were awarded. Results of the survey were published in January 1997 issue of ENGINEERS, EWC's quarterly publication on engineering workforce issues.

## NEC/NESC Seminar Program

During the month of March, the Orlando Chapter of the IEEE Power Engineering/ Industry Applications/Power Electronics Society will be hosting a seminar series on the National Electrical Code (NEC) and the National Electrical Safety Code (NESC). The seminars will take place at the Pershing Street Training Facility of the Orlando Utilities Commission. The seminars will be held from 6:00 to 9:00 on Tuesday evenings beginning March 4, 1997 and ending on March 25, 1997. One Continuing Education Unit (CEU) will be awarded by the IEEE for those who attend the full seminar program. The seminar registration fee for IEEE members is as follows: \$95 for Non-Students members and \$15 for Student members. For non-IEEE members, the registration fee will be as follows: \$145 for non-student, non-members and \$40 for student non-members. The deadline for registering by mail is February 21, 1997. In class registration will be permitted if space is available. For further information, contact the program coordinators: Robert Ashley (Westinghouse) @ 281-3418 or Gary Engmann (Black & Veatch) @ 419-3500.

The schedule for the seminar series is listed below:

Date	Topic
March 4, 1997	Insulated Conductor Cable Types
March 11, 1997	Hazardous [Classified] Locations
March 18, 1997	Selected Topics from 1997 NESC
March 25, 1997	Special Occupancies

Registration: Send check, payable to IEEE Power Engineering Society, Orlando Chapter, for appropriate above mentioned amount to:

**Robert Ashley**  
**Westinghouse, MC 100**  
**4400 Alafaya Trail**  
**Orlando, Florida 32826-2399**

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

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

\_\_\_\_\_

Telephone (H) \_\_\_\_\_ (W) \_\_\_\_\_

Firm: \_\_\_\_\_

IEEE#, If Member: \_\_\_\_\_

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Feb 25** 6:00 PM AES - A New SIMD Computer Vision Architecture - Orange County Public Library, 3rd. Floor, G. Holst, 629-5370
- Mar 4** 6:00 PM Orlando Section - EXCOM - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
- Mar 4** 6:00 PM PE/IA/PEL - NEC/NESC Seminar: Insulated Conductor Cable Types - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
- Mar 11** 6:00 PM CNSIG - Member's Presentation/Fee Survey Results - Orange County Library, 3rd. Floor, Patio Room, J. Medina, 260-1676
- Mar 11** 6:00 PM PE/IA/PEL - NEC/NESC Seminar: Hazardous [Classified] Locations - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
- Mar 11** 6:00 PM SP/COM/VT - Tour of Internet Service Provider Parkave.net - Parkave.net, Winter Park, A. Berg 365-2214
- Mar 18** 6:00 PM PE/IA/PEL - NEC/NESC Seminar: Selected Topics from 1997 NESC - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
- Mar 25** 6:00 PM PE/IA/PEL - NEC/NESC Seminar: Special Occupancies - OUC, R. Ashley, 281-3418 or G. Engmann 419-3500
- Apr 4** 6:00 PM Orlando Section - EXCOM - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
- Apr 11** 6:00 PM CNSIG - Networking Meeting - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the 1st Tuesday of the month preceding the month of publication.

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### FRANK ZELESKY, PE, CSP

Certified Safety Professional - System Safety  
Registered Professional Engineer - Electrical  
System Safety/Reliability Consultant

Facility - Vehicular - Airborne Systems

Laser/Fire/Explosion/Electrical Safety Criteria/Evaluation

Evaluate Control System Reliability & Availability

Program/Test Plans - FMEA - MTBF/MTTR/LCC Models

Develop Comprehensive Hazard Analysis Reports

End-to-End Fault Tree Analysis - Risk Assessment/Resolution

Francis Zelesky, Inc.

2308 Whitehall Drive

Tel & FAX : (407) 645-5881

Winter Park, FL 32792

E-MAIL: fzelesky@aol.com

### POSITION AVAILABLE

- RF/ANALOG ENGINEER - Fast growing fiber optics communications company seeking RF/Analog Design Engineer, 5-10 years experience. Detailed design and project engineering responsibilities. High speed digital communications experience a plus.
- PRODUCTION TEST TECHNICIAN - 1-5 years experience. Learn fiber optics on the job.

Excellent company benefits and insurance. Please send resume to Personnel, BCP, 305 East Drive, Melbourne, FL 32904. EOE





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 9

A Monthly Publication of the IEEE Orlando Section

April 1997

## IEEE ORLANDO SECTION 1997 AWARDS BANQUET

The 1997 Orlando Section Awards Banquet was held at the University of Central Florida Dining Room on February 22, 1997. Twenty members and guests attended this function. Four Section, six Chapter Engineer-of-the-Year and six student awards were presented.

### Student Awards

Each year the Section presents awards to an outstanding undergraduate and graduate student from the Electrical and Computer Engineering Department. The award winners this year were:

Outstanding Undergraduate Student in  
ECE  
**Joe Martinez**

Outstanding Graduate Students  
**Hongzhi Cai, Tony G. Ivanov**

The Computer Society Chapter and the Systems, Robotics and Controls Society Chapter each have a student chapter. The students selected to receive the awards for these chapters were:



Outstanding Undergraduate and Graduate Student  
Award Recipients

Outstanding Undergraduate Student in  
COMP

**Brian A. Millikan**

Outstanding Graduate Student in  
COMP

**Wallapak Tavanapong**

Outstanding Undergraduate Student in  
SRC

**Christopher Rose**

### Chapter Engineer-of-the- Year Awards



Engineer-of-the-Year Award Recipients

Each of the Chapters in the Section select a member from within the Chapter as the Engineer-of-the-Year. The award is in recognition of outstanding contributions the members have made to their profession. The evaluation criteria include importance of technical contribution, technical papers and presentations, service to IEEE and the engineering profession. The following were the award winners for 1997:

