

IEEE GRID *.pdf*

FEBRUARY 2004

Here's Your
2004 Directory
of Officers

IEEE GRID.pdf

February 2004 • Volume 51 • Number 2

IEEE-SFBAC 2004

Chairman

Douglas B. Snow

Finance Chair

James B. Lekas

Editorial Board Chair

Jonathan B. David

OEB Director

Annie Kong

SF Director

Julian Ajello

SCV Director

Ron Kane

ECI Directors

James Lamb

James Hungerford

Bernie Siegal

SFBAC Manager

Marilyn Turner

IEEE-SFBAC

345 Forest Avenue

Palo Alto, CA 94301

Tel: 650 327-6622

Fax: 650 321-9692

E: ma.turner@ieee.org

From the editor . . .

The first thirteen pages of this issue contain the roster of officers for the Bay Area Council, the three Section Excoms, and all active Society chapters.

This is a once a year endeavor and is as current and up to the minute as we could make it—the last changes being made on February 27.

We recommend that you print these pages and keep them as a convenient reference for locating your IEEE colleagues.

IEEE Grid is the monthly newsmagazine of the San Francisco Bay Area Council of the Institute of Electrical and Electronics Engineers, Inc. As a medium for both news and opinion, the editorial objectives of IEEE Grid are to inform readers in a timely and objective manner of newsworthy IEEE activities taking place in and around the Bay Area; to publish the official calendar of events; to report on IEEE activities on a national and international scope; and to serve as a forum for comment on areas of concern to the engineering community by publishing contributed articles, invited editorials and letters to the editor.

IEEE Grid is published as an Online Edition residing at www.ieee-sfbac.org and in this handy printable pdf edition, sent by email each month to more than 24,000 Bay Area members.



Editor: Doug Davolt
IEEE GRID
278 W. 42nd Avenue
San Mateo CA 94403
Tel: 650 571-0119
Fax: 650 571-5585
E: d.davolt@ieee.org
www.ieee-sfbac.org

NOTE: IEEE GRID.pdf is a monthly publication and is issued a few days before the first of the month. It is not updated after that. Please refer to the Online edition and interactive calendar for the latest information.

San Francisco Bay Area Council for 2004

Chair

Douglas B. Snow, PE

db Solutions

674 Broadmoor Blvd.

San Leandro, CA 94577-1952

Tel: 510 376-5235

Email: d.snow@ieee.org

Financial Chair

James B. Lekas

2240 E. Peak Court

Martinez, CA 94553-5053

Tel: 925 212-4959

Email: j.lekas@ieee.org

Editorial Board Chair

Jonathan B. David

Cadence Design Systems

2655 Seely Avenue, Bldg 9

San Jose, CA 95134

Tel: 408 894-2646

Email: j.david@ieee.org

Oakland/East Bay Director

Annie Kong

ChevronTexaco

6001 Bollinger Canyon Road

San Ramon, CA 94583

Tel: 925 842-1200

Fax: 925 842-0723

Email:

atko@chevrontexaco.com

San Francisco Director

Julian Ajello, PE

California Public Utilities

Commission

505 Van Ness Avenue, 2D

San Francisco, CA 94102-3298

Tel: 415 703-1327

Fax: 415 703-1891

Email: jea@cpuc.ca.gov

Santa Clara Valley Director

Ron Kane

3679 Canelli Court

Pleasanton, CA 94566

Tel: 925 422-7393

Fax: 925 423-3144

Email: kane@ieee.org

ECI Director

James Hungerford

528 St. Thomas Way

Pleasanton, CA 94566

Tel: 510 816-9112

Fax: 925 931-1335

Email: j.hungerford@ieee.org

ECI Director

James Lamb

LTX Corporation

3930 North First Street

San Jose, CA 95134-1501

Tel: 408 383-2450

Fax: 408 433-0128

Email: jim_lamb@ltx.com

ECI Director

Bernie S. Siegal

Thermal Engineering Associates,
Inc.

