Volume XXVI Number 1

S. IEEE

# THE **ORLANDO** SECTION MONTH

Serving Lake, Orange, Osceola, Seminole and Sumter Counties August 1992



Outstanding Service Award, Robert F. Gray (left), Outstanding Chapter Chairman Award, Laurie Dunn on behalf of Jeff Rollman, Outstanding Corporate Service Award, Bob Smallwood.

# 1992 Orlando Section Installation Banquet

Outgoing Section Chairman, Jorge Medina (left), hands over the gavel to incoming Section Chairman, Dr. Ali Atashroo.





New Section Officers for 1992-93: Dr. Ali Atashroo - Chairman (left), Jacqueline Hines - Vice Chair, Parveen Wahid - Treasurer, David King - Secretary.



Dr. Ali Atashroo (left), Dr. Kalpathy Sundaram, Mrs. and Mr. Harold Cates - Guest Speaker, Parveen Wahid, David King and Tom Voor.

Region 03 Council 05 Section 51

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(VM) 901, (O) 826-1354, (H) 539-0465
Vice Chairman: Jacqueline Hines, Sawtek
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Secretary: Dave King, Martin Marietta Corp.
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Sr. Past Chair.: Dr. Madjid Belkerdid, UCF
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AES: Dr. David Flinchbaugh (VM) 213, (O) 859-7310, (H) 859-4855 AP/MTT: Gwyn Laurie Dunn,

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C: Dr. Edwin K. Evenson

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LEO: Dr. William T. Silfvast, CREOL (VM) 293, (O) 658-6855, (Fax) 281-1557

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SP: Ikram E Abdou

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SRC: Dr. Michael Harris, UCF

(VM) 303, (O) 823-2548, (H) 366-1214

UFFC: Thomas E Voor

(VM) 283, (H) 267-1146

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#### STUDENT BRANCH CHAIRMAN

UCF: Chuck Fulks, (VM) 83, (H) 277-0456

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



M. Ali Atashroo, Section Chairman

#### CHAIRMAN'S CORNER

ur Installation Banquet was held on June 13, 1992 at Park Avenue Grill, Dr. Harold Cates, our quest speaker, addressed the audience on the topic of Change: The Issues and Challenges That Affect the Engineering Profession in the Defense Industry. Dr. Madjid Belkerdid, outgoing Awards Chairman, presented the Outstanding Corporate Award to Bob Smallwood representing Hewlett-Packard Orlando, the Outstanding Service Award to Robert F. Gray, the Outstanding Chapter Chairman Award to Jeff Rollman, and the Society Chapter Recognition to our outgoing Chapter Chairmen.

Jorge Medina, our outgoing Section Chairman, presented certificates of appreciation to Executive and Committee members. After a brief recount of Orlando Section achievements under his leadership, Jorge passed the leadership to your incoming officers: Dr. Ali Atashroo - Section Chairman, Jacqueline Hines - Vice Chairman, Dr. Parveen Wahid - Treasurer, and David King - Secretary.

IEEE Orlando Section has been recognized as an Exemplary Section by IEEE primarily due to the team work of its Executive and Committee members and continuity of leadership of its past junior and senior chairmen. The Orlando Section is an excellent leadership training ground for volunteers. We invite new volunteers to join us in this rewarding endeavor.

To get more familiar with your Executive and Committee members, we will publish one member profile in each issue of the *Orlando Section Monthly*. We are also inviting an open forum in the Section newsletter for member(s)-to-members communication of any issues concerning our profession.

Jackie Hines, our *Programs Chairperson*, has already arranged our second social outing in *Wet'n Wild* on Sunday September 13, 1992. On behalf of the Executive and Committee members, I am inviting all of you to mark your calendar for this family fun day!

#### IEEE SOCIETY CHAPTER OFFICERS FOR 1992-1993

AES

Chairman/Treasurer: Dr. David Flinchbaugh Vice Chairman/Secretary: Dr. Robert Harney

AP/MTT

Chairman: Vice Chairman: Laurie Dunn William Graves Walter Arceneaux

Secretary: Walter Arceneaux Local Arrangements: Dr. Amir Mortazawi

C

Chairman: Vice Chairmen: Dr. Ed Evenson Dr. Kate Kinsley Mr. Jim Laird

Secretary: Srivathsan Narasimhan

COM/VT

Chairman: Vice Chairman: Secretary: Mike Germain Dr. Madjid Belkerdid Dr. Mike Georgiopoulos

ED/CHMT

Chairman: Vice Chairman Dr. Kalpathy Sundaram Robert Canright

PE/IA

Chairman: Vice Chairman: Secretary: Jim Pipkin Adrian Baus Mike Dodane

SP

Chairman: Vice Chairman: Secretary: Ikram Abdou Dr. Yacoub Alsaka Pete Simko

**UFFC** 

Chairman: Vice Chairman: Treasurer: Tom Voor Jeff Mink Rodolfo Almar

# 1992 IEEE Orlando Section Installation Banquet by Madjid A Awards O

The annual IEEE Orlando Section Installation Banquet was held on June 13, 1992 at Park Avenue Grill in Winter Park, and was attended by over fifty people. Dr. Ali Atashroo who doubles up as the Section Vice Chairman and the Programs Chairman is to thank for a nice evening; he took care of all the arrangements with the restaurant and lined up the banquet speaker. Dr. Harold Cates, Vice President of Martin Marietta Technical Operations was the speaker of the evening. The topic was: Changes: The Issues and Challenges that Affect the Engineering Profession in the Defense Industry. After the question/answer session the Installation ceremonies began.

As in the previous years, three Section wide awards are given at the Installation Banquet. Plaques are presented by the Section Awards Chairman to the following awards recipients: Outstanding Corporate Awards, Outstanding Service Awards, and Outstanding Chapter Chairman Award.

The Outstanding Corporate Award, is chosen by the awards committee, which consists of the Section Awards Chairman, and the Section Chairman, Vice Chairman, Secretary, and Treasurer. This year's award was presented to Hewlett-Packard Orlando in recognition for their efforts in supporting the Section. Hewlett-Packard Orlando has provided meeting facilities for every monthly Section executive committee meeting, refreshments were always provided to all attendees, and the welcome mat was always rolled out. Accepting the awards for Hewlett-Packard Orlando was Bob Smallwood, who is also the Section Membership Chairman. Bob, pledged continued support for the

Section.

The Outstanding Service Award, is also chosen by the Awards Committee. This year's award was presented to Robert F. Gray. Bob has served the Section in many ways the last five years or so. He has been Chairman of the PE/IA Chapter for three years in a row, during his tenure he was the recipient of the Outstanding Chapter Chairman Awards in 1989, and 1990. Bob also initiated and organized spring seminars as continuing education for the membership at large. He was able to attract instructors of such caliber that the seminars were a great success, financially and academically. Enrollment sometimes was 40 to 50 people and he netted up to \$4,000.00 per year for the Section, in a period of time when the Section's financial picture was bleak. Bob was also the workhorse that landed the 1995 annual meeting of the IA society in Orlando, and in 1991 the IEEE Orlando Section and the IA society signed a conference co-sponsoring contract.

Every year, at the June executive committee meeting, the ten Chapter Chairmen meet and vote on the year's Outstanding Chapter Chairman Award. The vote is based on a formula that is published in advance and that is based on the number of meetings the chapter had, the number of attendees, as well as the number of

by Madjid A. Belkerdid, Awards Chairman

members in the chapter. The 1992 Outstanding Chapter Chairman Award was presented to Jeff Rollman, Chapter Chairman of the AP/ MTT Chapter.

The Awards Chairman then presented certificates of appreciation for the Chapter Chairmen as follows:

AES	Dr. David Flinchbaugh
AP/MTT	Jeff Rollman
C	Dr. Sheau Lang
COM/VT	Michael Germain
ED/CHMT	Robert Canright
PE/IA	Tim Turba
SP	David King
SRC	Dr. Michael Harris
UFFC	Brent Horine

Jorge Medina, the Outgoing Section Chairman, presented certificates of appreciation to the Section executive officers and the various standing Committee Chairmen. Jorge, then thanked everyone for support during his tenure as Section Chairman, introduced the new Section Chairman, Dr. Ali Atashroo, presented him with the Section Chairman pin and turned over the gavel. Dr. Atashroo then introduced the 1992-93 IEEE Orlando Section Executive Committee: Jacqueline Hines - Vice Chair, Dr. Parveen Wahid - Treasurer, David King - Secretary.

Chairman Atashroo briefly discussed his agenda for his tenure, thanked everyone and bid farewell.

# **IEEE FAMILY FUN DAY**

MET'N WILLD

Sunday, September 13, 1992

See the September Issue for More Details

**IEEE Orlando Section** 

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### **EVENTS CALENDAR**

For the latest and/or additional information call the IEEE Orlando Voice Information Center 260-1676 and enter the VM No.

Aug. 4, 1992 IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 826-1354, (H) 539-0465

Sep. 1, 1992 IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 826-1354, (H) 539-0465

Sep. 13, 1992 IEEE Orlando Section - Family Fun Day - Wet'n Wild - J. Hines, (VM) 913, (O) 886-8860, (H) 628-1604

Oct. 26-31, 1992 NPS - 1992 IEEE Nuclear Science Symposium - Hyatt Orlando, J. Dawson, (708) 972-6541

Nov. 8, 1992 C - 1992 IEEE Software Comprehensive Workshop - Mary Ann DeWald, (908) 562-3878

Nov. 9-12, 1992 C - 1992 IEEE Conference on Software Maintenance - Mary Ann DeWald, (908) 562-3878

Dec. 6-9, 1992 COM - GLOBECOM '92 - 1992 IEEE Global Telecommunications Conference - R. Kandell, 955-8230

Mar 1-5, 1993 C - 9th IEEE Conf. on Artificial Intelligence for Applications - D. Waltz, (617) 234-2050

Jun. 1-3, 1993 CHMT - 1993 IEEE 43rd Electronic Components & Technology Conference - P. Walsh, (202) 457-4932

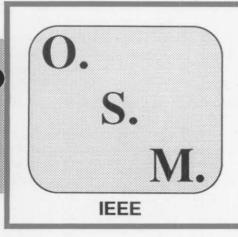
May 15-19, 1995 MTT - 1995 IEEE/MTT-S International Microwave Symposium - K. Huddleston, (O) 356-7201. 339-0336

#### 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 200 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
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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
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Preprinted Insert	8.5 x 11	\$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 101, P.O. Box 521917, Longwood, FL 32752-1917, (407) 260-1676



# THE ORLANDO SECTION MONTHLY

Serving Lake, Orange, Osceola, Seminole and Sumter Counties

September 1992

# **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

# ANTENNAS AND PROPAGATION/ MICROWAVE THEORY AND TECHNIQUES (AP/MTT)

#### Planar Network-Based and Spatial Power Combining Structures

Speaker:

Dr. Amir Mortazawi

Date:

Thursday, September 17, 1992

Time:

Refreshments at 5:30 PM

Meeting at 6:00 PM

Location:

Hewlett-Packard

Contact:

Laurie Dunn at 1-867-3193 or

leave message at 260-1676, ext. 6,

voice mail box 223.

# CONSULTANTS' NETWORK WORKING GROUP

#### Organizational Meeting

Date: Time: Tuesday, September 8, 1992

Time:

Meeting at 6:00 PM

Location: Medina Software, Inc.,

385 Commerce Way, Suite 101,

Longwood, FL 32750

Contact:

Call Jorge Medina at 628-4828

for reservations or leave message at 260-1676, ext. 6, voice mail box

323.

#### **NEURAL NETWORK WORKING GROUP**

#### Real-Time Neural Net Processing

Speaker:

Mr. Ron Sartain

Date:

Thursday, October 15, 1992

Time:

Meeting at 6:00 PM

Location:

Rapid Imaging Inc.

5955 T. G. Lee Blvd., Suite 150

Orlando, FL 32822

Contact:

Dr. M. Georgiopoulos at 823-

5338, Ron Sartain at 356-4432 or leave message at 260-1676, ext. 6,

voice mail box 313

#### SIGNAL PROCESSING (SP)

#### Introduction to Wavelet Transform

Speaker:

Dr. Larry Peele

Date:

Wednesday, October 14, 1992

Time:

5:30 PM, Refreshments will be

served

Location:

UCF, Engineering Building

Contact:

Dr. Ikram Abdou at 356-0322 or

leave message at 260-1676, ext. 6,

voice mail box 233.

Region 03 Council 05 Section 51

#### **EXECUTIVE BOARD**

Chairman: Dr. M. Ali Atashroo, Martin Marietta (VM) 901, (O) 356-6914, (H) 539-0465 Vice Chairman: Jacqueline Hines, Sawtek Inc. (VM) 902, (O) 886-8860, (H) 628-1604 Treasurer: Dr. Parveen Wahid, UCF (VM) 904, (O) 823-2610, (H) 677-0571 Secretary: Dave King, Martin Marietta Corp. (VM) 903, (O) 275-2318, (H) 699-4890 Jr. Past Chair.: Jorge Medina, Sigtone, Inc. (O) 628-4828, (H) 260-1676 Sr. Past Chair .: Dr. Madjid Belkerdid, UCF (O) 823-5793, (H) 699-4890

#### **COMMITTEE CHAIRMEN**

Awards: Jorge Medina, Sigtone, Inc. (VM) 905, (O) 628-4828, (H) 260-1676 Chapters: Jeff Rollman, Martin Marietta Corp. (VM) 906, (O.) 356-6310, (H) 671-2568 Conf/Ed: Ed Ellis, (VM) 907/908, (H) 834-3319 Education: Dr. Kalpathy B. Sundaram, UCF (VM) 909, (O) 823-5326, (H) 671-6843 Historian: Russell E. Theisen, Martin Marietta (VM) 910, (O) 356-4320, (H) 671-4139 Membership: Bob Smallwood, Hewlett-Packard (VM) 911, (O) 826-9217, (H) 365-9724 PACE: Glenn Portz, (VM) 912, (H) 644-2408 Programs: Jacqueline Hines, Sawtek Inc. (VM) 913, (O) 886-8860, (H) 628-1604 Publications: Jorge Medina, Sigtone, Inc. (VM) 914, (O) 628-4828, (Fax) 628-5820 Strategic Plan.: Dave King, Martin Marietta (VM) 915, (O) 275-2318, (H) 699-4890 Student Activities: Dr. Michael Harris, UCF (VM) 916, (O) 823-2548, (H) 366-1214

#### SOCIETY CHAPTER CHAIRMEN

AES: Dr. David Flinchbaugh

(VM) 213, (O) 859-7310, (H) 859-4855 AP/MTT: Laurie Dunn, Kennedy Space Center (VM) 223, (O) 867-3193, (H) 678-9674

C: Dr. Edwin K. Evenson

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(VM) 273, (O) 281-2916 SP: Dr. Ikram E. Abdou, Martin Marietta Corp

(VM) 233, (O) 356-0322, (H) 671-0397 SRC: Dr. Michael Harris, UCF

(VM) 303, (O) 823-2548, (H) 366-1214

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Consultants' Network: Jorge Medina, Sigtone (VM) 323, (O) 628-4828, (H) 260-1676 Neural Network: Dr. M. Georgiopoulos, UCF (VM) 313, (O) 823-5338, (H) 275-2665

STUDENT BRANCH CHAIRMAN UCF: Terry Waldrof, (VM) 83

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M. Ali Atashroo, Section Chairman

#### CHAIRMAN'S CORNER

lellow member, I would like to share with you our Section's expressed objectives and goals for the next twelve months. Empowering engineers to directly serve their communities and each other, constitutes the cornerstone of our goals. To facilitate achieving that goal, we have embarked on the following activities.

Jorge Medina, Jr. Past Chairman, is organizing a local Consultants' Network Working Group sponsored by IEEE-USA Private Practitioners Task Force to promote self-employed engineers. To further promote entrepreneurship, we are planning to coordinate education in the Working Group and to establish an outstanding local entrepreneur award.

Dr. Kalpathy Sundaram, Education Committee Chairman, is coordinating engineer volunteers to organize a speaker pool to address local public schools on math, science, and engineering. IEEE Orlando Section with over 1,200 local members, has a unique opportunity to participate in solving this national concern.

To ensure continuity, David King, Strategic Planning Committee Chairman, is drafting our Section's evolving strategic objectives and goals which expand over multiple years. We value your inputs. To that end, our publication editors, Jorge Medina and Ed Ellis have allocated in the Orlando Section Monthly an open forum for Member-to-Member Talk to air engineers' concerns. Let your fellow members hear from you. You might not be alone! Pressed for time? Just call the IEEE Orlando Voice Information Center - 260-1676, using the published Voice Mail numbers in the Section Monthly newsletter.

We would like to invite each of you to join your volunteer Section Officers in our collective effort to empower engineers in both marketplace and community.

Looking forward to meeting you all on Sunday September 13, 1992 at our second Family Fun Day in Wet 'n Wild. Jackie Hines has arranged a splash day for you and your family!

#### WELCOME!

#### **New Members in the Section**

The Orlando Section would like to welcome the following new members who have joined the IEEE since May 1992.