COMP .....**Dr. Mostafa A. Bassiouni**  
CN .....**Mr. David King**  
ED/CHMT .....**Dr. Tom Li**  
PE/IA/PEL .....**Mr. Lon Montgomery**  
SP..... **Dr. John Seybold**  
SRC.....**Mr. Larry Gaber**

### Orlando Section Awards

The Orlando Section Outstanding Engineer of the Year award was presented to **Mr. Lon W. Montgomery** who through his technical and professional abilities have made outstanding contributions to his profession. The Orlando Section Outstanding Engineering Educator award was presented to **Dr. Mubarak Shah**, who, through his academic contributions, has enhanced the engineering profession. The Outstanding Service Award was presented to **Mr. Jorge Medina** in recognition of his many years of service to IEEE at the local and Region level and for his service to the profession and the community. The Outstanding Entrepreneur Award was given to **Mr. Ed Tuttle**. He was recognized for his outstanding contributions to his field through his firm and for his service to the IEEE.



Outstanding Orlando Section Award Recipients

Special thanks go out to **Mr. David King**, Section Awards Chairman, **Dr. Takis Kasparis**, Vice Chair and Programs Chair, **Dr. Kalpathy Sundaram**, Section Chair and Photographer for making the evening a success. In addition, the Section would like to thank all the Chapter Chairs and the Awards Committee for their help in providing the nominations and in helping make the selections for the Section 1997 Awards.

**THE ORLANDO SECTION MONTHLY**  
Published by the  
**IEEE ORLANDO SECTION**  
**EXECUTIVE BOARD**

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

**SOCIETY CHAPTER CHAIRMEN**

**AES:** Gerald Holst - VMBox 210  
629-5370 - jcdgc@aol.com  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
(O)275-3600, (H)812-4323 - jsseybold@tasc.com  
**CN SIG:** Jorge Medina - VMBox 400  
260-1676 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFCF:** A. Zajac, Sawtek - VMBox 300  
884-3486 - az@sawtek.com

**COMMITTEE CHAIRMEN**

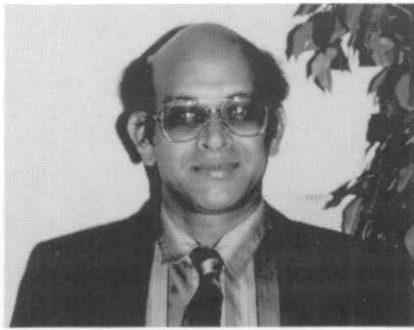
**Awards:** Dave King, CSEC - VMBox 600  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**PACE:** Jorge Medina, MSI - VMBox 660  
260-1676 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
260-1676 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

**UCF STUDENT BRANCH**

**Web Page:** <http://www-ece.engr.ucf.edu/~ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
Dr. Takis Kasparis - VMBox 620  
823-5913 - tnk@ece.engr.ucf.edu  
**Chairman:** Laurine Muzzey - VMBox 720  
677-5531 - laurine@ao.net  
**SRC:** Jeremy McKinney - VMBox 730  
306-0306 - jmm@ou.net

**IEEE ORLANDO INFORMATION CENTER**

**E-mail:** sec.orlando@ieee.org  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail (407)260-1676 - Fax (407)260-1636**



*Dr. Kalpathy Sundaram, Section Chairman*

**CHAIRMAN'S CORNER**

The March meeting of the Executive Committee was held on Tuesday, March 4 at UCF. One of the concerns of the executive committee was the low attendance seen in the various chapter meetings. Members came with several suggestions and ideas. One of the ideas is to hold joint chapter meetings so that there may be improvement in attendance. The other idea is to arrange some kind of fun and picnic in early spring to find out more about other suggestions from members. How can we give better service to the members. The committee is working on these issues.

The annual award banquet went well this year with most of the members who got awards showing up for the function. Again the over all attendance for the banquet was low. Thanks to **Dr. Kasparis**, Programs Chair and **Mr. Dave King**, Awards Chair for making the banquet a success. Once again it is that time of year to think about new officers of the section for next year. Please look for the search for new officers in the news letter.

Looking ahead, Southeastcon 98 will be in Orlando in April 1998. Five steering committee members of Southeastcon 98 from our section will be attending the Southeastcon 97 which will take place in Blacksburg, VA during April 11-13. This will give an opportunity to learn more about conference management.

I would like to wish every one a wonderful Easter. The next executive commit-

tee meeting will take place on April 1, Tuesday at 6:00 PM in the UCF, Engineering Building 288. Please join us.

## CANDIDATES FOR 1998-99 LEADERSHIP POSITIONS

For almost 25 years, the IEEE United States Activities Board (USAB) has been concerned with advancing the career interests of Institute members in the United States. USAB has been chaired by the Vice President of Professional Activities, who was elected annually by the IEEE Assembly.

Recent changes in Bylaws intended to provide greater autonomy for U.S. professional activities will result in the formation of the IEEE United States of America (IEEE-USA). Beginning next year, IEEE-USA will not be chaired by a vice president elected by the Assembly. Instead, Institute members in the six U.S. Regions will choose annually an IEEE-USA President-Elect.

The IEEE-USA President-Elect will serve one year in that role, becoming IEEE-USA President the following year, and then in the third year, acting as the IEEE-USA Past President. The process begins this year and, since this is the first election, 1997 is the only year that there will be a choice of both a president and a president-elect.