612 National Ave.

Mountain View, CA 94043-2222

Tel: 650 961-5900

Fax: 650 323-9237

Email: b.siegal@ieee.org or

bsiegal@thermengr.com

Office Manager

Marilyn Turner

IEEE – SFBAC

345 Forest Avenue

Palo Alto, CA 94301

Tel: 650 327-6622

Fax: 650 321-9692

Email: ma.turner@ieee.org

Editor, IEEE Grid

Doug Davolt

278 W. 42nd Avenue

San Mateo CA 94403

Tel: 650 571-0119

Fax: 650 571-5585

Email: d.davolt@ieee.org

Oakland/East Bay Section for 2004

OEB SECTION EXCOM

Chair

William J. "Bill" DeHope

University of California
Lawrence Livermore National
Laboratory

7000 East Ave., L-460

Livermore, CA 94550

Tel: 925 424-6413

Fax: 925 422-7558

Email: dehope1@llnl.gov

Vice Chair

Joe Mauger

Electronics Engineering
Lawrence Livermore National
Laboratory

P.O. Box 808, L-154

Livermore, CA 94550

Tel: 925 423-7682

Fax: 925 423-3144

Email: mauger1@llnl.gov

Secretary

Alan Meyer

665 Dunhill Dr.

Danville, CA 94506

Tel: 925 648-5113

Email: meyer21@llnl.gov

Treasurer

Victor Stepanians

J and M Consultants

P.O. Box 1513

San Ramon, CA 94583

Tel: 925 968-0979

Fax: 925 244-4782

Email: vicstepanians@ieee.org

PACE

Rosanna Lerma

37814 Second Street

Fremont, CA 94536

Tel: 408 282-1500 x210

Fax: 408 297-2995

Email:

rosanna@salasobrien.com

COMMUNICATIONS SOCIETY

Chair

Suresh C. Bazaj

Tel: 510 252-1200

Email: bazaj@ieee.org

Vice Chair

Malik Audeh

Tel: 510 305-6022

Email: audeh@ieee.org

Secretary

Todor Cooklev

San Francisco State University

1600 Holloway Ave.

San Francisco, CA 94132

Tel: 781 687-0682

Email: tcooklev@ieee.org

Treasurer

Dr. Avtar Singh

4008 Ordaz Ct.

Dublin, CA 94568

Tel: 925 361-7209

Fax: 925 730-4901

Email: avtar@ieee.org

Education Liaison

Christopher Flores

4114 Lakeshore Ave.,

Oakland, CA 94610

Tel: 510 834-4046

Email: chrisf@sbcglobal.net

Membership/Publicity

Jose Verger

Napa Consulting

2465 Lavender Drive

Walnut Creek, CA 94596

Tel: 925 989-2319

Fax: 253 323-5611

Email:

verger@napaconsulting.net

Webmaster

Mike Patterson

Verizon Enterprise Solutions
6001 Bollinger Canyon Road,
Suite H-1499

San Ramon, CA 94583

Tel: 925 842-5019

Email:

mapa@chevrontexaco.com

Member-at-large/Webmaster

Randy Roberts

490 Beverly St.

Livermore, CA 94550

Tel: 925 423-9255

Fax: 925 424-4975

Email: roberts38@llnl.gov

COMPUTER SOCIETY

Chair/Treasurer

Jeff Kalibjian

Compaq Computer Corp
CAC06-29

10555 Ridgeview Court

Cupertino, CA 95014

Email:

Jeff.Kalibjian@compaq.com

ENGINEERING MANAGEMENT SOCIETY

Chair/Treasurer

Annie Kong

ChevronTexaco

6001 Bollinger Canyon Road

San Ramon, CA 94583

Tel: 925 842-1200

Fax: 925 842-0723

Email: atko@chevron.com

Oakland/East Bay Section for 2004

INDUSTRY APPLICATIONS SOCIETY

Chair

David Eng

Technical Marketing & Sales
2415 San Ramon Valley Blvd.,
#4324

San Ramon, CA 94583

Tel/Fax: 925 265-1000

Email: engdd412@ieee.org

Vice Chair

Gregg A. Boltz, PE

Brown & Caldwell
201 N. Civic Drive, Suite 115
Walnut Creek, CA 94596-3864

Tel: 925 210-2571

Fax: 925 937-9026

Email: gboltz@brwncald.com

Treasurer

Doug Handran, PE

Carollo Engineers
2700 Ygnacio Valley Road,
Suite 300

Walnut Creek, CA 94598

Tel: 925 932-1710

Fax: 925 930-0208

Email: dhandran@carollo.com

Membership

Greg Young

WRMS

1556 Parkside Drive

Walnut Creek, CA 94596

Tel: 925 933-3094

Fax: 925 933-5167

Email: gyoung@wrms.com

NUCLEAR & PLASMA SCIENCES SOCIETY

Chair

Joe Mauger

Electronics Engineering
Lawrence Livermore National
Laboratory

P.O. Box 808, L-154

Livermore, CA 94550

Tel: 925 423-7682

Email: mauger1@llnl.gov

Vice Chair

G. Patrick Roberson

University of California
Lawrence Livermore National
Laboratory

M/S L-333

7000 East Avenue

Livermore, CA 94550

Tel: 925 422-8693

Fax: 925 424-3215

Email: roberson1@llnl.gov

Secretary

Paul G. Banchemo

6232 Auburn Avenue
Oakland, CA 94618-1322

Tel: 510 627-1165

Fax: 510 595-8226 (by
arrangement)

Email:

pbanchero@portoakland.com

Treasurer

Edward J. Lampo

University of California
Lawrence Livermore National
Laboratory

M/S 80-101

1 Cyclotron Road

Berkeley, CA 94720

Tel: 510 486-6779

Fax: 510 486-5800

Email: e.lampo@ieee.org

POWER ENGINEERING SOCIETY

Chair/Treasurer

Rosanna Lerma

37814 Second Street
Fremont, CA 94536

Tel: 408 282-1500 x210

Fax: 408 297-2995

Email:

rosanna@salasobrien.com

Vice Chair

To-Nhu Le, EE

DTN Engineers, Inc.
1611 Telegraph Ave., Suite
809

Oakland, CA 94612

Tel: 510 267-0441

Fax: 510 267-0443

San Francisco Section for 2004

SAN FRANCISCO SECTION EXCOM

Chair

Dan Sparks, PE

P.O. Box 191681
San Francisco, CA 94119-1681
Tel: 415 260-4613
Email: dan.sparks@ieee.org

Vice Chair

Ted Hudacko

1815 9th Avenue
San Francisco, CA 94122
Cell: 415 720-7842
Tel: 415 753-1210
Email:
thudacko@mindspring.com

Secretary

Robert "Robb" Myer

509 Mission Blvd.
Santa Rosa, CA 95409
Tel: 707 538-4767
Email:
robert_myer@agilent.com

Treasurer

Seth Bromberger

Federal Reserve Bank of SF
101 Market Street
San Francisco, CA 94105
Tel/Fax: 415 292-7054
Email:
ieee2004@bromberger.com

PACE:

Pauline B. Tapia

1919 Webster St., Room 477
Oakland, CA 94612
Tel: 510 874-2656
Fax: 510 874-2442
Email: PBT1@ieee.org

Section Director

George Puffett, PE

Cammisa Wipf Consulting
Engineers
32 Page Street
San Francisco, CA 94102
Tel: 415 863-5740
Fax: 415 863-5758
Email:
gpuffett@cammisawipf.com