> MICHAEL J CHARNOKY **WALT G BESIO DOUGLAS L ANDERSON** DONALD C FOWLER JOHN M DECATREL **JUXIN HUANG** STEVE RAMPLEY SAIFUL HAQUE **AMIT JAIN** JEFFREY R KLUG **EMBELLE LITUMBE** ROBERT J PIRELA HAROLD L RAGAN JR ARTHUR J RIEGERT JR

#### Members on the Move

The Orlando Section would like to welcome a number of IEEE members who have decided to find out why Central Florida is such a nice place to live. We hope you enjoy living and practicing your profession here. The Orlando Section invites you to participate in the activities of the Section.

> ROBERT W HOLKUP JEFF T MINK JEFFREY L RAUWERDINK PAUL D BRUCKNER WILLIAM B BOGAN

Seminole dividend

Page 2 Lynn. Baggett
Jane Lane (nate Tuloning)

# IEEE Power Engineering Society presents a Seminar Series on POWER GENERATORS



DATE

Sep. 17

The IEEE-Orlando Power Engineering Society is pleased to announce the 4th Annual Power Engineering Seminar Series



SPEAKER

Donald G. Ramey, Westinghouse

September 17, 1992 - November 12, 1992, 6:30 - 8:30 on Thursday Evenings

Location: Westinghouse Quadrangle, 4400 Alafaya Trail, Orlando (Across from UCF, just North of the Intersection of University and Alafaya)

Fee: \$75 for IEEE members, \$95 for non-members

The Seminar Series is intended for electrical engineers working in power generation, but will also be of interest for engineers working in station design, utility engineers who perform systems studies, protection engineers, generation dispatchers, and others with a professional interest in power generation. Seminar speakers are prominent local engineers and engineering managers with wide experience in appropriate aspects of generator and utility engineering.

For further information call Bob Nelson (Westinghouse, 381-6308), Tim Turba (OUC, 423-9100), Luis Ramos (Black & Veatch, 240-9038) or Mehrdad Mohseni (R.W. Beck, 422-4911)

TOPIC

Generator Theory and Design

Sep. 24	Generation Excitation and Control	Joseph D. Hurley, Westinghouse
Oct. 1	Generator Protection	M. Stanley Baldwin, Consultant
Oct. 8	Generator Operation and Maintenance	Fred Haddad, Orlando Utilities
Oct. 15	Generator Dispatch and Commitment	Tom Washburn and Claston Sunanon, Orlando Utilities
Oct. 22	Generation Planning and Economics	Paul Arsuaga, R.W. Beck & Associates
Oct. 29	Modeling of Generators for Power System Studies	Bill Smith, Power Technologies Inc.
Nov. 5	Independent Power Producers and Generator Interconnection	Tom Reedy, Resource Management International
Nov.12	Emerging Technologies in Power Generation	John P. Kessinger, Westinghouse Generation
Register Early!	Attendance Limited! Mex	th 849-3333 Flee 5 male
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Sep. 1, 1992 IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465

Sep. 8, 1992 IEEE Consultants' Network - Organizational Meeting- Medina Software, J. Medina, (VM) 323, 628-4828 Sep. 13, 1992 IEEE Orlando Section - Family Fun Day - Wet'n Wild - J. Hines, (VM) 913, (O) 886-8860, (H) 628-1604

Sep. 17, 1992 IEEE AP/MTT - Planar Network-Based & Spatial Power Combining Structures - L.Dunn, (VM) 223, 1-867-3193

Sep. 17, 1992 IEEE PE/IA - Power Generators: Generator Theory & Design - B. Nelson, (O) 381-6308

Sep. 24, 1992 IEEE PE/IA - Power Generators: Generation Excitation & Control - B. Nelson, (O) 381-6308

Oct. 1, 1992 IEEE PE/IA - Power Generators: Generator Protection - B. Nelson, (O) 381-6308

Oct. 6, 1992 IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465

Oct . 8, 1992 IEEE PE/IA - Power Generators: Generator Operation & Maintenance - B. Nelson, (O) 381-6308 Oct . 14, 1992 IEEE SP - Introduction to Wavelet Transform - UCF, Eng. Bldg., I. Abdou, (VM) 233, (O) 356-0322

Oct . 14, 1992 IEEE NN - Real-Time Neural Net Processing - Rapid Imaging, Inc., M. Georgiopoulos, (VM) 313, (O) 823-5338

IEEE PE/IA - Power Generators: Generator Dispatch & Commitment - B. Nelson, (O) 381-6308 Oct . 15, 1992 IEEE PE/IA - Power Generators: Generatation Planning & Economics - B. Nelson, (O) 381-6308 Oct . 22, 1992

Oct. 26-31, 1992 IEEE NPS - 1992 IEEE Nuclear Science Symposium - Hyatt Orlando, J. Dawson, (708) 972-6541

Oct . 29, 1992 IEEE PE/IA - Power Generators: Modeling for Power System Studies - B. Nelson, (O) 381-6308

Nov. 3, 1992 IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465

Nov. 5, 1992 IEEE PE/IA - Power Generators: Independent Power Producers - B. Nelson, (O) 381-6308 Nov. 8, 1992 IEEE C - 1992 IEEE Software Comprehensive Workshop - Mary Ann DeWald, (908) 562-3878

Nov. 9-12, 1992 IEEE C - 1992 IEEE Conference on Software Maintenance - Mary Ann DeWald. (908) 562-3878

Nov. 12, 1992 IEEE PE/IA - Power Generators: Emerging Technologies - B. Nelson, (O) 381-6308

Dec. 1 1992 IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465

Dec. 6-9, 1992 IEEE COM - GLOBECOM '92 - 1992 IEEE Global Telecommunications Conference - D. Sullivan, 660-6861

IEEE C - 9th IEEE Conf. on Artificial Intelligence for Applications - D. Waltz, (617) 234-2050 Mar. 1-5, 1993

Jun. 1-3, 1993 IEEE CHMT - 1993 IEEE 43rd Electronic Components & Technology Conference - P. Walsh, (202) 457-4932

May 15-19, 1995 IEEE MTT - 1995 IEEE/MTT-S International Microwave Symposium - K. Huddleston, (O) 356-7201, 339-0336

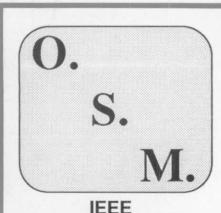
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# THE ORLANDO SECTION MONTHLY

Serving Lake, Orange, Osceola, Seminole and Sumter Counties

October 1992

# **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.

#### POWER ENGINEERING/ INDUSTRY APPLICATIONS

(PE/IA)

#### Seminar Series: POWER GENERATORS

Date:

Thursday Evenings, Sep 17-Nov 12

Time:

6:30 PM - 8:30 PM

Location:

Westinghouse Quadrangle,

4400 Alafaya Trail, Orlando (Across from UCF, just North of

University & Alafaya Intersection)

Fee:

\$75 IEEE members

\$95 non-members

Contact:

Bob Nelson (381-6308),

Tim Turba (423-9100), Luis Ramos (240-9038) or Mehrdad Mohseni (422-4911)

### SIGNAL PROCESSING

(SP)

#### Introduction to Wavelet Transform

Speaker:

Dr. Larry Peele

Date:

Wednesday, October 14, 1992

Time:

5:30 PM, Refreshments will be

served

Location:

UCF, Engineering Building

Contact: Dr. Ikram Abdou at 356-0322 or

leave message at 260-1676, ext. 6,

voice mailbox 233.

#### **NEURAL NETWORK WORKING GROUP**

#### Real-Time Neural Net Processing

Speaker:

Mr. Ron Sartain

Date:

Thursday, October 15, 1992

Time:

Meeting at 6:00 PM

Location:

Rapid Imaging Inc. 5955 T. G. Lee Blvd., Suite 150

Orlando, FL 32822

Contact:

Dr. M. Georgiopoulos at 823-

5338, Ron Sartain at 356-4432 or leave message at 260-1676, ext. 6,

voice mailbox 313

# CONSULTANTS' NETWORK WORKING GROUP

### Technology Licensing

Speaker:

Mr. Edward G. Tutle

Date:

Tuesday, October 13, 1992

Time:

Meeting at 6:00 PM

Location:

Medina Software, Inc.,

385 Commerce Way, Suite 101,

Longwood, FL 32750

Contact:

Call Jorge Medina at 628-4828 for

reservations or leave message at 260-1676, ext.6, voice mailbox 323

Region 03 Council 05 Section 51

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Chairman: Dr. M. Ali Atashroo, Martin Marietta
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STUDENT BRANCH CHAIRMAN UCF: Terry Waldrof, (VM) 83

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M. Ali Atashroo, Section Chairman

#### CHAIRMAN'S CORNER

ames Beal, past chairman of the Florida Council, reported the proposed 1993 IEEE Section Rebate Schedule at the FCIEEE meeting held on August 15, 1992 in Tampa. "Allowance all Sections in existence on December 31 of prior calendar year and meeting minimum requirements shall receive \$1,500 annual allowance. Membership Rebate - \$2.50 for each member (higher grade, members and students) and Affiliate based on the prior year's December 31 statistics. All to be received by March. Note that in the first year of implementation, year 1993, no section shall receive less than that obtained in 1992. It was also indicated that [membership] dues may be increased by \$6." IEEE Orlando Section's 1992 budgeted rebate is \$5,276 which is higher than the proposed 1993 budget of \$4,500 based on our 1,200 members in the Section. Another change effective in 1993 is the new requirement of holding four (used to be two) chapter meetings per calendar year to avoid chapter delinquency.

The incoming chapter/committee chairmen and student branch chairman are busy preparing their 1992-1993 activity plans as well as 1993 annual budgets to be approved in the Orlando Section Executive Committee (EXCOM) meeting scheduled for October 6, 1992. This is the time to contact your chapter chairman or student branch chairman and offer the activities that you want to lead or contribute. You can find their names and telephone/voice mailbox numbers inside the Orlando Section Monthly newsletter.

Ed EIIIs, Globecom '92 (Dec 6-9) Committee Secretary, has prepared a detailed list of Globecom '92 volunteer requirements. I encourage Section members and especially students members to contact Ed Ellis at (407) 834-3319 to find out about the time,

place, function, and the volunteer's benefits for technical sessions as well as the social functions.

Dr. Kalpathy Sundaram, Education Committee Chairman, has contacted Orange and Seminole counties school boards to coordinate our section stride on "Engineers for Education." We welcome our first engineer volunteer from Disney World and looking forward to a large pool of member volunteers from other industrial and educational organizations. Our goal is to coordinate our first school visit no later than January 1993.

During the National Engineering Week (NEW) February 14-20, 1993 we plan for an all out effort for "Public Awareness of Engineering Profession" through highlighting engineers' contributions to society. I would like to challenge each chapter/committee and the student branch of the Section to prepare and lead an activity promoting this cause during NEW.

Finally, **David King**, Strategic Planning Committee Chairman, has proposed a long-term investment plan for the Section's initial \$20,000 capital fund. The goal is to gradually build up a conservative capital fund whose income supports our Section activities. Our Section's revenue sources are primarily through conference sponsorship such as Vehicular Technology conference, Seminal series run by chapters such as Power Engineering chapter's Power Generators, and the annual IEEE Section rebates.

Hope you enjoyed your September 13, 1992 Family Fun Day splash arranged diligently by **Jackie Hines**, Program Chairwoman, and sponsored by the IEEE Orlando Section.

#### SPEAKER POOL

Dr. Kalpathy Sundaram, Education Committee Chairman, is coordinating engineer volunteers to organize a speaker pool to address local public schools on math, science and engineering. Until now the response has been poor for this pool. Also, Seminole school authorities expressed interest in having volunteer tutors for high level math for their students. IEEE members who are interested to join for this volunteer activity can contact Dr. Sundaram at (407) 823-5326.



Hyatt Orlando Hotel, November 9 — 12, 1992

6375 Irlo Vronson Memorial Highway
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Special room rate of \$89 (+ tax) per night, single/double occupancy, has been negotiated. To secure group rate, make reservations for the IEEE Computer Society Conference on Software Maintenance room block. This rate also applies 3 days before and after the meeting dates. The cut-off date for reservations is Saturday, October 17, 1992, 5:00 p.m. EST.

mproving the Processes of Software Maintenance — The Conference on Software Maintenance, CSM 92, will gather managers, developers, maintainers, and researchers to discuss new solutions to the continuing challenges of software maintenance and maintainability. The focus will be on the processes used to perform software maintenance as a means of understanding, defining, improving, managing, and supporting the practices of software maintenance. CSM 92 will provide the forum in which to discuss software maintenance — refereed papers, experience reports, panel sessions, tutorials, and informal meetings. CSM 92 will present the most important, up-to-date, practical, experimental, and theoretical work being conducted in support of software maintenance. If you are a practitioner or a researcher — from industry, government, or academia — who is involved with or has an interest in software maintenance, this conference is for you!

#### Tutorials - Monday, November 9

- Software Reengineering
  Robert Arnold Software Evolution Technology
- Unit Testing During Maintenance
  Thomas Bogart AT&T Bell Laboratories
- Keynote Addresses
  - **■** Tuesday, November 10
    - Bill Curtis Director, Software Process Program
      Software Engineering Institute
      Pittsburgh, PA

- Software Change Management Robert Wachtel — Consultant
- Techniques for Software Maintenance Ned Chapin — InfoSci, Inc.
- Thursday, November 12

Ted Keller — Manager, Space Shuttle Software Project Coordination IBM, Houston, TX

General Sessions	9:00 10:30 a.m.	11:00 а.т. — 12:30 р.т.	2:00 3:30 p.m.	4:00 — 5:30 p.m.
Tuesday November 10, 1992 Welcome/opening remarks 8:30 - 9:00 a.m.	Keynote address (plenary)  "Maintaining the Software Process Movement"	Session 1A: Practical Main- tenance Management I Nicholas Zvegintzov (Chair)	Session 2A: Practical Main- tenance Management II Paul Layzell (Chair)	Session 3A: Panel Session – Measurements for Mainten- ance Process Management Loredana Mancini (Chair)
	Bill Curtis, SEI	Session 1B: Software Main- tenance Methods Ned Chapin (Chair)	Session 2B: Panel Session – Paradigms for Maintenance Mari Georges (Chair)	Session 3B: Maintenance of Object-Oriented Systems Frank Calliss (Chair)
Wednesday November 11, 1992	Session 4A: Maintenance Process Track I Shawn Bohner (Chair)	Session 5A: Maintenance Process Track II John Foster (Chair)	Session 6A: Maintenance Process Track III Gianluigi Caldiera (Chair) Session 6B: Special Session –	Session 7A: Panel Session – Maintenance Process Improve- ment in Industry David Card (Chair)
	Session 4B: Reengineering & Restructuring Robert Arnold (Chair)	Session 5B: Reverse Engineer- ing & Program Understanding Hausi Muller (Chair)	Report From Workshop on Program Comprehension Vaclav Rajlich (Chair)	Session 7B: Testing in Soft- ware Maintenance Tetsuo Tami (Chair)
Thursday November 12, 1992	Keynote address (plenary) "The Importance of	Session 8A: Ties Between Development & Maintenance Keith Gallagher (Chair)	Session 9A: Software Main- tenance Metrics Pasi Kuvaja (Chair)	Session 10 (plenary): Panel Session – Reliability Models & Metrics for Space System Maintenance
	Process Improvement in Software Maintenance"  Ted Keller, IBM	Session 8B: Panel Session – Can Software Maintenance be Taught? Frank Calliss (Chair)	Session 9B: Maintenance Tools Isao Miyamoto (Chair)	Norman Schneidewind (Chair)

#### Conference Organizers

Vaclav Rajlich — General Chair Wayne State University Mari Georges — Program Vice-Chair Cap Gemini

Marc Kellner — Program Chair Software Engineering Institute Isao Miyamoto — Program Vice-Chair University of Hawaii For a copy of the advance program and registration form, contact:

IEEE Computer Society, Conference Dept — CSM 92 1730 Mass Ave, NW Washington, DC 20036 – 1992 Telephone 202.371.1013 FAX 202.728.0884 Email j.mee @ compmail.com