On Feb. 12, in executive session, USAB approved the following candidates to be placed on the ballot for the Institute's general election later this fall:

\*For 1998 IEEE-USA President\*:  
**George F. McClure** (Orlando Section Fellow Member), John R. Reinert

\*For 1998 IEEE-USA President-Elect\*:  
Paul J. Kostek, Charles S. Lessard

\*For 1998 IEEE-USA Member-at-Large\*:  
Jerry C. Aukland, T. J. Tarn

\*For 1998-99 IEEE-USA Member-at-Large\*:  
Frank E. Lord, Robert P. Noberini

Elected leaders will take office on Jan. 1, 1998. Ballots will be mailed in tandem with the Institute-wide elections. The organization will provide updates on the election through

## IEEE-USA'S LEGISLATIVE AGENDA FOR THE 105TH CONGRESS

IEEE-USA will pursue the following legislative goals in support of the objectives and positions adopted by our members:

- ◆ Passage of **retirement-security legislation to improve portability of pension-plan benefits and expand savings opportunities** available under tax-deferred Individual Retirement Accounts;
- ◆ Support for **tax incentives, regulatory reforms, and public investments** that will help **promote new enterprise** and create well-paid, value-added jobs for Americans, particularly in the high-technology and manufacturing sectors;
- ◆ Passage of budget **authorization and appropriations bills** that **sustain and strengthen federal investment in research and development**, especially in applied research, engineering and precompetitive technology areas;
- ◆ Permanent extension and expansion of the **Research and Experimentation Tax Credit**;
- ◆ Permanent extension of the **Section 127 (Internal Revenue Code) tax exclusion for Employer-Provided Educational Assistance**, and restoration of eligibility for graduate education expenses for the tax exclusion;
- ◆ Introduction and passage of **legislation to provide protection against unauthorized copying of original useful articles**;
- ◆ Adoption of **legislation, executive orders and/or regulations relaxing U.S. export controls** and other regulations on **encryption technologies** to the maximum extent possible; and
- ◆ **Repeal of Section 1706** of the Internal Revenue Code and **restoration of the Section 530 safe harbor** to ensure the fair and equitable tax treatment of all engineering service providers.



THE INSTITUTE OF ELECTRICAL  
AND ELECTRONICS ENGINEERS, INC.

**UNITED STATES ACTIVITIES**  
1828 L Street, N.W., Suite 1202  
Washington, DC 20036-5104, U.S.A.

Telephone: 202-785-0017  
Fax: 202-785-0835  
E-mail: [ieeeusa@ieee.org](mailto:ieeeusa@ieee.org)  
WWW: <http://www.ieee.org/usab>

IEEE-USA's

# 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](http://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.r01@ieee.org](mailto:info.ieeeusa.jobs.r01@ieee.org) ► **Region 4:** [info.ieeeusa.jobs.r04@ieee.org](mailto:info.ieeeusa.jobs.r04@ieee.org)  
► **Region 2:** [info.ieeeusa.jobs.r02@ieee.org](mailto:info.ieeeusa.jobs.r02@ieee.org) ► **Region 5:** [info.ieeeusa.jobs.r05@ieee.org](mailto:info.ieeeusa.jobs.r05@ieee.org)  
► **Region 3:** [info.ieeeusa.jobs.r03@ieee.org](mailto:info.ieeeusa.jobs.r03@ieee.org) ► **Region 6:** [info.ieeeusa.jobs.r06@ieee.org](mailto:info.ieeeusa.jobs.r06@ieee.org)

► **Non-U.S.:** [info.ieeeusa.jobs.other@ieee.org](mailto:info.ieeeusa.jobs.other@ieee.org)  
► **Massachusetts:** [info.ieeeusa.jobs.mass@ieee.org](mailto:info.ieeeusa.jobs.mass@ieee.org)  
► **California:** [info.ieeeusa.jobs.cal@ieee.org](mailto:info.ieeeusa.jobs.cal@ieee.org)  
► **Illinois:** [info.ieeeusa.jobs.ill@ieee.org](mailto:info.ieeeusa.jobs.ill@ieee.org)



THE INSTITUTE OF ELECTRICAL  
AND ELECTRONICS ENGINEERS, INC.  
**IEEE UNITED STATES ACTIVITIES**  
1828 L Street, N.W., Suite 1202  
Washington, DC 20036-5104, U.S.A.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

## TIME SENSITIVE MAIL

07139413 06/29/1996  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- Apr 04** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**Apr 11** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
- May TBA** Orlando Section - **Picnic** - Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu  
**May 06** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**May 13** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org  
**May 28-30** UFFC - '97 IEEE 51st Annual Symposium on Frequency Control - Hilton At Walt Disney World Village
- Jun 03** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**Jun 07-12** PE - '97 IEEE 6th Human Factors & Power Plants - Sheraton Plaza Hotel, Orlando  
**Jun 10** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

### FRANK ZELESKY, PE, CSP

Certified Safety Professional - System Safety  
Registered Professional Engineer - Electrical  
System Safety/Reliability Consultant

Facility - Vehicular - Airborne Systems

Laser/Fire/Explosion/Electrical Safety Criteria/Evaluation

Evaluate Control System Reliability & Availability

Program/Test Plans - FMEA - MTBF/MTTR/LCC Models

Develop Comprehensive Hazard Analysis Reports

End-to-End Fault Tree Analysis - Risk Assessment/Resolution

Francis Zelesky, Inc.