Education Chair

Emery Fabri

Tel: 408 238-5166
Email: defab@sbcglobal.net

INDUSTRY APPLICATIONS SOCIETY

Chair

Finn Schenck

Square D Company
6160 Stoneridge Mall Road,
Suite 200
Pleasanton, CA 94588
Tel: 925 730-3148 (w)
510 703-0071 (c)
Fax: 859 817-4636
Email:
finn.schenck@us.schneider-electric.com

Vice Chair

Rick Miller

RNM Engineering
165 Lundys Avenue
San Francisco, CA 94110
Tel: 415 307-5106
Fax: 415 643-3013
Email: richard n
millerpe@hotmail.com

Secretary/Treasurer

David D. Roybal, PE

Cutler-Hammer Inc.
3697 Mount Diablo Blvd., Suite
210
Lafayette, CA 94549
Tel: 925 299-3754
Fax: 925 299-3791
Email:
DavidDRoybal@eaton.com

Membership and Publicity

Sonny K. Siu, P.E.

EYP Mission Critical Facilities,
Inc.
49 Stevenson Street, #200
San Francisco, CA 94105
Tel: 415 901-4318
Email: www.eypmcf.com

POWER ENGINEERING SOCIETY

Chair

Dr. Siri Varadan, PE

Nexant Inc.
1333 Broadway, Suite 1015
Oakland, CA 94612
Tel: 510 444-6500 x293
Fax: 510 444-6502
Email: svaradan@nexant.com

Vice Chair

Charles Magee, PE

California Public Utilities
Commission
Energy Division
505 Van Ness Avenue, Room
4002
San Francisco, CA 94102
Tel: 415 703-4683
Fax: 415 703-2200
Email: cm1@cpuc.ca.gov

San Francisco Section for 2004

Secretary**Ben Williams**

Pacific Gas and Electric
Company
Mail Code B15A
P.O. Box 770000
San Francisco, CA 94177
Tel: 415 973-9473
Email: bew5@pge.com

Treasurer**Bhaskar Ray**

Pacific Gas and Electric
Company
Mail Code N3B
P.O. Box 770000
San Francisco, CA 94177
Tel: 415 973-0582
Email: bxr0@pge.com

Santa Clara Valley Section for 2004

SANTA CLARA VALLEY SECTION EXCOM

Chair Rufino Olay

Xilinx
2100 Logic Drive
San Jose, CA 95124
Tel: 408 879-7741
Fax: 408 626-6440
Email: r.olay@ieee.org

Vice Chair Lee Colby

Lee Colby & Associates
860 Mangrove Ave.
Sunnyvale, CA 94086-8640
Tel/Fax: 408 730-8528
Email: lee.colby@ieee.org

Treasurer: Fred Jones

DMJMH+N, Electric Power
Office
NASA Ames Research Center
M/S 213-8
Moffett Field, CA 94035-1000
Tel: 650 604-1918
Email:
fjones@mail.arc.nasa.gov

Secretary Dan Oprica

Engineering Consultants
P.O. Box 62288
Sunnyvale, CA 94088-2288
Tel: 408 985-9166
Email: opricad@ieee.org

PACE Co-Chair Thomas M. Coughlin

Coughlin Associates
Tel/Fax: 408 978-8184
408 202-5098 (c)
Email: tom@tomcoughlin.com

PACE Co-Chair
Frank Lord, PE
35 Hartford Avenue
San Carlos, CA 94070
Tel: 650 594-0512

Student Activities Coordinator Linda Schnell

2655 Seely Avenue
San Jose, CA 95134
Tel: 408 428-5290
Email: l.schnell@ieee.org

K-12 Education Coordinator David Fong

1456 Ferguson Way
San Jose, CA 95129
Tel: 510 687-4507
Email: daffy@ieee.org

Webmaster Linda Fong

1456 Ferguson Way
San Jose, CA 95129
Tel: 408 588-8717
Email: lindafong@ieee.org

MONTEREY BAY SUBSECTION

Chair Roberto Cristi

Code EC/Rc
Dept of ECE
Naval Postgraduate School
Monterey, CA 93943
Tel: 831 656-2223
Fax: 831 656-2760
Email: rcristi@nps.navy.mil