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# **EVENTS CALENDAR**

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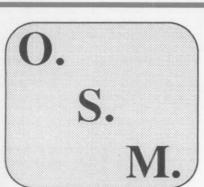
Oct. 1	IEEE PE/IA - Power Generators: Generator Protection - B. Nelson, (O) 381-6308
Oct. 6	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Oct. 8	IEEE PE/IA - Power Generators: Generator Operation & Maintenance - B. Nelson, (O) 381-6308
Oct. 13	IEEE Consultants' Network - Technology Licensing - Medina Software, J. Medina, (VM) 323, (O) 628-4828
Oct . 14	IEEE SP - Introduction to Wavelet Transform - UCF, Eng. Bldg., I. Abdou, (VM) 233, (O) 356-0322
Oct . 14	IEEE NN - Real-Time Neural Net Processing - Rapid Imaging, Inc., M. Georgiopoulos, (VM) 313, (O) 823-5338
Oct . 15	IEEE PE/IA - Power Generators: Generator Dispatch & Commitment - B. Nelson, (O) 381-6308
Oct . 22	IEEE PE/IA - Power Generators: Generatation Planning & Economics - B. Nelson, (O) 381-6308
Oct . 25-29	LIA - ICALEO '92 - 11th Annual Int'l Congress on Applications of Laser & Electro-Optics - J. Salg 380-1553
Oct. 26-31	IEEE NPS - 1992 IEEE Nuclear Science Symposium - Hyatt Orlando, J. Dawson, (708) 972-6541
Oct . 29	IEEE PE/IA - Power Generators: Modeling for Power System Studies - B. Nelson, (O) 381-6308
Nov. 3	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Nov. 5	IEEE PE/IA - Power Generators: Independent Power Producers - B. Nelson, (O) 381-6308
Nov. 8	IEEE C - 1992 IEEE Software Comprehensive Workshop - Mary Ann DeWald, (908) 562-3878
Nov. 9-12	IEEE C - 1992 IEEE Conference on Software Maintenance - Mary Ann DeWald, (908) 562-3878
Nov. 12	IEEE PE/IA - Power Generators: Emerging Technologies - B. Nelson, (O) 381-6308
Dec. 1	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Dec. 6-9	IEEE COM - GLOBECOM '92 - 1992 IEEE Global Telecommunications Conference - D. Sullivan, 660-6861
Dec. 9	IEEE AP/MTT - Progress and Change in Microwave Radio Communications - L. Dunn, (VM) 223, 1-867-3193
Mar. 1-5, '93	IEEE C - 9th IEEE Conf. on Artificial Intelligence for Applications - D. Waltz, (617) 234-2050
Jun. 1-3, '93	IEEE CHMT - 1993 IEEE 43rd Electronic Components & Technology Conference - P. Walsh, (202) 457-4932
May 15-19, '95	IEEE MTT - 1995 IEEE/MTT-S International Microwave Symposium - K. Huddleston, (O) 356-7201, 339-0336

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**IEEE** 

# Volume XXVI Number 4 THE **ORLANDO** SECTION MONTH

Serving Lake, Orange, Osceola, Seminole and Sumter Counties

November 1992

# **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.

ANTENNAS AND PROPAGATION/ **MICROWAVE THEORY & TECHNIQUES** (AP/MTT)

Progress and Change in Microwave Radio Communications

Speaker:

Dr. Ferdo Ivanek, Distinguished Microwave Lecturer

Date: Time: Wednesday, December 9th Refreshments at 5:30 PM

Meeting at 6:00 PM

Location:

Hewlett-Packard

Contact:

L. Dunn at 1-407-867-3193

COMMUNICATIONS/ **VEHICULAR TECHNOLOGY** (COM/VT)

Kick Off Meeting for 1992-1993

Date: Time:

Wednesday, November 4th Refreshments at 6:30 PM

Location:

Galloway Building, United Tel. Co. of FL

815 E. SR 436, Alt. Springs

Telecommunication Trends: Services and Technology

Speaker:

Derek H. Brennan,

Vice President-Network Plan. & Eng. United Tel. Co.

Wednesday, November 18th Date: Refreshments at 6:30 PM Time:

Meeting at 7:00 PM

Location: UCF Engineering Building M. Germain at 678-5599 or Contact:

Dr. M. Belkerdid at 823-5793.

CONSULTANTS' NETWORK

(CN)

Entrepreneurial Options

Speaker: Date:

Mr. Philbrook Sargent Tuesday, November 10th

Time:

Meeting at 6:00 PM Orlando Public Library,

Location: 3rd, Floor

Contact: Call Jorge Medina at

260-1676 for reservations.

LASER AND ELECTRO-OPTICS

(LEO)

Ultra Sprectroscopy from meV to MeV

Speaker:

Dr. Wayne Knox, Technical Staff in the Advanced Photonics

Research Dept. AT&T Bell Lab. Optical techniques for time-

Program:

resolved studies were originally developed in the visible spectral range. Rapid progress in the field has pushed the range of femtosecond optical pulses into the UV, VUV, X-rays at 1 MeV. On the other side, nearinfrared, mid-infrared and now far-infrared radio is available with subpicosecond time resolution. We will discuss this rapid progress, highlight a number of applications of nonlinear spectroscopy in this wide range, and

directions.

Date: Time: Thursday, November 5th Social hour: 5:30 pm

point out some possible future

Tech. presentation: 6:30 pm President's Board Room -

Location:

Contact:

Administration Bldg., UCF E. Van Stryland at 658-6814.

POWER ENGINEERING/ INDUSTRY APPLICATIONS

(PE/IA)

Seminar Series: POWER GENERATORS

Date:

Thursday Evenings. Sep. 17th - Nov. 12th

6:30 PM - 8:30 PM

Time: Location:

Fee:

Westinghouse Quadrangle,

4400 Alafaya Trail, Orlando

\$75 IEEE members

\$95 non-members

Contact:

Bob Nelson (381-6308), Tim Turba (423-9100), Luis Ramos (240-9038) or

Mehrdad Mohseni (422-4911)

SIGNAL PROCESSING (SP)

Speech Coding Using Contractive Techniques

Speaker:

Mr. Roberto Zúñiga

Date:

Thursday, November 12th

Time:

5:30 PM, Refreshments will

be served

Location: Contact:

UCF, Eng. Bldg., Room 407

Dr. Ikram Abdou at 356-0322

ULTRASONICS, FERROELECTRICS AND FREQUENCY CONTROL (UFFC)

Ionizing Space Radiation Effects on Surface Acoustic Wave Resonators

Speaker:

Jackie Hines

Tuesday, November 10th

Date: Time:

Refreshments at 6:00 PM

Meeting at 6:30 PM

Location: Contact:

UCF, Eng. Bldg., Room 288 Call Michael Garrity or Tom

Voor at 886-8860.

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#### **UCF STUDENT BRANCH**

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Chairman: Debra Kemnitz, UCF (VM) 83, (H) 658-4595

SRC: Scott Harrell, (VM) 93

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#### CHAIRMAN'S CORNER

M. Ali Atashroo, Section Chairman

I would like to thank your chapters, committees, and student branch chairs for the excellent 1992-93 technical, professional, and social events that they have planned for you. You will enjoy and benefit from these planned events. Look up your favorite events in the "Events Calendar" updated monthly in this Section monthly newsletter, or call up our IEEE Orlando Voice Information Center 260-1676, ext. 6 and enter the Voice Mailbox (VM) number for the latest information.

Parveen Wahid is finalizing the IEEE Orlando Section's 1993 budget incorporating the 1993 budgets submitted by the chapters, committees, and student branch chairs. We will review and approve the section budget in our November 3, 1992 executive committee meeting. Many thanks to Parveen for her support of student branch activities and budgeting.

Jackie Hines, program chair, reports the record show of 188 members and their families in October who enjoyed our IEEE Orlando Section's second Family Fun Day social event at Wet'n Wild. Those of you who missed this year's social event, there will be a third one in October 1993. Jackie is now arranging for our Awards Banquet to be held in February of 1993. We welcome any suggestions on place and theme.

Jorge Medina, Awards Chair, has started his "Search for Stars." Traditionally, we recognize those members in the community who stand out in engineering profession, engineering education both as educator and as senior or graduate student, and IEEE service. Also, each society chapter recognizes the engineer of the year for that chapter. This year, I have asked the Awards Chairman to initiate an Entrepreneurship award recognizing an outstanding entrepreneur in the community. You play a key roll in this process. Nominate the individuals in your work-place whom you believe are outstanding.

Jorge Medina is also spearheading the Consultants' Network working group. He holds the group meeting on second Tuesday of each month. He is finishing a publication of the IEEE Orlando Section membership directory which will be available to members only for a nominal reproduction cost. This directory serves as enhancement of networking among local members. Also, Edwin Evenson, Harley Myler, and Jorge Medina have initiated collaboration to enhance the Section Information Center with E-mail service to further our networking capability.

Bob Smallwood, Membership chair, has established the IEEE Orlando Section membership data base on a PC at Hewlett-Packard. For membership information, now you can contact him at 826-9217. Bob would also appreciate volunteers to help him man the IEEE membership booth at GlobeCom '92 held on Dec. 6-9, 1992 at Buena Vista Palace in Walt Disney World Village.

Ed Ellis, GlobeCom '92 Committee Secretary, has prepared a detailed list of GlobeCom '92 volunteer requirements. I encourage Section members and especially student members to contact Ed Ellis at (407) 834-3319 to find out about the time, place, and function. Volunteer's benefits are a meal ticket and one day free admission pre or post the volunteering day.

During the National Engineering Week (NEW) February 14-20, 1993 we plan for an all out effort for "Public Awareness of Engineering Profession" through highlighting engineers' contributions to society. I would like to challenge each chapter/committee and the student branch of the Section to prepare and lead an activity promoting this cause during NEW. We plan for NEW in our November 3, 1992 executive committee meeting.

Finally, **David King**, Strategic Planning Committee Chairman, has proposed a long-term investment plan for the Section's initial \$20,000 capital fund. David has selected a short-term government security no-load fund for our capital investment.

# **★ STAR SEARCH ★**

Jorge Medina, Awards Chairman
ORLANDO SECTION AWARDS
CANDIDATE SEARCH FORM

#### 1.1 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.

#### 1.2 PROCEDURE

The Submitter fills out the form as indicated and suggests nominators and endorsers 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 Awards 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).

#### 1.3 QUALIFICATIONS

The OUTSTANDING ENGINEER AWARD is designed to recognize a member of the Section who, through his technical and professional abilities, has made an outstanding contribution to the electrotechnology profession.

The OUTSTANDING ENGINEERING EDUCA-TOR AWARD is designed to recognize a member of the Section who has shared his 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 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 consulting abilities has made outstanding contributions to the electrotechnology profession.

#### 1.4 ELIGIBILITY

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

## THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

	ORLANDO SECTION AWA	RD CANDIDATE SE	ARCH FORM
_	Outstanding Engineer Award Outstanding Engineering Educat Outstanding Service Award Outstanding Entrepreneur Award		Please Return Form To: Jorge Medina, Awards Chair. P.O. Box 521917 Longwood, FL 32752-1917
2. NOMINEE:			
	nal Affiliation and Title:		
Current A	ddress:		
			)
	ITATION (30 words or less) FOR:		
	7BOARD RELEVANT TO ACHIEVEME Y:		
	ition and Grade:		
	ddress:		
Work Pho	ne: ( )	Home Phone: (	)
6. ARE YOU WILL	ING TO PREPARE THE NOMINATION	N FORMS YOURSELF? Y	/ES NO
	NDORSERS (two required who are familiar with	h nominee, who can attest to his	
A. Name	B. Name		C. Name
Position/Title	Position/Title		Position/Title
Address	Address		Address
City/ZIP/Phone	City/ZIP/Phone		City/ZIP/Phone
8. BRIEF EVIDEN	CE TO SUPPORT NOMINATION/YEA	R ACHIEVEMENT/IMPOR	RTANCE:
9. SUGGESTED N	NOMINATOR(S) IF DIFFERENT FROM	#5:	

**IEEE Orlando Section** 

385 Commerce Way, Suite 101 P.O. Box 521917 Longwood, Florida 32752-1917

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# IFIP WG 10.3 (Concurrent Systems)

Working Conference on Architectures and Compilation Techniques for Fine and Medium Grain Parallelism

> Hotel Royal Plaza, Orlando, Florida January 20-22, 1993

Please send electronic mail to ifip@usc.edu, to obtain a copy of the conference program and registration form. For further information, please contact Professor Paraskevas Evripidou, Local Arrangements Chairman, at (214) 692-3673.

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#### **EVENTS CALENDAR**

For the latest and/or additional information call the IEEE Orlando Voice Information Center 260-1676, ext. 6 and enter the Voice Mailbox No.

- Nov. 3
   IEEE Orlando Section EXCOM Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465

   Nov. 4
   IEEE COM/VT Kick Off Meeting for 1992-1993 United Telephone, M. Germain, (VM) 253, (O) 1-904-326-1483(H) 678-5599

   Nov. 5
   IEEE LEO Ultra Sprectroscopy from meV to MeV E. Van Stryland
- (VM) 293, (O) 658-6814

  Nov. 5 IEEE PE/IA Power Generators: Independent Power Producers B.
- Nelson, (O) 381-6308

  Nov. 8 IEEE C 1992 IEEE Software Comprehensive Workshop Mary Ann
- DeWald, (908) 562-3878

  Nov. 9-12 IEEE C 1992 IEEE Conference on Software Maintenance Mary Ann
- DeWald, (908) 562-3878

  Nov. 10 IEEE Consultants' Network Entrepreneurial Options Medina Software,
- J. Medina (VM) 323, (O) 260-1676

  Nov. 10 IEEE UFFC Ionizing Space Radiation Effects on Surface Acoustic
- Wave Resonators T.Voor (O) 886-8860

  Nov. 12 IEEE PE/IA Power Generators: Emerging Technologies B. Nelson,
- (O) 381-6308

  Nov. 12 IEEE SP Speech Coding Using Contractive Techniques UCF, Dr. I.
- Abdou (VM) 233. (O) 356-0322

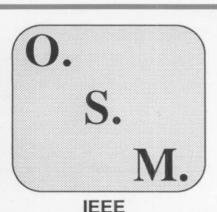
  Dec. 1 IEEE Orlando Section EXCOM Hewlett-Packard, A. Atashroo, (VM) 901,
- (O) 356-6914, (H) 539-0465
- Dec. 6-9 IEEE COM GLOBECOM '92 1992 IEEE Global Telecommunications Conference - D. Sullivan, 660-6861
- Dec. 8 IEEE Consultants' Network TBA Medina Software, Inc., J. Medina (VM) 323, (O) 260-1676

#### 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 200 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready 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 101, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636



# THE ORLANDO SECTION We would be a second of the second of

Serving Lake, Orange, Osceola, Seminole and Sumter Counties

December 1992

# **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.

## ANTENNAS AND PROPAGATION/ MICROWAVE THEORY AND TECHNIQUES

& COMMUNICATIONS/ VEHICULAR TECHNOLOGY

#### Progress and Change in Microwave Radio Communications

Speaker: Dr. Ferdo Ivanek, 1992-1994

MTT-S Distinguished Lecturer

Date: Wednesday, December 9th, 1992

Time: Refreshments at 5:30 PM

Meeting at 6:00 PM

Location: Hewlett-Packard

Contact: Laurie Dunn at 1-407-867-3193 or

leave message at 260-1676, ext. 6,

voice mailbox 223.

#### CONSULTANTS' NETWORK

#### Marketing Strategies

Speaker: Regina Marston, Creative Media

Source

Date: Tuesday, December 8th, 1992

Time: Meeting at 6:00 PM

**Location:** Orlando Public Library, 3rd Floor

Contact: Call Jorge Medina at 260-2676 for reservations or leave message at

260-1676, ext.6, voice mailbox 323

#### **AEROSPACE & ELECTRONIC SYSTEMS**

#### EMFs, Epidemiology, and IEEE Standards

Speaker: Dr. J. Robert Ashley, IEEE

SCC28/3, Tampa, Former Prof. of E.E., U. of Colorado, and Dr. David E. Flinchbaugh, P.E.

Date: Tuesday, November 24th, 1992

Time: 7:00 PM

Refreshments will be served.

Location: Technology Consulting Center,

822 E. Wallace St. (2 blocks south of Oak Ridge Rd., off S. Orange

Ave.)

Contact: Dave Flinchbaugh, 859-4855/859-

7310 or leave message at 260-1676, ext. 6, voice mailbox 213.

### The Single-Stage-to-Orbit Rocket Program

Speaker: Dr. David C. Webb, Director Inter

national Hypersonic Research

Institute

Date: Tuesday, December 15th, 1992

**Time:** 7:00 PM

Refreshments will be served.

Location: Technology Consulting Center

Contact: Dave Flinchbaugh, 859-4855/859-

7310 or leave message at 260-1676, ext. 6, voice mailbox 213.

Region 03 Council 05 Section 51

#### **EXECUTIVE BOARD**

Chairman: Dr. M. Ali Atashroo, Martin Marietta (VM) 901, (O) 356-6914, (H) 539-0465 Vice Chair .: Jacqueline Hines, Sawtek Inc. (VM) 902, (O) 886-8860, (H) 628-1604 Treasurer: Dr. Parveen Wahid, UCF (VM) 904, (O) 823-2610, (H) 677-0571 Secretary: Dave King, Martin Marietta Corp. (VM) 903, (O) 275-2318, (H) 699-4890 Jr. Past Chair.: Jorge Medina, Sigtone, Inc. (O) 628-4828, (H) 260-1676 Sr. Past Chair.: Dr. Madjid Belkerdid, UCF (O) 823-5793, (H) 699-4890

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#### SOCIETY CHAPTER CHAIRMEN

AES: Dr. David Flinchbaugh (VM) 213, (O) 859-7310, (H) 859-4855 AP/MTT: Laurie Dunn, Kennedy Space Center (VM) 223, (O) 1-407-867-3193, (H) 678-9674 C: Dr. Edwin K. Evenson

(VM) 243, (H) 660-6116 COM/VT: Michael C. Germain, United Tel. (VM) 253, (O) 1-904-326-1483, (H) 678-5599 ED/CHMT: Dr. Kalpathy B. Sundaram, UCF (VM) 263, (O) 823-5326, (H) 671-6843 LEO: Eric W. Van Stryland, UCF

(VM) 293, (O) 658-6814

PE/IA: James R. Pipkin, Westinghouse (VM) 273, (O) 281-2916

SP: Dr. Ikram E. Abdou, Martin Marietta Corp (VM) 233, (O) 356-0322, (H) 671-0397 SRC: Dr. Harley Myler, UCF

(VM) 303, (O) 823-5098, (H) 657-4680 UFFC: Thomas E. Voor

(VM) 283, (H) 267-1146

#### WORKING GROUP CHAIRMEN

Consultants' Network: Jorge Medina, Sigtone (VM) 323, (O) 628-4828, (H) 260-1676 Neural Network: Dr. M. Georgiopoulos, UCF (VM) 313, (O) 823-5338, (H) 275-2665

#### UCF STUDENT BRANCH

Advisor: Dr. Mario Sznaier, UCF, (VM) 916

Chairman: Debra Kemnitz, UCF

(VM) 83, (H) 658-4595

SRC: Scott Harrell, (VM) 93, (H) 366-7952

#### IEEE ORLANDO INFORMATION CENTER

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

#### CHAIRMAN'S CORNER

M. Ali Atashroo, Section Chairman

our chapters, working groups, committees, and student branch chairs have arranged excellent 1992-1993 technical, professional, and social events for you. They conducted eleven such activities in October and ten in November with good attendance. You will enjoy and benefit from these planned events. Look-up your favorite events in the "Events Calendar" updated monthly in this Section monthly newsletter, or call up our IEEE Orlando Voice Information Center 260-1676, ext. 6 and enter the respective Voice Mailbox (VM) number for the latest information.