2308 Whitehall Drive

Tel & FAX : (407) 645-5881

Winter Park, FL 32792

E-MAIL: fzelesky@aol.com

YOUR AD HERE  
WILL REACH OVER 1,400 ENGINEERS  
AND OVER 200 ENGINEERING COM-  
PANIES IN THE CENTRAL FLORIDA  
AREA

Tel: (407) 260-1676

FAX: (407) 260-1636





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 10

A Monthly Publication of the IEEE Orlando Section

May 1997

## IEEE SPRING PICNIC

**Saturday, May 17, 1997**

**10:00 AM - 3:00 PM**

**Lake Claire**

**Next to the UCF Arena**

**Free to Orlando IEEE members and their guests**

- An all-you-can-eat Cookout served at 12:00pm - 1:00pm, with all the fixings, and desert

- Hot Dogs and Hamburgers

- Soft drinks

- Games

- Music

- Entertainment

- Surprises

- Picnic Baskets and Covered Dishes are welcome

- Call Dr. Takis Kasparis at 823-5913 or e-mail: [tnk@ece.engr.ucf.edu](mailto:tnk@ece.engr.ucf.edu) for more information

### OUTSTANDING CHAPTER CHAIRMAN AWARD

It is final report time. Each Chapter Chairman is asked to prepare and submit a report on his/her chapter activities covering the period July 1996 through June 1997. To make your reports timely and of use in selecting the Outstanding Chapter Chairman, please adhere to the following schedule:

**May 6** - Attend the Executive Committee meeting and submit the following items:

1. Final written report of chapter activities, including summary report submitted earlier, names and addresses of new chapter officers, budget data and a narrative summary.

2. Oral report of activities (5 minutes).

3. Your vote for the best chapter award as based on the activity reports and other criteria.

4. Any and all meeting reports (Form L-31) not yet submitted.

5. Compute the activity index for your chapter for each meeting and total the results for the year. A description of the Chapter Activity Index Formula is shown below:

$$AI = \sum_{i=1}^N (ai * Ai/M)$$

N = Total number of meetings

ai = 0.5 social meetings

1.0 professional meetings

1.5 technical meetings

Ai = Total attendance, including non-members

M = Total number of chapter members

The Outstanding Chapter Chairman Award will be presented at the IEEE Orlando Section Installation Banquet in June, 1997.

## THE ORLANDO SECTION MONTHLY

Published by the  
IEEE ORLANDO SECTION

## EXECUTIVE BOARD

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

## SOCIETY CHAPTER CHAIRMEN

**AES:** Gerald Holst - VMBox 210  
629-5370 - jcdgc@aol.com  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**CGM/VT:** Dr. John S. Seybold - VMBox 240  
(O)275-3600, (H)812-4323 - jsseybold@tasc.com  
**CN SIG:** Jorge Medina - VMBox 400  
260-1676 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFCF:** A. Zajac, Sawtek - VMBox 300  
884-3486 - az@sawtek.com

## COMMITTEE CHAIRMEN

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Majid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**PACE:** Jorge Medina, MSI - VMBox 660  
260-1676 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
260-1676 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

## UCF STUDENT BRANCH

**Web Page:** <http://www-ece.engr.ucf.edu/~ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
 Dr. Takis Kasparis - VMBox 620  
823-5913 - tnk@ece.engr.ucf.edu  
**Chairman:** Laurine Muzzey - VMBox 720  
677-5531 - laurine@ao.net  
**SRC:** Jeremy McKinney - VMBox 730  
306-0306 - jmm@ou.net

## IEEE ORLANDO INFORMATION CENTER

**E-mail:** [sec.orlando@ieee.org](mailto:sec.orlando@ieee.org)  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

## CHAIRMAN'S CORNER

The April meeting of the Executive Committee was held on Tuesday, April 1, at UCF. The executive committee decided to reduce the number of voting members in the committee by abolishing the Neural Network Working Group (NNWG). NNWG will not have a chapter status but can work with other chapters of common interest for any technical activities. The student chapter will be participating in the Hardware Contest of Southeastcon 97. The executive committee wished them success in the robot competition.

I will be attending the next Florida Council Meeting at Blacksburg, VA on April 11 during the Southeastcon 97. Five steering committee members of Southeastcon 98 from our section will be attending the Southeastcon 97. By the time the conference is over we will have the necessary experience to make the Southeastcon 98 a success. **Dr. Parveen Wahid** has already completed the details of conference announcement and call for papers which will be made available during the conference at Blacksburg.

Again it is time to think about the officers for next years executive committee. We need people to serve in the executive committee as well as chapters. Please look for election details in the news letter. The Election Committee members for Section Officers are **Mr. Jorge Medina, Mr. David King and Dr. P Wahid**. The voting will take place at our May executive committee meeting. Please consider serving your chapter this year. Chapter chairs must select their officers for the next year. **Dr. Kasparis** is finalizing plans for the installation banquet to be held in June. The

program chair, Dr. Kasparis is also planning a fun and picnic party in May. Watch for details in the newsletter. The next executive committee meeting will take place on May 6, Tuesday at 6:00 PM in the UCF, Engineering Building 288. Please join us.

Candidates for IEEE Orlando  
Section Officers Named

In accordance with the Section By-laws, the following candidates for Section Officers for terms beginning July 1, 1997 and ending June 30, 1998, are as follows:

**Chairman:** *Dr. Takis Kasparis*  
**Vice Chair:** *Dr. C. Christodoulou*  
**Treasurer:** *Dr. Albert Berg*  
**Secretary:** (Vacant)

Each person was contacted by the Nominations Committee formed by Mr. Jorge Medina, Dr. Parveen Wahid, and Mr. Dave King and was found to be qualified and willing to serve. The Nominations Committee will be accepting nominations in writing for Section Secretary by May 5, 1997.

## WELCOME

New Members in the IEEE  
Orlando Consultants' Network

The Orlando Consultants' Network would like to welcome the following members who have joined the network during the last three months:

*Theodore Balaska*  
*Oscar Bolivar*  
*R. Ted Compton, Ph.D.*  
*David A. Conner, Ph.D., P.E.*  
*William J. Getson, P.E.*  
*Larry Grossman*  
*Roy H. Harris*  
*Hans A. Heynau, P.E.*  
*Richard Lowry*  
*Ben Rubin*  
*Percy F. Shadwell, Jr.*  
*Jerry T. Taylor*

# 1996 IEEE REGION 3 ELECTROTECHNOLOGY CONSULTANTS' FEE SURVEY RESULTS

The IEEE Consultants' Network of Orlando has just completed the 1996 anonymous fee survey of 18 Region 3 Consultants. Here is some of the information compiled.