Parveen Wahid. Section Treasurer. completed the IEEE Orlando Section's 1993 budget incorporating the budgets submitted by the chapters, working groups, committees, and student branch chairs. It was approved unanimously in our November 3, 1992 executive committee (EXCOM) meeting.

Jackie Hines, Program chair, is now arranging for our Awards banquet to be held Saturday 27th (second choice 20th) of February 1993. We will announce the date, time and place after our December 1st EX-COM meeting.

Jorge Medina, Awards chair, is looking forward to receiving your responses to his "Search for Stars" published in the November issue of the Section Monthly. You play a key roll in this process. Nominate the individuals in your work-place whom you believe are outstanding.

Jorge Medina, Consultants' Network chair, has produced an informative publication of the IEEE Orlando Section membership directory sorted by different categories. This directory is for exclusive use of IEEE members and is available from Jorge for a nominal reproduction cost. This directory serves as enhancement of networking among local members. Also, Harley Myler, Strategic Planning Committee member and SRC chair, is completing an E-mail service at UCF to further our networking capabilities.

Ed Ellis, GlobeCom '92 (Dec. 6-9) Committee Secretary, has a last call seeking volunteers for GlobeCom '92. I encourage Section members and especially students to contact Ed Ellis at (407) 834-3319(H) to find out about the time, place, and function. Volunteer's benefits are a meal ticket and one day free admission pre or post the volunteering day. Bob Smallwood, Membership chair, would also appreciate volunteers to contact him at (407) 826-9217 (O) for manning the IEEE membership boot at the GlobeCom '92 held at Buena Vista Palace in Walt Disney World Village.

During the National Engineering Week (NEW), February 14-20, 1993 we plan

for an all out effort for "Public Awareness of Engineering Profession" through highlighting engineers' contributions to society. The Strategic Planning Committee has taken the lead to propose concrete alternatives for NEW. On our December 1st EXCOM meeting, we will kick-off the implementation of the selected activities. Finally, David King, Strategic Planning Committee chair, has commenced our long-term investment plan for the Section by investing \$20,000 in the Vanguard no-load short-term U.S. treasury fund.

## **★ STAR SEARCH ★**

Jorge Medina, Awards Chairman

#### Help us identity the Outstanding Electrical Engineers in the Orlando Section!

We are looking for potential candidates for major Section Awards. The Outstanding Engineer Award and the Outstanding Engineering Educator Award will be presented in February, 1993 and the Outstanding Service Award and the Outstanding Entrepreneur Award will be given in June, 1993.

The Orlando Section consists of over 1300 Engineers spread over five counties. We can only get to know who the top performers are with your help. An Orlando Section Award Candidate Search Form can be found on page 3 of the November newsletter. If you are aware of someone who has made significant contributions to the profession in the areas specified in the Qualifications section, and also meets the Eligibility requirements, please take a couple of minutes to fill out the short Search form.

All Search forms received by the Awards Committee will be acknowledge by return mail. In the event a candidate is selected for nomination for a particular awards, a Nomination form must then be filled out for the candidate, as indicated in the Procedure section. .

#### SPEAKERS POOL

Kalpathy B. Sundaram, Education Chairman

The response has been poor for the proposed speakers pool of volunteers to be established to address the local public schools on math, science and engineering. The following members expressed interest in the proposed pool and they are: Mr. Jim Lynes (Walt Disney), Dr. A. Atashroo (Martin Marietta), Dr. M. Harris and Dr. K.B. Sundaram (UCF). Members who are still interested to participate in this volunteer activity are requested to contact Dr. Kalpathy Sundaram, Education Chairman at (407) 823-5326. •

The Ninth IEEE Conference on

# ARTIFICIAL INTELLIGENCE FOR **APPLICATIONS**



Advancing the Application of AI Techniques to Real-World Problems

Disney Yacht & Beach Club Hotel • Orlando, Florida March 1-5, 1993

For eight consecutive years, CAIA, the Conference on Artificial Intelligence for Applications, has provided an international forum for the exchange of ideas, techniques, and experiences in the application of AI to real-world problems.

In continuing this tradition, CAIA '93 will be held at the Disney Yacht and Beach Club Hotel in Orlando, Florida. This year's program will feature tutorials, workshops and invited speakers, and will focus on case studies and advances in AI techniques and on the principles that underlie knowledge-based systems. Additional emphasis will be on new AI paradigms that can or have had an impact on applications of the technology.

An Advance Program describing the CAIA '93 conference is now available from the IEEE Computer Society. Included in the Advance Program is an overview of the various tutorials, workshops and panels planned for this year's conference, as well as information on hotel, travel, and conference registration.

Once primarily the vision of academia and research, Artificial Intelligence and its associated techniques are now helping to solve strategic problems that could not have been solved in the past. CAIA '93 is devoted to advancing the application of AI techniques to real-world problems.

To receive the Advance Program or additional conference information, contact:

CAIA '93 **IEEE Computer Society** 1730 Massachusetts Avenue, N.W. Washington, DC 20036-1903 Phone: (202) 371-1013

Fax: (202) 728-0884

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## **IFIP WG 10.3** (Concurrent Systems)

Working Conference on Architectures and Compilation Techniques for Fine and Medium Grain Parallelism

> Hotel Royal Plaza, Orlando, Florida January 20-22, 1993

Please send electronic mail to ifip@usc.edu, to obtain a copy of the conference program and registration form. For further information, please contact Professor Paraskevas Evripidou, Local Arrangements Chairman, at (214) 692-3673.

#### Call (407) 260-1676 for advertising information

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#### EVENTS CALENDAR

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Nov. 24	IEEE AES - EMFs, Epidemiology, and IEEE Standards - Technology Consulting Center, Dr. D. Flinchbaugh (VM) 213, 859-4855/859-7310
Dec. 1	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Dec. 6-9	IEEE COM - GLOBECOM '92 - 1992 IEEE Global Telecommunications Conference - D, Sullivan, 660-6861
Dec. 8	IEEE Consultants' Network - Marketing Strategies - Orlando Public Library, J. Medina (VM) 323, (O) 260-1676
Dec. 9	IEEE AP/MTT - Progress and Change in Microwave Radio Communica- tions - L. Dunn, (VM) 223, 1-407-867-3193
Dec. 15	IEEE AES - The Single-Stage-to-Orbit Rocket Program - Technology Consulting Center, Dr. D. Flinchbaugh (VM) 213, 859-4855/859-7310
Jan. 5	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Jan. 12	IEEE Consultants' Network - Introduction to Modem Technology - Orlando Public Library, J. Medina (VM) 323, (O) 260-1676
Jan. 20-22	IFIP WG 10.3 - Working Conference on Architectures and Compilation Techniques for Fine and Medium Grain Parallelism - Hotel Royal Plaza, P. Evripidou (214) 692-3673.
Feb. 5	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Feb. 12	IEEE Consultants' Network - TBA - Orlando Public Library, J. Medina (VM) 323, (O) 260-1676
Mar. 1-5	IEEE C - 9th IEEE Conf. on Artificial Intelligence for Applications - D. Waltz, (617) 234-2050

Richard W. Brounley, P.E.

## RF ENGINEERING CONSULTANT

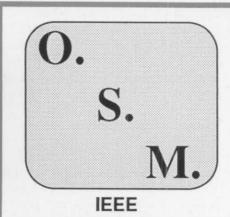
Specializing in the design of solid state RF transmitters and associated circuits \* Complete RF laboratory facilities \* \* Prototype Development \* Pilot production runs \* \* Production follow-up \* 7381 114 Ave. N., Unit 410 Largo, FL 34643

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#### NEED ANY ASSISTANCE?

The Referral Service of the IEEE CONSULTANTS NET-WORK OF ORLANDO has over 30 engineering, technical and managerial consulting professionals available to help you with your particular problem. The Network's ethical code ensures the highest professional standards.



# THE ORLANDO SECTION MONTHLY

Serving Lake, Orange, Osceola, Seminole and Sumter Counties

January 1993

# **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 AND ELECTRO-OPTICS

#### Starting an Optoelectronics Business

Program: The history of EPITAXX - an optoelectronic

devices firm spun off from the RCA David Sarnoff Research Center in 1984 - will be reviewed from start-up to acquisition. Topics covered will include business plans, venture capi tal, key employees, and R&D funding. Mistakes, pitfalls, and successes will all be included. Key issues include the environment of a small vs

large company and product quality. Resources to help start companies and the financial climate for the 1990's will be discussed and a question

and answer period will follow.

Speaker: Dr. Gregory Olsen,

President Sensors Unlimited, Inc.

Date: Thursday, January 14th, 1993

Time: Social hour (refreshments, etc.) 5:30 PM

Technical presentation 6:30 PM

Location: President's Board Room - Administration Build-

ing, UCF

Contact: Eric W. Van Stryland at 658-6814 or leave mes-

sage at 260-1676, ext. 6, Voice Mailbox 293.

# ULTRASONICS, FERROELECTRICS AND FREQUENCY CONTROL

#### High-accuracy Oscillators and Clocks

Speaker: John R. Vig, National Distinguished Lecturer

Date: Wednesday, January 20th, 1993

Time: Dinner at 6:30 PM, Lecture at 7:30 PM.

Individual reservations and deposit required by

January 15, 1993 for those attending dinner.

Location: Radisson Hotel (Lake Ivanhoe)

60 South Ivanhoe Blvd., Orlando

Contact: Jeff Mink at 886-8860 for questions and

reservations or leave message at 260-1676, ext. 6, Voice Mailbox 283.

#### SIGNAL PROCESSING

#### Synthetic Aperture Radar with Applications to Maneuvering Platforms

Speaker: Dr. James Hughen,

Martin Marietta

Date: Thursday, January 14th, 1993

Time: Meeting at 5:30 PM

Refreshments will be served.

Location: UCF Engineering Building

Contact: Dr. Ikram Abdou at 356-0322 or leave mes-

sage at 260-1676, ext. 6, Voice Mailbox 233.

#### SYSTEMS, ROBOTICS AND CONTROLS

#### Adaptive Resonance Theory

Program: Video tutorial by Gail Carpenter, Center for

Adaptive Systems, Boston University

Date: Thursday, January 14th, 1993

Time: 7 P.M.

Location: UCF Engineering Bldg. Room 288, refresh-

ments/comfy chairs/wide-screen TV

Contact: Dr. Harley Myler at 823-5098 or leave

message at 260-1676, ext. 6, Voice Mailbox

303. IEEE members only

#### CONSULTANTS' NETWORK

#### Introduction to Modem Technology

Program: Video Tutorial by Dr. G. David Forney,

Vice President of Codex

Date: Tuesday, January 12th, 1993

Time: Meeting at 6:00 PM

Location: Orlando Public Library, 3rd Floor

Contact: Call Jorge Medina at 628-4828 for reserva-

tions or leave message at 260-1676, ext. 6,

Voice Mailbox 323

Region 03 Council 05 Section 51

#### **EXECUTIVE BOARD**

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(VM) 901, (O) 356-6914, (H) 539-0465
Vice Chair.: Jacqueline Hines, Sawtek Inc.
(VM) 902, (O) 886-8860, (H) 628-1604
Treasurer: Dr. Parveen Wahid, UCF
(VM) 904, (O) 823-2610, (H) 677-0571
Secretary: Dave King, Martin Marietta Corp.
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(O) 628-4828, (H) 260-1676
Sr. Past Chair.: Dr. Madjid Belkerdid, UCF

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LEO: Eric W. Van Stryland, UCF

(VM) 293, (O) 658-6814 PE/IA: James R. Pipkin, Westinghouse (VM) 273, (O) 281-2916

SP: Dr. Ikram E. Abdou, Martin Marietta Corp (VM) 233, (O) 356-0322, (H) 671-0397SRC: Dr. Harley Myler, UCF

(VM) 303, (O) 823-5098, (H) 657-4680 UFFC: Thomas E. Voor

(VM) 283, (H) 267-1146

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Consultants' Network: Jorge Medina, Sigtone (VM) 323, (O) 628-4828, (H) 260-1676 Neural Network: Dr. M. Georgiopoulos, UCF (VM) 313, (O) 823-5338, (H) 275-2665

#### **UCF STUDENT BRANCH**

Advisor: Dr. Mario Sznaier, UCF, (VM) 916

Chairman: Debra Kemnitz, UCF (VM) 83, (H) 658-4595 SRC: Scott Harrell, (VM) 93, (H) 366-7952

IEEE ORLANDO INFORMATION CENTER Voice Mail: (407) 260-1676, Fax: 260-1636



M. Ali Atashroo, Section Chairman

#### CHAIRMAN'S CORNER

peaking for IEEE Orlando Section Officers, I wish to all peace and joy for the holiday season, and a Happy Hanukkah, Christmas, and New Year.

Jorge Medina, Awards Chair, is looking forward to receiving your responses to his "Search for Stars" published in the last two issues of the Section Monthly newsletter. The deadline for receiving your nominees is January 15,1993. Members play a key role in this process. Nominate the individuals in your workplace whom you believe are outstanding as an engineer, educator, promoter of engineering profession, or entrepreneur.

I would like to congratulate Dr. Keith Huddleston and Dr. Wasfy Boushra Mikhael, 1992 Orlando Section Outstanding Engineer and Educator respectively, for their selection as recipient of 1992 Florida Council's Outstanding Engineer and Educator awards.

Jackie Hines, Program Chair, has arranged for our Awards Banquet to be held Saturday evening February 27, 1993. She will announce the time and place in the next issue of this newsletter.

Parveen Wahid, Section Treasurer, is preparing the 1992 final financial report. Dave King, Section Secretary, is also preparing the 1992 meetings report. These reports are due the IEEE Head Quarters by February 1, 1993. Parveen and Dave would appreciate receiving promptly the balance of the 1992 meeting and expense reports from the chapters, committees, and working groups chairs.

Jorge Medina, Consultants' Network Chair, reports that currently there are ten consultants' network with 396 members nationwide. New York has the largest network with over 100 members. Jorge has done an excellent job establishing the Orlando Consultant's Network in 1992 with fifty members.

In December 3, 1992, the Executive Committee kicked off the Orlando Section's National Engineering Week project as proposed by the Strategic Planning Committee. The project consists of an essay contest on the role of engineering in energy and environment conducted among high school students in the Section's five-countyjurisdiction. Harley Myler leads the Strategic Planning Committee members who volunteered to carry out the project. Westinghouse Corporation and IEEE Orlando Section will jointly sponsor the project. Orlando Section welcomes other company sponsors.

Ed Ellis, GlobeCom '92 (Dec. 6-9) Committee Secretary, reports that the conference had projected a registration of 1,200 people of whom 800 were paid registered. IEEE Orlando Section sponsored the Globe-Com '92 conference and will share the conference proceeds.

#### **EMAIL LISTSERVER DATA**

by Harley Myler

An experimental listserver has been established at UCF for Orlando Section IEEE members to broadcast email messages to each other. To subscribe to the server, email a message to:

ieee-osi-request@engr.ucf.edu
The subject of the message must be:

#### LISTSERVER

The body of the message should contain the single word: **subscribe**You will then receive a confirmation message from the server. When you wish to broadcast a message to the group, email it to:

ieee-osi@engr.ucf.edu

If you wish to be removed from the server, send a request message as shown above, with the word: unsubscribe in the message body. For more information please contact Dr. Harley R. Myler at 407-823-5098 or 407-657-4680.

#### IEEE CONSULTANTS NETWORK OF ORLANDO

by Jorge Medina, Chairman

n November 22, 1992 I had the privilege to attend the National Meeting of the IEEE Private Practitioners Task Force (PPTF) in New York and to participate in the review of the 1992 Operation Plan for the activities of the Task Force and the 1993 Annual Plan which will be due early in 1993. The highlights of this meeting are presented here.

In the past year, the number of Networks has grown from five to ten. They are:

Long Island Consultants Network
Philadelphia Consultants Network
New York Consultants Network
Boston Consultants Network
San Diego Consultants Network
Connecticut Consultants Network
DC Consultants Network
North New Jersey Consultants Network
Orange County Consultants Network
Orlando Consultants Network

Several members of the Task Force had attended the National Consultants Conference in Connecticut on Saturday, November 21, 1992, and commended the Connecticut and Boston Sections for the excellent program.

The PPTF has voted to propose changing its name to *The Association of IEEE Consultant Networks (AICN)*.

Irwin Weitman, PPTF Chairman, informed the Task Force that a session had been approved for Electro '93 (4/27-29/93), tentatively titled "Is Consulting Engineering in Your Future?" The Task Force developed titles for four possible papers to be presented:

The Future of Technical Consulting.
The Role of the Local Network.
How to Find a Consultant.
The Benefits of Using Consultants in Large and in Small Organizations.

The Task Force agreed that the booth at Electro '93 should have two

goals: to sign up new members for networks, and to reach potential clients. Representatives from the North New Jersey, New York, Philadelphia, and possibly Boston Networks will staff the booth and materials from the other networks will be distributed. Clients' names (via sign-up sheets) will be distributed to all networks.

The first issue of the PPTF National Newsletter will include:

Summary of this meeting Conference in Connecticut Short piece from each network Section 1706 of the tax code Announcement about Electro '93

Bill Anderson, IEEE Staff, will develop a listing of local networks that can be FAXed to clients, as well as a roster for inclusion in the national database.

The 1993 Task Force goals are:

- Establish local networks by calling interested members to encourage them to organize themselves, with a goal of ten additional networks to be established in 1993.
- 2. Establish a subcommittee to develop guidelines for local networks to use in preparing a means for accessing members' skills, so that these databases can be easily incorporated into a national database for client referral; and also make recommendations for the development (software packages, etc.) of a national database that would include skills listings.
- Lobby actively to eliminate discriminatory provisions (Section 1706) of the Tax Code.
- 4. Develop the recommendations for the future of the Association of IEEE Consultant Networks as mentioned above.

<b>Private Practitioners</b>
Task Force Survey
C

(Responses from non-members of the IEEE are welcome)

Last Name\_\_\_\_

First Name\_\_\_

IEEE#\_

City \_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_

Income derived from consulting: |More the 20% [] 40% [] 60% [] | 80% [] 99% []

Years earning that percentage:

Total number of years consulting:

Will you help organize a network in your area?

Yes [] No []

May we give your name to other consultants so they can contact you?

Yes [] No []
| Should the PPTF publish a periodical?

Yes [] No []
Would you contribute material?

Yes[] No[]

Would you like the PPTF to organize a referral service?

Yes[] No[]

Do you presently belong to any consultants' organizations?

Yes[] No[]

If yes, give the name of the organization:

Consulting Skills:

Mail completed questionnaire to:

IEEE Consultants Network of Orlando
P.O. Box 521917
Longwood, FL 32752-1917

IEEE Orlando Section 385 Commerce Way, Suite 101 P.O. Box 521917 Longwood, Florida 32752-1917 THE ORLANDO

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#### **EVENTS CALENDAR**

For the latest and/or additional information call the IEEE Orlando Voice Information Center 260-1676, ext. 6 and enter the respective Voice Mailbox (VM) number.

MONTHLY

Jan.	5	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (O) 356-6914, (H) 539-0465, (VM) 901
Jan.	12	IEEE Consultants' Network - Introduction to Modem Technology -
vaii.	12	Orlando Public Library, J. Medina, (O) 260-1676, (VM) 323
Jan.	14	IEEE LEO - Starting an Optoelectronics Business - President's Board Room - Admin. Bldg., UCF, E. Van Stryland, (O) 658-6814, (VM) 293
Jan.	14	IEEE SP - Synthetic Aperture Radar with Applications to Maneuvering Platforms - UCF, Eng. Bldg., I. Abdou, (O) 356-0322, (VM) 233
Jan.	14	IEEE SRC - Adaptive Resonance Theory - UCF Engineering Bldg. Room 288, H. Myler (O) 823-5098, (VM) 303
Jan.	20	IEEE UFFC - High-accuracy Oscillators and Clocks - Radisson Hotel, Orlando, J. Mink, (O) 886-8860, (VM) 283
Jan.	20-22	IFIP WG 10.3 - Working Conference on Architectures and Compilation Techniques for Fine and Medium Grain Parallelism - Hotel Royal Plaza, P. Evripidou (214) 692-3673.
Feb.	2	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (O) 356-6914, (H) 539-0465, (VM) 901
Feb.	9	IEEE Consultants' Network - TBA - Orlando Public Library, J. Medina, (O) 260-1676, (VM) 323
Mar.	1-5	IEEE C - 9th IEEE Conf. On Artificial Intelligence for Applications - D. Waltz, (617) 234-2050
Mar.	2	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (O) 356-6914, (H) 539-0465, (VM) 901
Mar.	9	IEEE Consultants' Network - TBA - Orlando Public Library, J. Medina, (O) 260-1676, (VM) 323
Apr.	6	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (O) 356-6914, (H) 539-0465, (VM) 901
Apr.	13	IEEE Consultants' Network - TBA - Orlando Public Library, J. Medina, (O) 260-1676, (VM) 323
May	3	IEEE IA - Industrial & Commercial Power Systems Annual Technical Conference - J. Beall (813) 376-2790
Jun.	1-3	IEEE CHMT - 43rd Electronic Components & Technology Conference - P. Walsh, (202) 457-4932

# 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 200 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	Rate	Discounted Rate (more than one issue)	
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#### NEED ANY ASSISTANCE?

The Referral Service of the IEEE CONSULTANTS NET-WORK OF ORLANDO has over 40 engineering, technical and managerial consulting professionals available to help you with your particular problem. The Network's ethical code ensures the highest professional standards.

Call (407) 260-1676 for information, or write to P.O. BOX 521917, LONGWOOD, FLORIDA 32750 There is no charge for referrals.

Volume XXVI, Number 7

THE **ORLANDO** SECTION MONTE

IEEE

Serving Lake, Orange, Osceola, Seminole and Sumter Counties

February 1993

The Orlando Section of the Institute of Electrical and Electronics Engineers Announces the

# **IEEE Orlando Section Awards Banquet**

Saturday, February 27th, 1993

## Omni Orlando Hotel

Located at the Centroplex in Downtown Orlando Complimentary Valet Parking

# Program

6:00 P.M. Cash Bar - 7:00 P.M. Dinner 7:45 P.M. Presentation of Awards Induction of New IEEE Fellow Chapter Engineer-of-the-Year Awards Student Awards Section Awards Florida Council IEEE Awards

This is an excellent opportunity to meet other members of the Orlando engineering community. For reservations or additional details please contact Jackie Hines at 886-8860, 628-1604 or 823-5507

	Reservation Form
	EE Awards Banquet. My check for* (\$20 each) is enclosed.
	tree: [] Lemon Grouper and Sliced Top Round of Beef
[ ] Sliced Sirloin Steak and Sauteed Ch	icken Stuffed with Florentine Salmon Mousse [] Vegetarian
Mail to: IEEE Awards Banquet	
c/o Jackie Hines	Name:
1741 Edwin Blvd.	
Winter Park, FL 32789	Phone No.:
886-8860, 628-1604 or 823-5507	* No Charge to IEEE Orlando Section Fellows and their spouses.
Reservations must be received r	no later than Tuesday, February 23rd, 1993

Region 03 Council 05 Section 51

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SRC: Scott Harrell, UCF (VM) 93, (H) 366-7952

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M. Ali Atashroo, Section Chairman

#### CHAIRMAN'S CORNER

ackie Hines, program chair, has reserved the Omni Orlando Hotel at Centroplex for our Awards banquet on February 27th, 1993. Come and join Jackie Hines and Jorge Medina, Awards chair, who have put together a delightful evening for us. This year, speaking for Executive Committee, I would like to extend an invitation to the Fellows of IEEE Orlando Section and their spouses to attend the Awards banquet free of charge.

Jorge Medina, Consultants Network chair, reports that Orlando currently has fifty nine consultant members. Jorge who is to head the Region 3 consultants network conducts monthly meetings on second Tuesdays at the Orlando Public Library.

On January 6th, 1993, Harley Myler, Engineering Essay Contest lead, mailed out the Essay Contest announcement, official rules, and the official entry form to the principals of Lake, Orange, Osceola, Seminole, and Sumter Counties High Schools. The essay theme Engineering Energy and Ideas, is open to high school students grades eleven and twelve. The Entries must be received no later than 12 Noon, Friday, February 5th, 1993. Winners and sponsors will be notified the week of February 8th and invited for an awards luncheon Wednesday, February 17th, 1993 of the National Engineering Week. The prizes are \$500, \$250 and \$100 U.S. saving bonds for the first, second, and third places, respectively. IEEE Orlando Section, Westinghouse Corp., and University of Central Florida are sponsoring this essay contest.

Ed Ellis, GlobeCom '92 (Dec. 6-9)

Committee Secretary, reports that the conference was a smashing success with over 1,700 satisfied attendees. I would like to commend Ron Kandell, General Chairman, and the GlobeCom'92 Executive Committee for their outstanding performance. Also, I would like to thank the Section's volunteers and their spouses for their time and efforts.

The IEEE Neural Network Council is holding its World Congress on Computational Intelligence on June 25 - July 4, 1994 at Walt Disney Dolphin Hotel Next to EPCOT. There would be four International Conferences, on Neural Networks, Fuzzy Systems, Evolutionary Systems, and Virtual Reality Technology with attendance estimate over 2,000. Glenn Portz and I attended the Organizing Committee meeting on Saturday, January 9, 1993 and committed the IEEE Orlando Section to help Volunteer Coordination, Local Arrangement, and Social/Technical activities for five percent share of the congress surplus. If you are interested in technical or social involvement with the World Congress please call me (407-356-6914) to obtain a point of contact.

## E-MAIL LISTSERVER DATA

by Harley Myler

An experimental listserver has been established at UCF for Orlando Section IEEE members to broadcast E-MAIL messages to each other. To subscribe to the server, do the following, E-MAIL a message to:

#### ieee-osl-request@engr.ucf.edu

The subject of the message must be:

#### LISTSERVER

The body of the message should contain the single word:

#### subscribe

You will then receive a confirmation message from the server. When you wish to broadcast a message to the group, E-MAIL it to:

#### ieee-osl@engr.ucf.edu

If you wish to be removed from the server, send a request message as shown above, with the word:

#### unsubscribe

in the message body. For more information please contact Dr. Harley R. Myler at 407-823-5098 or 407-657-4680.

# **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 AND ELECTRO-OPTICS

Phase-Shifting Masks for Integrated Circuit Production in the 1990's

Program:

The mass-produced integrated circuit is the most important invention of the late twentieth century. All such devices are manufactured by lithography - a process not too different from conventional photography. However, the minimum dimensions of these circuits is now about a wavelength of light, and shrinking by a factor of 2 every 5 years. Where does semiconductor manufacturing go from here? A lot of money has been spent on non-optical technologies, but none has proved commercially viable. Conventional optical lithography with one innovation - the phase-shifting mask - seems likely to dominate on a five-to-ten year time scale. While invented by the speaker 12 years ago, the phase-shifting mask has been developed almost entirely in Japan, which has a commanding 3 year lead at this time.

Speaker:

Marc D. Levenson, Research Staff Member at the Almaden

Research Center of IBM Corporation.

Date:

Thursday, February 4th, 1993

Time:

Social hour (refreshments, etc.) 5:30 PM

Technical presentation 6:30 PM

Location:

President's Board Room - Administration Building, UCF

Contact:

Eric W. Van Stryland at 658-6814 or leave message at 260-1676, ext. 7, Voice Mailbox 293.

#### JOINT MEETING OF THE IEEE COMPUTER SOCIETY AND THE CENTRAL FLORIDA UNIX USER'S GROUP

The Latest Enhancements to the UNIX Korn Shell (KSH)

Speaker:

Dr. David Korn, AT&T Bell Laboratories

Date:

Thursday, February 18th, 1993

Time:

7::00 PM to 9:00 PM

Location: AT &T Microelectronics Plant,

9333 South John Young Parkway, Orlando

Contact:

Ed Evenson at 660-6116 or via EMAIL to

attmail!ekevenson or eke@eola.cs.ucf.edu or leave message

at 260-1676, ext.7, Voice Mailbox 243.

#### CONSULTANTS' NETWORK

Tax and Accounting Considerations for Independent Consultants

Program: An overview of taxes and accounting methods for selfemployed consultants doing business as sole proprietor-

ships, partnerships, S corporations and C corporations. Speakers: Janice M. Walden, CPA Partner, Walden & Franz, CPAs

Date:

Tuesday, February 9th, 1993

Time:

Meeting at 6:00 PM

Location: Orlando Public Library, 3rd Floor

Contact:

Call Jorge Medina at 628-4828 for reservations or leave

message at 260-1676, ext. 7, Voice Mailbox 323.

#### POWER ENGINEERING/INDUSTRY APPLICATIONS

#### The National Energy Policy Act

Speaker:

W.G. Bentley, Resource Management International

Date:

Wednesday, February 17th, 1993

Time:

Dinner 6:30 PM (estimated cost is \$10 per person),

Technical presentation 7:30 PM

Location:

Cafe on the Park, South Room, Orlando, Harley Hotel (Corner of Washington and Rosalind Streets across

from Lake Eola).

Contact:

Betty at 857-6500 for reservations by 4:00 PM, February 16th. For additional information call Tom Reedy at 857-6500, Jim Pipkin at 281-2916, Bob Nelson at 381-6308 or leave message at 260-1676, ext. 7, Voice Mailbox 273.

#### SIGNAL PROCESSING

Adaptive Techniques: Algorithms and Structures

Speaker:

Mr. Timothy Young, Martin Marietta

Date:

Thursday, February 11th, 1993

Time:

Meeting at 5:30 PM. Refreshments will be served.

Location:

UCF Engineering Building, Room 288

Contact:

Dr. Ikram Abdou at 356-0322 or leave message at

260-1676, ext. 7, Voice Mailbox 233.

#### SYSTEMS, ROBOTICS AND CONTROLS

A Critique of Selmer Bringsjord's "What Robots Can and Can't Be"

Program:

What Robots Can and Can't Be is a self-contained, rigorous, sustained argument for the unique, two-sided posi tion that: 1) Al will continue to produce machines with greater and greater capacity to pass stronger and stronger versions of the Turing Test; but that 2) the Person Building Project (the attempt by cognitive engineers to build a ma chine which is a person) will inevitably fail. The program will consist of a critique of this book and roundtable discus

Date:

Wednesday, February 10th, 1993

Time:

7:00 P.M. UCF Engineering Building, Room 288

Location: Contact:

Dr. Harley R. Myler at 823-5098 or leave message at 260-

1676, ext. 7, Voice Mailboc 303.

#### ULTRASONICS, FERROELECTRICS AND FREQUENCY CONTROL

Acusto-Optic Signal Processing: Devices and Applications

Speaker:

Dr. Dennis Pape

Date:

Wednesday, February 17th, 1993

Time:

Refreshments at 6:00 PM, Lecture at 6:30 PM Location: UCF Engineering Building, Room 407

Contact:

Jeff Mink at 886-8860 for questions or leave message

at 260-1676, ext. 7, Voice Mailbox 283.

The Ninth IEEE Conference on

# ARTIFICIAL INTELLIGENCE FOR APPLICATIONS



Advancing the Application of AI Techniques to Real-World Problems

Disney Yacht & Beach Club Hotel • Orlando, Florida March 1-5, 1993

For eight consecutive years, CAIA, the Conference on Artificial Intelligence for Applications, has provided an international forum for the exchange of ideas, techniques, and experiences in the application of AI to real-world problems.

In continuing this tradition, CAIA '93 will be held at the Disney Yacht and Beach Club Hotel in Orlando, Florida. This year's program will feature tutorials, workshops and invited speakers, and will focus on case studies and advances in AI techniques and on the principles that underlie knowledge-based systems. Additional emphasis will be on new AI paradigms that can or have had an impact on applications of the technology.

An Advance Program describing the CAIA '93 conference is now available from the IEEE Computer Society. Included in the Advance Program is an overview of the various tutorials, workshops and panels planned for this year's conference, as well as information on hotel, travel, and conference registration.

Once primarily the vision of academia and research, Artificial Intelligence and its associated techniques are now helping to solve strategic problems that could not have been solved in the past. CAIA '93 is devoted to advancing the application of AI techniques to real-world problems.

To receive the Advance Program or additional conference information, contact:

CAIA '93
IEEE Computer Society
1730 Massachusetts Avenue, N.W.
Washington, DC 20036-1903
Phone: (202) 371-1013

Fax: (202) 728-0884

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We are looking for an individual with experience in IF and baseband signal processing, network synthesis, noise and spurious analysis, phase lock techniques, modulation and detection. The successful candidate must have extensive practical experience in RF design and construction techniques. BSEE desired, MSEE preferred with at least 10 years of experience.

## Crystal Oscillator Engineer

Responsible for design and testing of VHF/UHF oscillators using SAW technology. Experience in the design, temperature compensation and analysis of crystal oscillator circuits and a working knowledge of VCO and phase locked loop techniques. Manufacturing experience in hybrids a plus. BSEE and at least 3 years of experience desired.