CATEGORY	%	HOURLY		RATE	
		LOW	MED.	HIGH	AVG.
BILLING METHOD:					
1. HOURLY*	89	\$81	\$97	\$112	\$95
2. DAILY*	22	\$81	\$100	\$119	\$103
3. FIXED*	44	\$77	\$90	\$104	\$91
FULL/PART-TIME:					
1. FULL-TIME	89	\$76	\$90	\$104	\$86
2. PART-TIME	11	\$95	\$114	\$133	\$133
COLLEGE DEGREE:					
1. NONE	6	\$100	\$125	\$150	\$110
2. B.S./B.A.	11	\$60	\$76	\$93	\$83
3. M.S./M.A.	61	\$66	\$77	\$89	\$72
4. Ph.D.	22	\$116	\$135	\$154	\$141
P.E. LICENSE:					
1. P.E.	44	\$94	\$108	\$123	\$111
2. NO P.E.	56	\$65	\$80	\$95	\$75
OPERATION:					
1. INDEPENDENT*	72	\$80	\$93	\$106	\$93
2. WITH PARTNERS	6	\$115	\$115	\$115	\$115
3. INCORPORATED*	39	\$74	\$89	\$104	\$85
4. AS EMPLOYEE	6	\$42	\$46	\$50	\$45
OFFICE:					
1. OFFICE AT HOME	83	\$79	\$93	\$107	\$93
2. RENTS AN OFFICE	17	\$72	\$88	\$105	\$80
E & O INSURANCE:					
1. WITH E& O	11	\$138	\$169	\$200	\$158
2. WITHOUT E&O	89	\$77	\$91	\$105	\$90
LIABILITY INSURANCE:					
1. WITH L.I.	67	\$84	\$96	\$107	\$90
2. WITHOUT L.I.	33	\$67	\$87	\$107	\$90
HEALTH INSURANCE:					
1. OWN'S POLICY*	67	\$74	\$88	\$101	\$85
2. FROM SPOUSE*	28	\$93	\$107	\$120	\$105
3. FROM MEDICARE	0				
4. OTHER*	22	\$96	\$111	\$126	\$105

CATEGORY	%	HOURLY		RATE	
		LOW	MED.	HIGH	AVG.
MARKETING METHOD:					
1. NETWORKING*	78	\$73	\$89	\$106	\$92
2. REFERRAL (C/F)*	78	\$81	\$97	\$112	\$94
3. REFERRAL (OCN)	0				
4. REFERRAL (OCN DIR)	0				
5. ADVERTISING*	17	\$53	\$68	\$83	\$72
6. COLD CALLS*	22	\$83	\$98	\$114	\$106
7. REFERRAL FOR A FEE	0				
8. OTHER*	22	\$54	\$62	\$70	\$68
ENGINEERING EXPERIENCE:					
1. LESS THAN 25 YRS	61	\$71	\$82	\$94	\$82
2. 25 YRS OR MORE	39	\$90	\$109	\$127	\$106
CONSULTING EXPERIENCE:					
1. LESS THAN 9 YRS	61	\$70	\$87	\$103	\$86
2. 9 YRS OR MORE	39	\$90	\$102	\$113	\$98
PROBLEMS IN GETTING PAID:					
1. YES	17	\$113	\$122	\$130	\$115
2. NO	83	\$71	\$88	\$102	\$86
SPECIALTY*:					
1. CONTROLS	28	\$63	\$81	\$99	\$82
2. FORENSICS	22	\$115	\$128	\$140	\$135
3. HARDWARE	33	\$50	\$64	\$79	\$67
4. ICs	6	\$100	\$125	\$150	\$110
5. MANUFACTURING	33	\$86	\$105	\$124	\$110
6. MANAGEMENT	6	\$65	\$95	\$125	\$85
7. MARKETING	0				
8. POWER	11	\$88	\$113	\$138	\$128
9. RF	6	\$100	\$138	\$175	\$175
10. SOFTWARE	28	\$53	\$68	\$83	\$72
11. TELECOM	6	\$100	\$138	\$175	\$175
12. OTHER	56	\$83	\$100	\$117	\$95

\* SEVERAL RESPONDENTS REPORTED MORE THAN ONE OPTION

The profile of the survey member is as follows: Charges \$91 per hour, bills by the hour, is a full-time consultant, has a MS/MA degree, does not have a P.E. license, is a sole proprietorship, operates out of his home, has liability insurance, carries his own health insurance, obtains business by referrals, has 25 years of engineering experience and 9 years of consulting experience.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

## TIME SENSITIVE MAIL

07139413  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

- May 06** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**May 13** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org  
**May 17** 10:00 AM Orlando Section - **Family Picnic** - Lake Claire, UCF, Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu  
**May 28-30** UFFC - '97 IEEE 51st Annual Symposium on Frequency Control - Hilton At Walt Disney World Village
- Jun 03** 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu  
**Jun 07-12** PE - '97 IEEE 6th Human Factors & Power Plants - Sheraton Plaza Hotel, Orlando  
**Jun 10** 6:00 PM CNSIG - **Networking Meeting** - Orlando Public Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org  
**Jun TBA** Orlando Section - **Installation Banquet** - Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:

IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

## ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

## NEED ANY ASSISTANCE?

The Referral Service of the IEEE CONSULTANTS NETWORK OF ORLANDO has engineering, technical and managerial consulting professionals available to help you with your particular problem. The Network's ethical code ensures the highest professional standards. There is **NO CHARGE** for referrals.