## **Mechanical Engineer**

We are looking for someone with a mechanical engineering background consisting of a working knowledge of material properties (metals and composites), drawings and dimensioning per DoD-100 (and 1000) as well as ANSI Y 14.5, general tooling and fixture design and geometric tolerancing. A proficiency in AUTOCAD release 11 or 12 (at least 2 years of experience) is required. MIL-SPEC knowledge and military avionics design experience helpful. A BS degree or equivalent and at least 5 years of experience is required.

## RF Technician

Requires experience in the test and evaluation of electronic components and the ability to utilize RF equipment including oscilloscopes and network analyzers. An AS degree and at least two years of related experience also required. Familiarity with Smith Charts and impedance matching a definite plus.

### Electro-Mechanical Technician

Requires familiarity with thermal testing of electronic devices per MIL-SPECS. Other essential skills include the ability to solder and perform electrical wiring, read schematics and conduct basic troubleshooting on electrical circuits. Must also have the ability use DVM and oscilloscopes. An AS degree (or advanced schooling) and at least two years of experience required.

SAWTEK can offer you exciting professional challenges, career growth potential and an excellent salary/benefits package. Qualified individuals should forward a resume with salary history for immediate, confidential consideration to: Sawtek, Inc., Human Relations Manager, P.O. Box 609501, Orlando, FL 32860-9501. Phone (407) 886-8860.



#### WELCOME!

#### New Members in the Section

The Orlando Section would like to welcome the followoing members who have joined the IEEE since September 1992.

> PETER B ATWAL C J ARSERIO LISA A BALLARD ROBERT J SORENSEN PETER BAUMGARTNER CHRIS DEFOREST PAUL H DOVER DOVER PAUL JOHN TORIEL SYED M HASSAN ROBERT ROSS **ERIC KOSCHMANN** KIMBERLY S MCLAUGHLIN KEVIN L MCLAUGHLIN CHARLES I PERKINSON FRED PIERING DONALD R SCHMALTZ RICHARD P SCHAFER ЛL K TOLIA **BRIAN WILKES** MELANIE ELLIOTT WILBUR L ARMSTRONG PE SYLVIO T PHANEUF CIANCI ROBERT MARIAM MOHSENIN KIRK R CARTER RICHARD S HARRELL KALEVI JARVINEN JULIE P LEBLANC **DAVID W NORMAN** ANH-TUYET T PHAM MARC E SAWYER

#### Members on the Move

The Orlando Section would like to welcome a number of IEEE members who have decided to find out why Central Florida is such a nice place to live. We hope you enjoy living and practicing your profession here. The Orlando Section invites you to participate in the activities of the Section.

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Feb.	2	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Feb.	4	IEEE LEO - Phase-Shifting Masks for Integrated Circuit Production in the 1990's - UCF, Admin. Bldg., E. Van Stryland, (VM) 293, (O) 658-6814
Feb.	9	IEEE CN - Tax & Accounting Considerations For Independent Consultants - Orlando Pub. Lib., J. Medina, (VM) 323, (O) 628-4828
Feb.	10	IEEE SRC - A Critique of Selmer Bringsjord's "What Robots Can and Cant't Be" - UCF Eng. Bldg., Room 288, H. Myler, (VM) 303, (O) 823-5098
Feb.	11	IEEE SP - Adaptive Techniques: Algorithms and Structures - UCF, Eng. Bldg., Room 288, I. Abdou, (VM) 233, (O) 356-0322
Feb.	17	IEEE Orlando Section - National Engineering Week - Essay Contest Awards Luncheon - H. Myler, (VM) 303, (O) 823-5098
Feb.	17	IEEE UFFC - Acusto-Optic Signal Processing: Devices and Applica tions - UCF Eng. Bldg., Room 407, J. Mink, (VM) 283, (O) 886-8860
Feb.	17	IEEE PE/IA - The National Energy Policy Act - Cafe on the Park, Harley Hotel, Orlando, J. Mink, (VM) 283, (O) 886-8860
Feb.	27	IEEE Orlando Section - Awards Banquet - Omni Orlando Hotel, J. Hines, (VM) 902, (O) 886-8860
Mar.	1-5	IEEE C - 9th IEEE Conf. On Artificial Intelligence for Applications - Disney Yatch & Beach Club Hotel, Orlando, (202) 371-1013
Mar.	2	IEEE Orlando Section - <b>EXCOM</b> - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Mar.	9	IEEE CN - Help Your Family Have a Better Financial Future! - Orlando Public Library, J. Medina, (VM) 323, (O) 628-4828
Apr.	6	IEEE Orlando Section - <b>EXCOM</b> - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Apr.	13	IEEE CN - University Commerce Connection - Orlando Public Library, J. Medina, (VM) 323, (O) 628-4828
May	3	IEEE IA - Industrial & Commercial Power Systems Annual Technical Conference - J. Beall (813) 376-2790
Jun.	1-4	IEEE CHMT - 43rd Electronic Components & Technology Conference -

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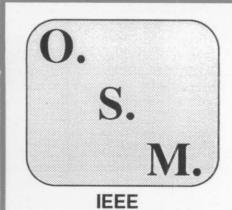
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# THE ORLANDO SECTION MONTHLY

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March 1993

# **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.

#### ANTENNAS AND PROPAGATION/ MICROWAVE THEORY AND TECHNIQUES

#### Radiometric Imaging Systems and Applications

Speaker: MTT-S Distinguished Lecturer

Professor Paul F. Goldsmith, Cornell University

Date: Wednesday, March 24th, 1993

Time: 5:30 PM Refreshments, 6:00 PM Meeting

Location: Hewlett Packard, 6177 Lake Ellenor Drive, Orlando

Contact: Laurie Dunn (1-407-867-3193), Bob Smallwood (826-

9217) or leave message at 260-1676, ext. 7, Voice

Mailbox 223.

#### ELECTRON DEVICES/ COMPONENTS, HYBRIDS AND MANUFACTURING TECHNOLOGY

#### Device Modelling of Heterojunction Bipolar Transistors

Speaker: Dr. J. Liov, University of Central Florida

Date: Tuesday, March 30th, 1993

Time: 6:30 PM

Location: UCF Engineering Building Room 407

Contact: Dr. K. B. Sundaram 823-5326, or leave message at 260-

1676, ext. 7, Voice Mailbox 263

#### SIGNAL PROCESSING

# Discussion of the Book "Computer Imaging Recipes in C"

Speaker: Dr. Harley Myler, UCF
Date: Thursday, March 11th, 1993

Time: Meeting at 5:30 PM. Refreshments will be served.

Location: UCF Engineering Building Room 288

Contact: Dr. Ikram Abdou at 356-0322 or leave message at 260-

1676, ext. 7, Voice Mailbox 233.

#### POWER ENGINEERING/ INDUSTRY APPLICATIONS SOCIETY

#### Transmission EMF in Florida

Speaker: Mr. Hamilton Oven

Florida Department of Environmental Regulation

Date: Tuesday, March 16th, 1993

Time: 7:00 to 8:30 PM Technical Presentation

(No dinner scheduled)

Location: OUC Pershing St. Training & Meeting Room

(Pershing St. between Semoran (436) and Goldenrod in SE

Orlando)

Contacts: Neil Crandell (356-0322), Jim Pipkin (281-2916), Bob

Nelson (381-6308) or leave message at 260-1676, ext. 7,

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outlay

Speaker: Marjorie H. Bond, Regional Vice President of

Primerica Financial Services Tuesday, March 9th, 1993

Date: Tuesday, March 9th, 19 Time: Meeting at 6:00 PM

Location: Orlando Public Library, 3rd Floor

Contact: Call Jorge Medina at 628-4828 for reservations or leave

message at 260-1676, ext. 7, Voice Mailbox 323.

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M. Ali Atashroo, Section Chairman

#### **CHAIRMAN'S CORNER**

he Engineering Essay Contest steering committee, Dr. Harley Myler, Dr. Kalpathy Sundaram, and David King received entries from Cypress Creek, Evans, Jones, Oakridge, and Oviedo high schools by February 5th, 1993. At the time of this writing, the entries were being judged by a panel of engineers and educators who will report on the outcome in the next issue of The Orlando Section Monthly. The Essay Contest announcement, official rules, and the official entry form were mailed to the principals of Lake, Orange, Osceola, Seminole, and Sumter County High Schools. The Essay Contest was also publicized through announcements in the Orlando Sentinel newspaper, closed-circuit TV at Martin Marietta, Westinghouse, UCF, and Orange County high schools superintendent's Office. The essay theme that was Engineering Energy and Ideas was open to high school students grades eleven and twelve. Winners and sponsors would be notified the week of February 8th and invited to an awards luncheon Wednesday, February 17th, 1993 during National Engineering Week. The prizes were \$500, \$250 and \$100 U.S. saving bonds for the first, second, and third places, respectively. The IEEE Orlando Section, Westinghouse Corp., and University of Central Florida sponsored this essay contest.

According to our bylaws, it is that time of the year to start the election process of new officers (7/1/93-6/30/94) for the IEEE Executive Board who will be installed in our annual Installation Banquet in June, 1993. Section 061, page 13 states The [executive] board shall consist of the four (4) elected officers and the duly elected Group/Society Chapters representative. The four elective offices of the Sections are: Chair, Vice Chair,

Secretary, and Treasurer. Per our bylaws, I am appointing, Ed Ellis, Jorge Medina, Glenn Portz, and Bob Smallwood to Nomination Committee to present its slate of nominees by our next Executive Committee meeting. Furthermore, Section 043, Page 9 of our bylaws states The Section membership may make additional nomination by submitting qualified petitions. A qualified petition shall meet the following conditions: a) Specify the office, b) Bear the signature of at least 15 voting Section members, c) Contain statement of nominee's consent to serve, d) State nominee's qualifications and biography, e) Be delivered to the Section Chairman on or before 1 April, [1993]. In April's Executive Committee meeting, I will appoint an Election Committee to carry out the election process.

Please note the distinction between the Executive Board elected officers and the Executive Committee members which are listed correctly in this Orlando Section Monthly reflecting our bylaws. Section 050, Page 11 states that the Executive Committee, the Section's governing body, shall include the Executive Board, Chairmen of each Society chapter, Chairmen of Standing committees, and the two most recent pas chairmen of the Section who are willing and able to serve on the Executive Committee.

The IEEE Neural Network Council is holding its World Congress on Computational Intelligence on June 25 - July 4, 1994 at Walt Disney Dolphin Hotel next to EPCOT. There will be four International Conferences on Neural Networks, Fuzzy Systems, Evolutionary Systems, and Virtual Reality Technology with an attendance estimate of over 2,000. Dr. Charles J. Robinson is the general chairman of the World Congress. For technical or social involvement with the World Congress contact the IEEE Orlando Section's team of volunteers Dr. Ratan Guha (Operation Director, 823-2311), Dr. Edwin Evenson (Local Arrangement, 660-6116), Dr. Michael Georgiopoulos (Technical Activities, 823-5338), Dr. Harley Myler (Technical Activities, 823-5098), and Glenn Portz (Volunteer Coordinator, 644-2408).



## **Drawings and Doorprizes** including one SPARClassic to be given away each day of the show!

### **Keynote Speakers**

James Stikeleather **Director of Systems Development** Kash n' Karry Foodstores Rightsizing Case Study: A real-world example The benefits of client server computing and proper planning for IS departments.

#### Gary R. Ware, Col. USAF, Ret.

From his experience as Senior Analyst on Gen. Norman Swartzkopf's staff, Col. Ware will speak on the computer analysis and wargaming support used to great success during Desert Shield and Desert Storm.

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		(VM) 901, (O) 356-6914, (H) 539-0465
Mar.	4-5	The Shorewood Group - Sun Business Technology Showcase - Orlando
		Twin Towers Resort and Convention Center, Orlando, 407-422-6912
Mar.	9	IEEE Consultants' Network - Help Your Family Have a Better Financial
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wa.		IEEE SP - Discussion of the Book "Computer Imaging Recipes in C" -
	40	UCF, Dr. I. Abdou, (VM) 233, (O) 356-0322
Mar.	16	IEEE PE/IA - Transmission EMF in Florida -OUC, J. Pipkin, (VM) 273, (O) 281-2916
Mar.	24	IEEE AP/MTT - Radiometric Imaging Systems and Applications -
		Hewlett-Packard, L. Dunn, (VM) 223, (O) 1-407-867-3193
Mar.	30	IEEE ED/CHMT - Device Modelling of Heterojunction Bipolar Transis-
		tors - UCF, Dr. K. Sundaram, (VM) 263, (O) 823-5326
Apr.	6	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo,
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Apr.	13	IEEE Consultants' Network - University Commerce Connection - Orlando
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May	2	IEEE IA - Industrial & Commercial Power Systems Annual Technical
may		
Marr		Conference - J. Beall (813) 376-2790
May	4	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo,
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May	11	IEEE Consultants' Network - TBA - Orlando Public Library, J. Medina, (VM)
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Jun.	1	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo,
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Jun.	1-3	IEEE CHMT - 43rd Electronic Components & Technology Conference -
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Volume XXVI, Number 9

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#### IEEE Orlando Section 1993 Awards Banquet

Jorge Medina, Awards Chairman

The 1993 Awards Banquet was held on February 27th at the Omni Orlando Hotel and attended by 60 people. We gave seven Chapter Engineer-of-the-Year awards, four student awards, two important Section awards. In addition, we were pleased to have Mr. F.W. (Skip) Blum from the Florida Council of IEEE to present two Outstanding FCIEEE awards to Orlando Section members, who were selected from all of the Sections in the State of Florida. To end the evening, we recognized the newest IEEE Fellow in the Orlando Section, Dr. Donald Malocha.

Chapter Engineer-of-the-Year Awards
The Chapter Engineer-of-the-Year awards, are
designed to recognize members of the Orlando
Section who, through their technical and professional abilities, have made outstanding contributions to their profession. Evaluation criteria include: importance of technical contribution, output of patents, proprietary designs, papers, and
technical presentations, service to the IEEE, and
service to the engineering profession.

Nominations for the Engineer-of-the-Year awards came primarily from the 12 chapters in the Orlando Section. Because of this, each Chapter Chairman was asked to make the award for his chapter. The Chapter Engineer-of-the-Year awards were as follows:

AP/MTT	Jeff Rollman
COM/VT	Anthony E. Thakur
	Dr. Patrick Li-Kam-Wa
PE/IA	Edward I. King, Jr.
	Timothy Young
SRC	Dr. Michael G. Haralambous
UFFC	Dr. Rodolfo C. Almar

#### **Student Awards**

Each year the Orlando Section presents an award to the Outstanding Senior Student in Electrical Engineering, and the Outstanding Graduate Student in Electrical Engineering.

This year's winners were presented with a certificate and a \$100 check from the Orlando Section.

Dr. Mario Sznaier presented the Outstanding Student Awards in Electrical Engineering, and



Student Award Recipients: Ronald Rabbat (left), Debra Kemnitz, Steve Dick and Scott Harrell (pot shown)

**Dr. Ali Atashroo** presented the Outstanding Student Awards in the SRC Chapter. They were the following:

Outstanding Senior Student in EE Debra Ann Kemnitz

Outstanding Graduate Student in EE Ronald Rabbat

Outstanding Junior Student in SRC Chapter Steven Dick

Outstanding Senior Student in SRC Chapter Scott Harrell

**Outstanding Orlando Section Awards** 

Again this year, there were many excellent and well qualified nominations for the two Section Awards. The Orlando Section Outstanding Engineering Educator award is designed to recognize Orlando Section members who, through their academic contributions, have enhanced the engineering profession. This year's winner is Dr. J.S. (Peter) Yuan, assistant professor of Electrical Engineering at University of Central Florida.



Section Awards: Outstanding Engineer, Dr. Marion J. Soileau, Jr. (left), and Outstanding Engineering Educator, Dr. J.S. (Peter) Yuan.

The Orlando Section Outstanding Engineer award is designed to recognize Orlando Section members who through their technical and professional abilities have made outstanding contributions to their profession. This year's winner is **Dr. Marlon J. Solleau, Jr.**, Director and Professor of Electrical Engineering and Physics at CREOL (Center for Research in Electro Optics and Lasers) at the University of Central Florida.

#### **IEEE Florida Council Awards**

Each year the Florida Council of the IEEE makes awards for Outstanding Engineer, Outstanding Engineering Educator, and Outstanding Service. The Orlando Section nominates the Section award winners from last year for the FCIEEE awards and also for the Region 3 awards of the same names.



FCIEEE Outstanding Engineer, Dr. Keith Huddleston (left), and FCIEEE Outstanding Engineering Educator, Dr. Wasty Mikhael
This year the nominees from Orlando won two of the three FCIEEE awards. Mr. Skip Blum, Vice Chairman of the FCIEEE, presented these awards:

FCIEEE Outstanding Engineering Educator
Dr. Wasfy Mikhael

FCIEEE Outstanding Engineer Dr. Keith Huddleston

Special thanks goes to Dave King, who provided photographic coverage throughout the ceremonies. And special thanks to the Section's Programs Chairperson, Jackie Hines, for making all the arrangements. The Section thanks the nominees, Chapter Chairpersons, and members of the Awards Committee for all the help they provided in supporting the 1993 IEEE Orlando Section Awards nominations.

Region 03 Council 05 Section 51

#### **EXECUTIVE BOARD**

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SP: Dr. Ikram E. Abdou, Martin Marietta Corp (VM) 233, (O) 356-0322, (H) 671-0397 SRC: Dr. Harley Myler, UCF

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(VM) 910, (O) 823-5793, (H) 699-4890

Membership: Bob Smallwood, Hewlett-Packard
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PACE: Glenn Portz, (VM) 912, (H) 644-2408

PACE: Glenn Portz, (VM) 912, (H) 644-2408 Programs: Jacqueline Hines, Sawtek Inc. (VM) 913, (O) 886-8860, (H) 628-1604

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M. Ali Atashroo, Section Chairman

#### **CHAIRMAN'S CORNER**

he Engineering Essay Contest awardees, Kelly Davis (Oak Ridge H.S., 1st Place \$500), Zachary Schawb (Oviedo H.S., 2nd Place \$250), Stephen Gene Brannan (Cypress Creek H.S., 3rd Place \$100), Kimberly Doud (Evans H.S., 4th place), Francoeur Cadet (Jones H.S., 5th place), and Zakiyyah Karim (Jones H.S., 6th place) received their plaques, US bonds, and the prize package at the luncheon held in their honor on February 17th, 1993. Dr. Harley Myler introduced the speakers, Dr. Gary Whitehouse, Dean of UCF College of Engineering, Mr. Dominic Bartol, General Manager of Westinghouse Electric Co. Engineering and Dr. Ali Atashroo who addressed the students, their parents and school sponsors. With the help of Dr. Kalpathy Sundaram, Dr. Ali Atashroo presented the awards. The luncheon meeting was concluded with a group photograph.

Jorge Medina, awards chair and master of ceremony, conducted an excellent awards banquet held on February 27th, 1993 at the Omni Orlando hotel. David King, Secretary, was our photographer, and Shahla Atashroo and I greeted our sixty attendees. This year we were honored to have the IEEE Orlando Section Fellows and their escorts as our guests at the banquet. Congratulations to our new 1992 Fellow member Dr. Donald Malocha. Also congratulations to Dr. Keith Huddleston, and Dr. Wasfy Mikhael who received the Florida Council Outstanding Engineer and Outstanding Engineering Educator awards, respectively. Mr. Skip Blum, Florida Council Vice Chair, presented the awards.

Appropriately, Jorge Medina printed on the banquet program the message

from the President of the United States, Bill Clinton who addressed Engineers for National Engineers Week (February 14-20, 1993). His message, is presented here:

Engineers have always been major contributors to our nation's prosperity and quality of life. Now, as our country embarks in a new direction, engineers will be key players in finding solutions to many of our challenges ahead. From environmental cleanup to international competitiveness, from rebuilding our infrastructure to assuring a reliable energy supply, it is engineers who'll be called upon for the creativity to move our country ahead.

It is fitting that you mark your annual observance with visits to our nation's classrooms to inspire the leaders and workers of tomorrow with the wonders and opportunities of technology. A technically literate workforce is essential to our future success.

I am pleased to join all Americans in saluting our nation's engineers during National Engineers Week. I look forward to the opportunity to work with you to ensure a bright future for our nation.

The Nomination Committee has nominated the new officers Jackie Hines (Chair), Dr. Parveen Wahid (Vice Chair), David King (Treasurer), and Jeff Rollman (Secretary) for 7/1/93-6/30/94. Section 042, Page 9 of our bylaws states, the Section membership may make additional nomination by submitting qualified petitions. A qualified petition shall meet the following: a) Specify the office, b) Bear the signature of at least 15 voting Section members, c) Contain statement of the nominee's consent to serve, d) State nominee's qualification and biography, e) Be delivered to the Section chairman on or before 1 April, [1993]. In our March 2nd, 1993 Executive Committee meeting, I appointed Ed Ellis, Jorge Medina, Glenn Portz, and Bob Smallwood to the Election Committee to carry out the election process.

Attend this year enlightening Florida State Science and Engineering fair, on April 14-16 at Orlando Central Fair Grounds on Route 50. The Florida counties Science Fair winners will compete in the state Science Fair in the two 6-8 and 9-12 grades categories. Karl Lohman, Florida Council awards chair and Orlando Section member, and David King, Section Secretary, will be on the judging panel.

## MEETING ANNOUNCEMENTS

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

#### ANTENNAS AND PROPAGATION/ MICROWAVE THEORY AND TECHNIQUES

#### Fundamentals of Antenna Design

Speaker: Mr. Gene Augustin,

President Technical Systems Associates, Inc.

Date: Thursday, April 22nd, 1993

Time: 5:30 PM - Refreshments, 6:00 PM - Meeting Location: Hewlett Packard, 6177 Lake Ellenor Drive

Contact: Laurie Dunn 1-407-867-3193 (W)/678-9674(H), Bob

Smallwood 826-9217 or leave message at 260-1676,

ext. 7, Voice Mailbox 223.

#### CONSULTANTS' NETWORK

The University/Commerce Connection (UCC)

Speaker: Mr. Bruce M. Furino, Grants Development Manager,

Division of Sponsored Research, UCF.

Program: Given the potential for growth and direct benefit to our

local economy, it is most important for the University of Central Florida's (UCF) Division of Sponsored Research (DSR) to establish and sustain a continuing rapport with existing and new businesses. With the Clinton administration's proposed support for "Technology and Business Reinvestment, and Defense

Conversion", there is opportunity for new development. UCC is an excellent communications and information

dissemination toll for accomplishing this goal.

Date: Tuesday, April 13th, 1993 Time: Meeting at 6:00 PM

Location: Orlando Public Library, 3rd Floor, Magnolia Room Contact: Call Jorge Medina at 628-4828 for reservations or

leave message at 260-1676, ext. 7, VM 323.

#### SIGNAL PROCESSING

#### Theory and Application of Vector Quantization

Speaker: Mr. Al Berg, MMC

Date: Thursday, April 22nd, 1993

Time: Meeting at 5:30 PM. Refreshments will be served.

Election of new officers will be held.

Location: UCF Engineering Building, Room 228

Contact: Dr. Ikram Abdou at 356-0322 or leave message at

260-1676, ext. 7, Voice Mailbox 233.

#### SYSTEMS/ROBOTICS/CONTROL

#### General Meeting and Election of Officers

Date: Wednesday, April 21st, 1993

Time: Meeting 5:00 PM. (Root) Beer and Pizza will be

served!

Location: Intelligent Systems Lab, Room 274,

UCF College of Engineering

Contact: Dr. Harley Myler at 823-5098 or leave message at

260-1676, ext. 7, Voice Mailbox 303.

## **EMPLOYMENT ASSISTANCE**

Employment assistance continues to be emphasized by the PACE Committee. Unemployed members are urged to contact Glenn Portz, Orlando Section PACE Committee Chairman, at 644-2408 for more information. Also, the PACE committee has a library of information on:

- 1. Career Development
  - A. Avoiding Obsolescence
  - B. Skills Assessment
  - C. Transition to Management
  - D. Retirement Planning
- 2. Employment Issues
  - A. Hiring and Termination Practices
  - B. Discrimination, Age or Other
  - C. Legal Resources
- 3. Legislative Agenda
  - A. Pensions
  - B. Technology Positions
  - C. Congressional Fellows
- 4. Pre-college Education
  - A. Engineer's Week
  - B. Science Fairs
  - C. Student Conferences, e.g., S-PAC's
- 5. Intellectual Property Rights
  - A. Patents
  - B. Software

Contact Glenn Portz at 644-2408 or leave message at 260-1676. ext. 7, Voice Mailbox 912, for further details.

# IEEE ENGINEERING ENERGY AND IDEAS ESSAY CONTEST



Contest winners and dignitaries at the IEEE Engineering Energy and Ideas Essay Contest awards luncheon held at the UCF Holiday Inn during Engineers Week, 1993. From left to right: Dr. Gary Whitehouse, Dean, UCF College of Engineering; Francoeur Cadet, Jones H.S., 5th Place; Stephen Brannan, Cypress Creek H.S., 3rd Place; Kimberly Doud, Evans H.S., 4th Place; Zachary Schwab, Oviedo H.S., 2nd Place; Kelly Davis, Oak Ridge H.S., 1st Place; Dr. Ali Atashroo, IEEE Orlando Section Chairman; Mr. Nick Bartol, Westinghouse General Manager of Engineering.

IEEE Orlando Section P.O. Box 521917 385 Commerce Way, Suite 101 Longwood, Florida 32752-1917

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# **EVENTS CALENDAR**

For the latest and/or additional information call the IEEE Orlando Voice Information Center 260-1676, ext. 7 and enter the respective Voice Mailbox (VM) number.

Apr.	6	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Apr.	13	IEEE Consultants' Network - University Commerce Connection - Orlando Public Library, J. Medina, (VM) 323, (O) 260-1676
Apr.	22	IEEE SP - Theory and Applications of Vector Quantization - UCF, Dr. I. Abdou, (VM) 233, (O) 356-0322
Apr.	22	IEEE AP/MTT - Fundamentals of Antenna Design - Hewlett-Packard, L. Dunn, (VM) 223, (O) 1-407-867-3193
May	3	IEEE IA - Industrial & Commercial Power Systems Annual Technical Conference - J. Beall (813) 376-2790
May	4	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
May	11	IEEE Consultants' Network - Entering Private Practice (Open Discussion Panel) - Orlando Public Library, J. Medina, (VM) 323, (O) 260-1676
Jun.	1	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Jun.	TBA	IEEE Orlando Section - Installation Banquet - J. Hines, (VM) 902, (O) 886-8860, (H) 628-1604
Jun.	1-3	IEEE CHMT - 43rd Electronic Components & Technology Conference - P. Walsh, (202) 457-4932
Jun.	8	IEEE Consultants' Network - Video Technical Tutorial Seminar on Neural Networks: Algorithms and Microhardware - Orlando Public Library, J. Medina, (VM) 323, (O) 260-1676
Jun.	16 -17	IEEE National Telesystems Conference - Telesystems In Transition: Commercial Applications and Dual-Use Technology - World Congress Center, Atlanta, Georgia, E. Barnhart, (404) 894-8248
May	15-19, '95	IEEE MTT - 1995 IEEE/MTT-S International Microwave Symposium - K. Huddleston, (O) 356-7201, 339-0336

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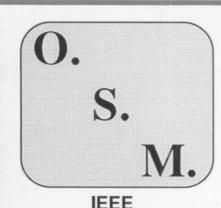
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Call (407) 260-1676 for information, or write to P.O. BOX 521917, LONGWOOD, FLORIDA 32750 There is no charge for referrals.



# THE ORLANDO SECTION MONTHLY

The Newsletter of the Orlando Section of the IEEE

May 1993

# **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.

AEROSPACE AND ELECTRONIC
SYSTEMS SOCIETY
JOINTLY WITH THE
POWER ENGINEERING/INDUSTRY
APPLICATIONS SOCIETY

"Florida's MAG PLANE High-Speed Transportation System"

Speaker: Dr. W. David Carrier, III

Bromwell & Carrier, Inc.

Date: Wednesday, May 19th, 1993
Time: Dinner at 6:00 PM (from menu)

Meeting at 7:00 - 8:30 PM

Location: Morrison's Cafeteria (East Colonial Drive - Hwy 50- near Colonial Plaza on the south side between Bumby and Fern Creek)

Contact: D. Flinchbaugh at 859-4855 (H), 859-7310 ext. 34 (W), Bob Nelson at 381-6308 or 260-1676, option 7 Voice Mailbox 213.

#### CONSULTANTS' NETWORK

Starting and Running Your Own Consulting Business

**Program:** It will focus on the steps necessary for entering private practice including: Reference materials, seminars, sources of start-up information; separation issues associated with your current employer; fees, contracts and collections; developing a clientele; software and other business support tools.

Date: Tuesday, May 11th, 1993
Time: Meeting at 6:00 PM
Location: Orlando Public Library,
3rd. Floor, Magnolia Room

Contact: Please make your reservations by leaving message for Jorge Medina at 260-1676, option 7, Voice Mailbox 323.

#### COMMUNICATIONS/ VEHICULAR TECHNOLOGY

Network Engineering: LAN, MAN, WAN A Video -Conference between Apopka, Winter Park and Kansas City

Speaker: Sprint Representative for

Picture-Tel

Program: Hold general election of chapter officers. Overview the Picture-Tel functions (15 minutes). Network Engineering (30 to 45 minutes). Questions and answers.

Date: Friday, May 14th, 1993
Time: 3:00 PM to 5:00 PM

Location: United Telephone building in Apopka, near the intersection of SR436 and Wekiva Springs Road and adjacent to the Albertson's Shopping Center. Look for United Telephone sign and proceed to parking lot and use unmarked parking spaces. Go by the flagpole and through front glass doors. Go immediately to receptionist on your left, in glass enclosure, to sign in and gain access to Room 3G.

Contact: Please make your reservations by calling the Voice Mail at 260-1676, option 7, VM 253 or M. Germain at 678-5599.

#### ANTENNAS AND PROPAGATION/ MICROWAVE THEORY & TECHNIQUE

Frequency Selective Surfaces

Speaker: Dr. Christos Christodoulou, UCF Date: Thursday, May 27th, 1993

Time: Refreshments at 5:30 PM Meeting at 6:00 PM

Location: Hewlett Packard,

6177 Lake Ellenor Dr., Orlando

Contact: L. Dunn at 1-407-867-3193 or Bob Smallwood at 826-9217 or leave message at 260-1676 option 7, Voice Mailbox 223.

#### POWER ENGINEERING/ INDUSTRY APPLICATIONS

Fuel Cell Technology Update

Speaker: JoAnn Linder of Westinghouse

**Emerging Technologies** 

Program: Fuel cells produce DC electricity by direct chemical conversion of common fuels. Recent advances in DC-to-AC conversion make fuel cells cost effective and practical for bulk power applications. Ms. Linder will discuss fuel cell technology and likely future developments with particular emphasis on solid oxide fuel cells.

Date: Wednesday, May 19th, 1993
Time: Dinner at 6:30 PM, Presentation at 7:30 PM. (Note: There will be an officer's meeting after the presentation)

Location: Lombardi's Restaurant at Olympia Place (800 N. Magnolia Avenue, First Union Bank Building) in Orlando.

Contact: Please make your reservations with Neil Crandell at 422-4911, Jim Pipkin at 281-2916 or Bob Nelson at 381-6308.

# SYSTEMS/ROBOTICS/CONTROL JOINTLY WITH THE NEURAL NETWORK WORKING GROUP

Learning, Recognition and Prediction by Self-Organizing Neural Networks

Program: Video tutorial by Stephen Grossberg, Center for Adaptive Systems, Boston University

Date: Thursday, May 27th, 1993

Time: 6:00 PM

Location: UCF, Eng. Bldg., Room 288, pizza, refreshments, wide-screen TV.

Contact: Dr. M. Georgiopoulos at 823-5338, Dr. H. Myler at 823-5098 or leave message at 260-1676, option 7 Voice Mailbox 303. IEEE members ONLY.

Region 03 Council 05 Section 51

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Sr. Past Chair.: Dr. Madjid Belkerdid, UCF

Advisor: Dr. Mario Sznaier, UCF, (VM) 916, (H) 366-5694 Chairman: Debra Kemnitz, UCF (VM) 83, (H) 658-4595 SRC: Scott Harrell, UCF (VM) 93, (H) 366-7952

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#### CHAIRMAN'S CORNER

M. Ali Atashroo, Section Chairman

he Nominating Committee has nominated the final new officers: Hines(Chair), Dr. Parveen Wahid (Vice Chair), David King (Treasurer), and Dr. Kalpathy Sundaram (Secretary) for the term 7/1/93 - 6/30/94 election. Each nominee has agreed to serve his/her office if elected. Since there was not more than one nominee for each office from the Nomination committee or the Section membership, Section 045, Page 5 of our bylaws states "In the event there is only one nominee in each office, the chairman of the Election Committee will cast the unanimous vote for the slate of the officers on behalf of the Orlando Section members without need for published ballot. To abide by our bylaws, I updated the Election Committee appointments to Dr. Harley Myler, Laurie Dunn, and Thomas Voor. In our May 4, 1993 Executive Committee meeting, the Election Committee will cast the vote on behalf of the Orlando Section members. The new officers then will be installed at our annual installation banquet in June.

The IEEE Florida Council and Region 3 Executive Committee meetings were held on April 3-5, '93 at the site of the South East Conference (SECON '93) in Charlotte, North Carolina. There were eight Area/Council representations in the Region 3. Florida Council with 12 Sections is the largest and accounts for 9,620 members of the total 33,439 members in the Region 3. Orlando was the recipient of the Region 3 Exemplary Section award for the second successive year.

Silvia Middleton, General Chair of SECON '93, reported that the conference had 259 paid-registered attendants and 349 people participants. The thirty nine student-branch participants entered 20 autonomous vehicles for the exciting Hardware-Device Contest. Each vehicle was designed by a four-member student team over a 6 month period and a budget of \$300. The SECON'94 will be held at Hyatt-Regency Miami on April 10-13, '94. Dr. Osama A. Mohammed of Florida International University is the General Chair (Tel. 305-348-3040).