Tel: (407) 260-1676, FAX: (407) 260-1636  
E-mail: [j.medina@ieee.org](mailto:j.medina@ieee.org)  
<http://www.parkave.net/users/medina/ieee>





# THE ORLANDO SECTION MONTHLY

Volume XXX, Number 11

A Monthly Publication of the IEEE Orlando Section

June 1997

## 1997 IEEE ORLANDO SECTION LEE'S LAKE SIDE ANNUAL INSTALLATION BANQUET

431 East Central Blvd., Orlando

**Saturday, June 14, 1997**

**6:00 PM - 9:00 PM**

**\$23 per Person**

**Menu:**

Chicken Marsala  
Prime Rib of Beef  
Vegetable, Dessert, Coffee  
Cash Bar at 6:00 PM

Reservations: Dr. Takis Kasparis at 823-5913 or  
e-mail: [tnk@ece.engr.ucf.edu](mailto:tnk@ece.engr.ucf.edu) for more information

### OUTSTANDING CHAPTER CHAIRMAN AWARD

It is final report time. Each Chapter Chairman is asked to prepare and submit a report on his/her chapter activities covering the period July 1996 through June 1997. To make your reports timely and of use in selecting the Outstanding Chapter Chairman, please adhere to the following schedule:

**June 3-** Attend the Executive Committee meeting and submit the following items:

1. Final written report of chapter activities, including summary report submitted earlier, names and addresses of new chapter officers, budget data and a narrative summary.
2. Oral report of activities (5 minutes).
3. Your vote for the best chapter award as based on the activity reports and other criteria.
4. Any and all meeting reports (Form L-31) not yet submitted.
5. Compute the activity index for your chapter for each meeting and total the results for the year. A description of the Chapter Activity Index Formula is shown below:

$$AI = \frac{\sum_{i=1}^N (ai * Ai/M)}{N}$$

- $N$  = Total number of meetings  
 $ai$  = 0.5 social meetings  
1.0 professional meetings  
1.5 technical meetings  
 $Ai$  = Total attendance, including non-members  
 $M$  = Total number of chapter members

The Outstanding Chapter Chairman Award will be presented at the IEEE Orlando Section Installation Banquet in June 14, 1997.

**THE ORLANDO SECTION MONTHLY****Published by the  
IEEE ORLANDO SECTION  
EXECUTIVE BOARD**

**Chairman:** Dr. Kalpathy Sundaram-VMBox 110  
823-5326 - kbs@ece.engr.ucf.edu  
**Vice Chair:** Dr. Takis Kasparis - VMBox 120  
823-5913 - tnk@ece.engr.ucf.edu  
**Treasurer:** Dr. C. Christodoulou - VMBox 130  
823-5831 - cgc@ece.engr.ucf.edu  
**Secretary:** Dr. Albert Berg, UCF - VMBox 140  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**Chapters:** Dr. Udaya Vemulapati, VMBox 150  
823-2638 - u.vemulapati@ieee.org

**SOCIETY CHAPTER CHAIRMEN**

**AES:** Gerald Holst - VMBox 210  
629-5370 - jcdgc@aol.com  
**AP/MTT:** Tony Ivanov - VMBox 220  
823-5198 - tgi@ece.engr.ucf.edu  
**Computer:** Dr. Udaya B. Vemulapati, VMBox 230  
823-2638 - u.vemulapati@ieee.org  
**COM/VT:** Dr. John S. Seybold - VMBox 240  
(O)275-3600, (H)812-4323 - jsseybold@tasc.com  
**CN SIG:** Jorge Medina - VMBox 400  
260-1676 - j.medina@ieee.org  
**ED/CHMT:** Dr. Jiann (Peter) Yuan - VMBox 250  
823-5719 - jsy@engr.ucf.edu  
**LEO:** Dr. N. A. Riza, CREOL-UCF - VMBox 260  
658-6800 - riza@mail.creol.ucf.edu  
**Neural Net.:** Dr. M. Georgiopoulos - VMBox 500  
823-5338 - georgiopoulos@pegasus.cc.ucf.edu  
**PE/IA/PEL:** Gary Engmann - VMBox 270  
419-3521 - engmanngr@bv.com  
**SP:** Dr. Albert Berg, UCF - VMBox 280  
306-6986 - al\_p\_berg@ccmail.orl.mmc.com  
**SRC:** Dr. Harley Myler, UCF - VMBox 290  
823-5098 - myler@pegasus.cc.ucf.edu  
**UFFC:** A. Zajac, Sawtek - VMBox 300  
884-3486 - az@sawtek.com

**COMMITTEE CHAIRMEN**

**Awards:** Dave King, CSEC - VMBox 600  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Conference:** Dr. Issa Batarseh - VMBox 620  
823-0185 - batarseh@pegasus.cc.ucf.edu  
**Education:** Dr. Amir Mortazawi - VMBox 630  
823-5957 - amm@ece.engr.ucf.edu  
**Historian:** Dr. Madjid Belkerdid - VMBox 640  
823-5793 - belkerdid@pegasus.cc.ucf.edu  
**PACE:** Jorge Medina, MSI - VMBox 660  
260-1676 - j.medina@ieee.org  
**Programs:** Dr. Takis Kasparis - VMBox 670  
823-5913 - tnk@ece.engr.ucf.edu  
**Pub./Editor:** Jorge Medina, MSI - VMBox 680  
260-1676 - j.medina@ieee.org  
**Strategic Plan.:** Dave King, CSEC - VMBox 690  
(O)628-8130, (H)628-4462 - dave@parkave.net  
**Web Server:** Dr. Ali Atashroo, UCF - VMBox 610  
823-2229 - atashroo@pegasus.cc.ucf.edu

**UCF STUDENT BRANCH**

**Web Page:** <http://www-ece.engr.ucf.edu/~ieee>  
**Advisors:** Dr. Brian Petrasko, UCF - VMBox 710  
823-2786 - petrasko@pegasus.cc.ucf.edu  
Dr. Takis Kasparis - VMBox 620  
823-5913 - tnk@ece.engr.ucf.edu  
**Chairman:** Laurine Muzzey - VMBox 720  
677-5531 - laurine@ao.net  
**SRC:** Jeremy McKinney - VMBox 730  
306-0306 - jmm@ou.net

**IEEE ORLANDO INFORMATION CENTER**

**E-mail:** sec.orlando@ieee.org  
**Web Page:** <http://ieee-os.engr.ucf.edu>  
**Voice Mail** (407)260-1676 - **Fax** (407)260-1636



Dr. Kalpathy Sundaram, Section Chairman

**CHAIRMAN'S CORNER**

The May meeting of the Executive Committee of the section was held on Tuesday, May 6, at UCF. The Section Officers for the next year were elected. **Dr. Takis Kasparis** will be the Section Chairman. **Dr. Christos Christodoulou** and **Dr. Albert Berg** will serve as Section Vice-Chairman and Section Treasurer, respectively. **Dr. Mubarak Shah** will be a new addition to our executive committee and will serve as secretary. They will take up office in July. **Mr. Gary Archibald** will be the UFFC chapter chair.

I had the opportunity to attend the *Southeastcon 97* held at Blacksburg, VA on April 11-13, 1997. In the *Florida Council* meeting, I presented the section activities during February-April, 1997 period. The report for July 1996- April 1997 of Orlando Section was also presented at the Region-3 Excom meeting in the *Southeastcon 97*.

This will be my last chairman's corner as my tenure as the Section Chairman ends this month. Our section continues to be one of the most active sections in Florida and Region-3. The annual rebate check for \$6,790.20 was received from IEEE. This amount also includes the money received by seven active chapters of our section as additional rebate. With this and the conference surplus shares, our financial position is very sound at this moment.

Finally, I take this opportunity to thank the section officers and the committee members for their kind help during my tenure. The Installation Banquet will be on June 14 and

I request all our members to attend. For further details please contact Dr. Kasparis, our Programs Chair.

The last Executive Committee meeting for the fiscal year '96-'97 will take place on June 3 Tuesday, at 6:00 PM in the UCF College of Engineering Building 288. Please join us.

**Florida Council****Web Page**

Walter L. Elden, FC  
WEBMASTER

This announces that the IEEE Florida Council WEB page is under new management and now can be accessed at:

<http://www.flsig.org/fcieee/index.html>

We are trying to become the first IEEE Council to publish the WEB pages for all of its Sections and Student Chapters.

**PACE Seeks  
GOLD Members**

The search is on for Graduates of the Last Decade (GOLD) members to attend the annual PACE conference in St. Petersburg, FL, USA, 30 Aug. - 1 Sept. Last year's young professional track drew nearly 60 young professionals to the conference.

This year's track themes are "Surviving and Thriving in the Corporate Jungle" and "Career Strategies." The PACE conference is IEEE-USA's annual conference that focuses on the professional needs of the IEEE member. "Tools for Tomorrow's Technology Leader" is the overall theme for the 1997 conference. Six tracks will cover such issues as industrial relations and career professional validity.

Any member having 0-10 years of experience and interested in attending the conference should contact Ann Hartfiel, IEEE-USA; (202) 785-0017; e-mail: [a.hartfiel@ieee.org](mailto:a.hartfiel@ieee.org).

Funding is available to support a portion of travel expenses.

## Meeting Announcement

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

### VISION 21

#### Video Presentation

**Sponsor:** Consultants' Network/PACE

**Video Program:** Each Sections Congress held since 1984 has provided the IEEE grassroots leadership from the ten Regions a priceless opportunity to impact on the future of the IEEE. Sections Congress is the ideal place to network and share knowledge, providing a means to increase leadership skills and a working knowledge of the IEEE. It is also a venue for expressing opinions and concerns through recommended actions, which will be used by the IEEE boards to direct the Institute into the 21st. century.

The goals of the Congress reflect the theme of IDEAS for the FUTURE, and are threefold: to provide a means for the attendees to become familiar with the resources available and the means to access them, maximizing their abilities as IEEE volunteer leaders; to create an environment conducive to the sharing of ideas, concerns, and solutions, both during the Congress and after; finally, and perhaps most importantly, to serve as a forum for Section Chairs and other local leaders, enabling them to voice - on the behalf of the collective membership - the ideas, issues, and recommendations which will impact on the development and growth of the IEEE, reinforcing its vitality and relevance to those it serves.

**Speaker:** Dr. Charles Alexander, P.E., IEEE 1997 President.

**Date:** Tuesday, June 10, 1997

**Time:** 6:00 PM

**Refreshments:** Sodas and snacks

**Location:** Orange County Library System, 101 E. Central Blvd., Orlando, 3rd Floor, Patio Room.

**RSVP:** Jorge Medina (407) 260-1676, Email: medina@ieee.org

## TODAY'S ENGINEER MAGAZINE TO DEBUT IN JANUARY

WASHINGTON, May 2, 1997 -- TODAY'S ENGINEER, the first magazine to be devoted exclusively to the professional lives of engineers in all technical fields, will begin quarterly publication in January 1998, according to its publisher, the career and technology-policy arm of The Institute of Electrical and Electronics Engineers (IEEE-USA). The magazine will begin with a controlled circulation of 75,000 and eventually convert completely to individual and group subscriptions.

"In our era marked by rapid changes in technology, the world economy and corporate culture, there is a crying need for a publication that gives engineers the tools they need to build successful and rewarding careers," said Gus Gaynor, the new magazine's editor-in-chief. "TODAY'S ENGINEER aims to provide them what they can't get from technical courses, conferences and publications -- and present it with intelligence, sparkle and wit."