Carl Hussey, Region 3 Professional Activities director, has approved \$500 for the Consultants Network Working Group's project submitted by Jorge Medina that includes upgrading the Section's voice mail computer with a mother board (386 SX 40MHz, 4 MB).

"Members in Arrears: Who Are they?" and why was presented at Region 3 ExCom. The statistics

are: Total Institute- 13%, Fellows- 0.5%, Senior Members-1.5%, Members-8%, Associate-20%, Recent Grads-(GM/GA)- 50%, Student Members- 25%. The members in arrears for Total Orlando Section is an alarming 19% as of 2/28/ 93. IEEE has a number of schedules and programs for retention of members in arrears such as 5 years graduated dues for Recent Graduates, Two Half- Payments Provision, and Minimum Income Provision for others. Please contact Bob Smallwood, Membership chair, if you need help with your dues. Also, retroactive to January 27, 1993. IRS reclassified IEEE from C6 to C3 notfor-profit organization which means dues will be deductible as well as no sales tax for Section's purchase of goods and services.

# **★ STAR SEARCH ★**

Jorge Medina, Awards Chairman

As Chairman of the Awards Committee, I need your help one more time to identify nominees for the Outstanding Service and Outstanding Entrepreneur Awards to be presented at the Installation Banquet in June.

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

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

Please use the enclosed Star Search form to nominate your candidate. Complete the form and send it to me by May 15th. I will solicit biographical information from each candidate for use at the June 1st meeting of the Executive Committee in deciding the winner. I will make the nomination process as painless as possible for the nominators! My mailing address and telephone are: P.O. Box 521917, Longwood, FL32752-1917, (Work) 628-4828, (Voice Mail) 260-1676, option 7, VM 905, (Fax) 260-1636.

#### **ELIGIBILITY**

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

#### THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

	<ul> <li>Outstanding Service Award</li> <li>Outstanding Entrepreneur Award</li> </ul>	Please Return Form To: Jorge Medina, Awards Chair. P.O. Box 521917 Longwood, FL 32752-1917 Fax: (407) 260-1636
Professional A	Affiliation and Title:	
Current Addre	ess:	
Work Phone: (	( )	Home Phome: ( )
3. PROPOSED CITAT	TON (30 words or less) FOR:	
4. IEEE SOCIETY/BO	ARD RELEVANT TO ACHIEVEMENT	CITED:
5. SUBMITTED BY:_		
IEEE Position	and Grade:	
Current Addre	ss:	
Work Phone:		Home Phone: ( )
		ORMS YOURSELF? YES NO  minee, who can attest to his/her contributions and to the importance thereo
A. Name	B. Name	C. Name
Position/Title	Position/Title	Position/Title
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Ad Size	Rate	Discounted Rate (more than one issue)
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Half Page	\$195	\$165
1/3 Page	\$165	\$135
1/4 Page	\$135	\$105
1/6 Page	\$80	\$72
Business Card	\$50	\$35
2 Page Preprinted Insert	\$292	\$252
Full Page Preprinted Insert	\$195	\$165

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# **EVENTS CALENDAR**

For the latest and/or additional information call the IEEE Orlando Voice Information Center 260-1676, option 7 and enter the respective Voice Mailbox (VM) number.

Apr.	29	IEEE COM/VT & UFFC - Crystal Filters Intermodulation Characteristics and Measurements - J. Mink (O) 886-8860
May	3	IEEE IA - Industrial & Commercial Power Systems Annual Technical Conference - J. Beall (813) 376-2790
May	4	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
May	11	IEEE Consultants' Network - Starting and Running Your Own Consulting Business - Orlando Public Library, J. Medina, (VM) 323, (O) 260-1676
May	14	IEEE COM/VT - Network Engineering: LAN, MAN, WAN - United Telephone, M. Germain, (VM) 253, (O) 678-5599
May	19	IEEE AES & PE/IA - Florida's MAG PLANE High-Speed Transportation System - Morrison's Cafeteria D. Flinghbaugh, (VM) 213, (O) 859-7310
May	19	IEEE PE/IA - Fuel Cell Technology Update - Lombardi's Restaurant, N. Crandel. (VM) 273. (O) 422-4911
May	27	IEEE AP/MTT - Frequency Selective Surfaces - Hewlett Packard, L. Dunn, (VM) 223, (O) 1-407-867-3193
May	27	IEEE SRC & NN - Learning, Recognition and Prediction by Self- Organizing Neural Networks - UCF, M. Georgiopoulos, (O) 823-5338
Jun.	1	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo, (VM) 901, (O) 356-6914, (H) 539-0465
Jun.	1-3	IEEE CHMT - 43rd Electronic Components & Technology Conference - P. Walsh, (202) 457-4932
Jun.	8	IEEE Consultants' Network - Video Technical Tutorial Seminar on Neural Networks: Algorithms and Microhardware - Orlando Public Library, J. Medina, (VM) 323, (O) 260-1676
Jun.	14-18	ACM/IEEE/EDAC - 30th Design Automation Conference - Dallas Convention Center, Dallas, TX - MP Associates (303) 530-4333
Jun.	16 -17	IEEE National Telesystems Conference - Telesystems in Transition: Commercial Applications and Dual-Use Technology - World Congress Center, Atlanta, Georgia, E. Barnhart, (404) 894-8248

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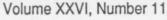
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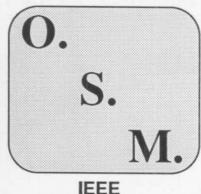
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# THE ORLANDO SECTION

The Newsletter of the Orlando Section of the IEEE

June 1993

The Orlando Section of the Institute of Electrical and Electronics Engineers Announces the

# 1993 Installation Banquet

Saturday, June 19th, 1993 The Outback Restaurant located at the back of the Lake Buena Vista Palace Hotel Free Valet Parking

Program:

6:00 P.M.- Cash Bar on the Veranda 7:00 P.M.-Dinner

Guest Speaker: Mr. Derek Brennan Vice President of Networks and C.I.O. United Telephone of Florida

### Presentation of Awards:

Certificates of Appreciation Outstanding Chapter Award Outstanding Service Award Outstanding Entrepreneur Award

Installation of the 1993 -1994 Executive Committee

This is an excellent opportunity to meet other members of the Orlando engineering community. For reservations or additional details please contact Jackie Hines at 886-8860, 628-1604 or 823-5507

	Reservation Form
enclosed. Make check payable to IEEE. Ch	93 IEEE Installation Banquet. My check for* (\$20 each) is oice of Entree: [] Barbecued Chicken & Ribs Combination noice of Dessert: [] Key Lime Pie [] Chocolate Dundee
Mail to: IEEE Awards Banquet c/o Jackie Hines	Name:
1741 Edwin Blvd. Winter Park, FL 32789 886-8860, 628-1604 or 823-5507	Phone No.: * No Charge to IEEE Orlando Section Fellows and their spouses.
	must be received no later than June 14th, 1993

The Orlando Section Monthly

June, 1993

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Region 03 Council 05 Section 51

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SRC: Scott Harrell, UCF (VM) 93, (H) 366-7952

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M. Ali Atashroo, Section Chairman
CHAIRMAN'S CORNER

ear fellow members, the team work and volunteer empowerment of the IEEE Orlando Section EXCOM's members have brought about another banner year in serving you and providing leadership opportunities for the volunteers. 1,044 members attended the 57 technical, professional, and seminar sessions held in 1992. Another 19 sessions were held just in 1993.

The high lights of the Orlando Section achievements for the past year were our Family Fun Day on September 13, '92, the Awards Banquet on February 27, '93, the Student Essay Contest for National Engineering Week in February 15-22, '93, the initiation of the Technical Video Library Service (47 video tape sets), our award winning The Orlando Section Monthly News letter, the formation of Neural Network and Consultants' Network Working Groups, the Sponsorship of GlobeCom '92, and the local operation agreement for the 1994 World Congress on Computational Intelligence.

Financially, our treasurer Parveen Wahid reports that we have \$12,305.70 in checking, and \$20,742.00 in reserve as of May 4, 1993 excluding the Section's income of \$16,600 from GlobeCom '92 to be received in June, '93. I would like to extend my congratulations to all our EXCOM members (listed on the first column on this page) for the outstanding job they did in serving our members.

Special thanks goes to Hewlett-Packard for hosting all of our EXCOM sessions as well as some of the chapters' sessions. On behalf of the EXCOM of the IEEE Orlando Section, I would like to also thank Martin Marietta Corporation, Westinghouse Electric Corporation, Sprint Corporation, Southern Bell, Carlson, and the University of Central Florida for their support by

providing speakers, sponsorship, or facili-

The Bylaws Committee that was formed to update our Section bylaws will meet in August, after our summer recess in July, and will propose the updates to the bylaws. Also, we formed an E-mail Bulletin Board Service (BBS) Committee to upgrade the Section's PC to an 486DX/33 platform capable of providing upgraded Voice-Mail, Bulletin Board, and an ultimate gateway to Internet for access to the IEEE E-Mail service. We welcome any immediate suggestions from our members.

Dr. Issa Batarseh volunteered to be the director of Professional Programs for the SouthCon '94 Conference sponsored by Region 3 and the Florida Council of the IEEE to be held in the Orlando Civic Center on March 29-31, '94. The SouthCon '94's theme is "Connecting with Tomorrow's Market." There are opportunities for other volunteers to chair technical sessions in Laser, Micro electronics, Electric Vehicle, Telecommunication, and ISO 9000 disciplines. Issa is also collecting signatures to establish the *Power Electronics* chapter in Orlando. Please contact Issa at 407-823-0185 for further information.

Jackie Hines, program chair, has arranged for our Annual Installation Banquet to be held at Outback at Lake Buena Vista on June 19, 1993 when the new elected Executive Board officers, Jackie Hines (Chair), Parveen Wahid (Vice Chair), David King (Treasurer), and Kalpathy Sundaram (Secretary) will be installed. Looking forward to seeing you all at our Installation Banquet.

#### P.E. REFRESHER COURSE

A Professional Engineering refresher course may be offered this summer in the Orlando area if there is a high interest. So far 7 candidates have expressed interest in it but there is a minimum requirement for at least 10 students. The cost will be \$250 per student. If you are interested in taking the P.E. refresher course please contact Jim Snyder at 904-253-1511 for more information.

#### SIGNAL PROCESSING OFFICERS FOR '93-'94

Chairman: Vice Chairman: Timothy Young Dr. Yacob Alsaka

Treasurer:

Al Berg

Secretary:

Dr. Jim Hughen

## POSITIONS WANTED **ADVERTISEMENTS**

Beginning immediately, the Orlando Section Monthly will publish your ad, exactly as you submit it, for "position wanted", according to the following rules:

- No fee for Orlando Section members.
- 2. Each ad will be printed once.
- 3. Ad may be resubmitted.
- 4. You may be identified by code (or by name and address).
- 5. Ad must be 75 words or less.
- 6. Send your name, mailing address, and IEEE member number.
- 7. Responses received will be mailed to you if you use code.
- 8. We will not be responsible for error or delays, but we will do our best to be helpful.

Note: A local antenna manufacturer is seeking designers and support personnel. For more information, contact PACE chairman, Glenn Portz, at 644-2408.

## **SECTION 1706 OF THE** TAX REFORM ACT OF 1986

This legal provision deprives a specific segment of the nation's scientific, engineering, and technical work force of entitled rights under prior law that continues to apply to taxpayers in other professions and occupations. Section 1706 made outmoded common law the exclusive test of whether workers providing services to technical firms are classified as employees or as independent contractors for the payment of Federal income, Social Security, and unemployment taxes. IEEE-USA recommends that Section 1706 be repealed or amended to ensure that the nation's tax laws apply fairly and equitably to all professions and occupations.

An April 7th Wall Street Journal article cited recent IRS activity to try to enforce Section 1706 of the Tax Reform of 1986, and to harass the self-employed generally.

Jim Boyd, corresponding member of the USAB Private Practitioners Task Force, chairs the committee to lobby against Section 1706 of the Tax Code. To help, contact him at (201) 584-0329 or Fax: (201) 584-1441.

# 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.

#### AEROSPACE AND ELECTRONIC SYSTEMS SOCIETY

An Update of Florida's Commercial Space Ventures

Speaker: Mr. James E. Mizell Date: Wednesday, June 16, 1993

Time: 7:00 PM

Location: Technology Consulting Center Contact: David Flinchbaugh at 859-7310 or leave message at 260-1676, ext. 6, voice

mailbox 213

#### CONSULTANTS' NETWORK

Nueral Networks: Algorithms and Microhardware

Program: A two-hour video technical tutorial seminar.

Date: Tuesday, June 8th, 1993 Time: Meeting at 6:00 PM

Location: Orlando Public Library, 3rd.

Floor, Magnolia Room

Contact: Please make your reservations by leaving message for Jorge Medina at 260-1676, option 7, Voice Mailbox 323.

#### POWER ENGINEERING/ INDUSTRY APPLICATIONS

Fuel Cell Technology Update

Program: Fuel Cell Technology Update Fuel cells produce DC electricity by direct chemical conversion of common fuels. Recent advances in DC-to-AC conversion make fuel cells cost effective and practical for bulk power applications. Ms. Linder will discuss fuel cell technology and likely future developments with particular emphasis on solid oxide fuel cells.

Speaker: JoAnn Linder of Westinghouse

**Emerging Technologies** Date: June 2, 1993

Time: 6:30 for Dinner, 7:30 for Presentation. (Note: There will be an officer's meeting after the presentation).

Location: Lombardi's Restaurant at Olympia Place (800 N. Magnolia Avenue, First Union Bank Building)

Contact: Please make your reservations with Neil Crandell at 422-4911, Jim Pipkin at 281-2916 or Bob Nelson at 381-6308.

JOINT MEETING OF THE FLORIDA SECTIONS OF THE OPTICAL SOCIETY OF **AMERICA** 

and

#### LASERS AND ELECTRO-OPTICS SOCIETY

Saturday, May 29th, 1993

University of Central Florida College of Business Administration **Room 119** 

#### AGENDA

10:00 AM Coffee and Pastries

10:15 AM Welcome:

M. Richardson, President Florida Section of OSA E. Van Stryland, Chairman Orlando Section LEOS

10:20 AM LEOS Election of officers: E. Van Stryland

10:25 AM OSA Budget: J.Harvey, OSA Treasurer

10:30 AM Experiments with Ultra High **Density Lasers** R. Falcone, OSA Traveling Lecturer, Professor in Physics, University of California, Berkeley, California

#### 11:30 AM Current & Future Applications of Lasers in Medicine

J. M. Parel. Professor Université de Paris: Assistant Professor, School of Medicine, University of Miami; Assistant Professor, College of Engineering, University of Miami.

12:30 AM Adjourn for Lunch.

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# EVENTS CALENDAR

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May	29	IEEE LEOS/OSA - X-Rays from High-Intensity, Short-Pulse Laser Interaction with Solids & Current and Future Applications of Lasers in
		Medicine - UCF, E. Van Stryland, (VM) 293, (O) 658-6815
Jun.	1	IEEE Orlando Section - EXCOM - Hewlett-Packard, A. Atashroo,
		(VM) 901, (O) 356-6914, (H) 539-0465
Jun.	1-3	IEEE CHMT - 43rd Electronic Components & Technology Conference -
		P. Walsh. (202) 457-4932
Jun.	2	IEEE PE/IA - Fuel Cell Technology Update - Lombardi's Restaurant, N.
	_	Crandel, (VM) 273, (O) 422-4911
Jun.	8	IEEE Consultants' Network - Video Technical Tutorial Seminar on Neural
		Networks: Algorithms and Microhardware - Orlando Public Library, J.
-		Medina, (VM) 323, (O) 260-1676
Jun.	14-18	ACM/IEEE/EDAC - 30th Design Automation Conference - Dallas
	7.5. 7.5.	Convention Center, Dallas, TX - MP Associates (303) 530-4333
Jun.	16	IEEE AES - An Update on Florida's Commercial Space Ventures -
		Technology Consulting Center, D. Flinghbaough, (VM) 213, (O) 859-7310
Jun.	16 -17	IEEE National Telesystems Conference - Telesystems in Transition:
		Commercial Applications and Dual-Use Technology - World Congress
		Center, Atlanta, Georgia, E. Barnhart, (404) 894-8248
Jun.	19	IEEE Orlando Section - Installation Banquet - Outback Restaurant, Buena
		Vista Palace, J. Hines, (VM) 902, (O) 886-8860, (H) 628-1604
Aug.	3	IEEE Orlando Section - EXCOM - Hewlett-Packard, J. Hines, (VM) 902,
		(O) 886-8860, (H) 628-1604
Aug.	10	IEEE Consultants' Network - TBA - Orlando Public Library, 3rd Floor,
		J. Medina, (VM) 323, (O) 260-1676
Feb.	14-18, '94	IEEE COM - MONS '94 - 1994 IEEE Network Operations and Manage-
		ment Symposium - Hyatt Orlando Hotel, Kissimmee
Mar.	29-31, '94	REGION 3, FCIEEE - SOUTHCON '94 - Orange County Convention/Civic
		Center, Orlando

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