Gaynor added that he hopes TODAY'S ENGINEER will help engineers "think outside the cubicle" in order to take control of their professional destinies. For engineers working in organizations, he explained, that mission would include tackling such topics as sharpening leadership skills, developing an entrepreneurial spirit and a business perspective, influencing one's organization, and preparing for management. "We're not Pollyannas; we share our readers' understanding of the many challenges facing today's professional," he said. "But we want to show that engineers don't have to be victims -- there are a

wealth of opportunities for professional growth available to those with the knowledge, desire and commitment to seize them."

Gaynor announced that the premier edition's cover story will examine "the crossroads of the engineering profession." In a preview of themes that the magazine will explore in later issues, the article will analyze contrary forces which either threaten to deprofessionalize the practice of engineering or promise to raise it to new levels of professionalism. "The engineer today can be either priest or prole, master or minion," stated Gaynor. "TODAY'S ENGINEER aspires to be a beacon for those who want to realize the greatest possibilities of their vocation."

For more information on TODAY'S ENGINEER, call 202-785-0017 or send e-mail to [ieeeusa-magazine@ieee.org](mailto:ieeeusa-magazine@ieee.org). To subscribe, call 800-678-IEEE and ask for product no. JP2969. Annual subscriptions are \$18.95 for individuals (\$12.95 for IEEE members), and \$6.95 each for group subscriptions of 50 or more.

## \*FRONTLINE\* MOVES TO THE WEB

\*FRONTLINE\*, the IEEE-USA Employment Assistance Committee's bi-monthly report, is moving to the front of the line in modern publishing by moving permanently to the World Wide Web. \*FRONTLINE\*, previously a print publication, will now appear solely on the Web through IEEE-USA's site at [www.ieee.org/usab](http://www.ieee.org/usab).

To view the most recent report, click on the "Employment Services" or "News & Publications — Topical Newsletters" links. The current issue of \*FRONTLINE\* includes information on lifelong employability, networking, improved services for job keepers and job seekers, and the electrotechnology industry database.

IEEE Orlando Section  
P.O. Box 521917  
Longwood, Florida 32752-1917

# THE ORLANDO SECTION MONTHLY

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
MID-FLORIDA FL  
PERMIT NO. 0020

TIME SENSITIVE MAIL

07139413 030551 970508  
KALPATHY SUNDARAM  
DEPT OF ELECTRICAL & COMP ENG  
UNIV OF CENTRAL FLORIDA  
ORLANDO, FL 32816

Send Address Changes to: IEEE Service Center, Coding Dept.  
P.O. Box 1331, Piscataway, NJ 08855-1331 or Call (908) 981-0060

Circulation 1,500

## EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636  
E-mail1: j.medina@ieee.org - E-mail2: sec.orlando@ieee.org - Web Page: <http://ieee-os.engr.ucf.edu>

Jun 03	6:00 PM	Orlando Section - EXCOM - UCF, Eng. Bldg. Room 288, K. Sundaram, 823-5326, kbs@ece.engr.ucf.edu
Jun 07-12		PE/IA - '97 IEEE 6th Human Factors & Power Plants - Sheraton Plaza Hotel, Orlando, H. Blackman, (208) 526-0425
Jun 10	6:00 PM	CNSIG - Vision 21 - Orange County Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
Jun 14	6:00 PM	Orlando Section - Installation Banquet - Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu
Aug 05	6:00 PM	Orlando Section - EXCOM - UCF, Eng. Bldg. Room 288, Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu
Aug 12	6:00 PM	CNSIG - Networking Meeting - Orange County Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
Sep 02	6:00 PM	Orlando Section - EXCOM - UCF, Eng. Bldg. Room 288, Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu
Sep 09	6:00 PM	CNSIG - Networking Meeting - Orange County Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org
Oct 07	6:00 PM	Orlando Section - EXCOM - UCF, Eng. Bldg. Room 288, Dr. T. Kasparis, 823-5913, tnk@ece.engr.ucf.edu
Oct 12-15		SMC - '97 IEEE Int'l Conference on Systems, Man and Cybernetics - Hyatt Orlando, Orlando
Oct 14	6:00 PM	CNSIG - Networking Meeting - Orange County Library, 3rd. Floor, Patio Room, J. Medina, 260-1676, j.medina@ieee.org

### The Orlando Section Monthly - Advertisement Rates

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the 1st Tuesday of the month preceding the month of publication.

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	\$450	\$390
Full Page	8 x 10.5	\$300	\$255
3/4 Page	8 x 7.5	\$255	\$225
2/3 Page	8 x 7 or 5 x 10.5	\$225	\$195
Half Page	8 x 5	\$195	\$165
1/3 Page	8 x 2.75 or 2.25 x 8	\$165	\$135
1/4 Page	8 x 2.5 or 5 x 3.75	\$135	\$105
1/6 Page	4 x 3 or 2.25 x 5	\$80	\$72
Business Card	3.5 x 2.25	\$50	\$35
Two Page Preprinted Insert	16.95 x 10.95	\$292	\$252
Full Page Preprinted Insert	8.45 x 10.95	\$195	\$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:  
IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

## ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

### Featuring:

- Great prices!
- Thousands of name-brand products!
- 100% Satisfaction Guaranteed -- most things for a full year!

### Plus Direct Delivery:

- **Call** in your orders, and have them delivered directly to your door!
- **Saves Time** -- let the store come to you!
- **Saves work** -- let someone else carry all those products to your home or office!
- **Saves money** -- good prices, and eliminates "impulse buying!"

### THE AUTOMATIC REPLENISHMENT PROGRAM

For Additional  
Information Call:

**MSI**

(407) 260-1676

Fax: (407) 260-1736

✓ **Place a Scheduled Shipment Order** covering a full six-month period! Order it and forget it!

✓ **No hassle** -- your order is delivered automatically each month, right to your door!

✓ **No more running out of** coffee, sugar, trash bags, copier paper, paper towels, soap, snacks, etc.

✓ **No more running back to the store** for items you forgot!

✓ **Flexible** -- make changes or cancel as needed!