Vice Chair Marcelo Siero

165 Brackney Road
Ben Lomond, CA 95005
Tel: 408 335-5600
Fax: 408 335-4250
Email: siero@ee.com

Secretary Todd Weatherford

Code EC/Wt
Dept of ECE
Naval Postgraduate School
Monterey, CA 93943
Tel: 831 656-3044
Fax: 831 656-2760
Email: trweathe@nps.navy.mil

Treasurer David Jenn

Code EC/Jn
Dept. of ECE
Naval Postgraduate School
Monterey, CA 93943
Tel: 831 656-2254
Fax: 831 656-2760
Email: jenn@nps.navy.mil

ANTENNAS & PROPAGATION SOCIETY

Chair Andrew J. Poggio

Lawrence Livermore National
Laboratory
7000 East Ave., L-154
Livermore, CA 94550
Tel: 925 422-8557
Email: apoggio@llnl.gov or
apoggio@attbi.com

Vice Chair David J. Steich

Lawrence Livermore National
Laboratory
7000 East Ave., L-154
Livermore, CA 94550
Tel: 925 422-6978
Email: dsteich@llnl.gov

Santa Clara Valley Section for 2004

Secretary/Treasurer

Gerald J. Burke

Lawrence Livermore National
Laboratory
7000 East Ave., L-154
Livermore, CA 94550
Tel: 925 422-8414
Email: burke2@llnl.gov

CIRCUITS AND SYSTEMS SOCIETY

Chair

Rajit Chandra

Gradient Design Automation Inc.
11101 Bubb Road
Cupertino, CA 95014
Tel: 408 996-1573
Email: rcchandra@ieee.org

Vice Chair

Satheesh Sudarsan

Intel Corporation
2200 Mission College Blvd.
Santa Clara, CA 95054

Treasurer

Bob Pau

Cadence Design Systems, Inc.
2655 Seely Avenue
San Jose, CA 95134
Tel: 408 944-7308
Email: bpau@cadence.com

Secretary

William Kao

Cadence Design Systems
555 River Oaks Parkway
San Jose, CA 95134
Tel: 408 428-5202
Email: bkao@cadence.com

Programs Chair

Jonathan David

Cadence Design Systems
2655 Seely Avenue, MS 8A1
San Jose, CA 95134
Tel: 408 894-2646
Email: jbdavid@cadence.com

COMMUNICATIONS SOCIETY

Chair

Daniel Calafut

108 Ballatore Court
San Jose, CA 95134
Tel: 408 822-2114 (w)
408 435-8299 (h)
Fax: 408 822-2114
Email: dsc01@ieee.org

Co-Chair

Wei-Min Lu

3118 Cortona Dr.
San Jose, CA 95135
Tel: 408 256-4011
Fax: 408 256-5151
Email: wmlu@ieee.org

Treasurer

Satyavrat Prabhune

1249 Lakeside Dr., #1057
Sunnyvale, CA 94085
Tel: 408 530-0082
Email:
satyavrat_prabhune@yahoo.com

Secretary

Lorna Tan

P.O. Box 815
Cupertino, CA 95015
Tel: 650 386-5491
Email: ltan@ieee.org

COMPONENTS, PACKAGING & MANUFACTURING TECHNOLOGY SOCIETY

Chair

Thomas S. Tarter

NeoPhotonics
2911 Zanker Road
San Jose, CA 95134
Tel: 408 321-5009
Fax: 408 456-2979
Email:
ttarter@neophotonics.com

Vice Chair

Bernie S. Siegal

Thermal Engineering
Associates, Inc.
612 National Ave.
Mountain View, CA 94043-2222
Tel: 650 961-5900
Fax: 650 323-9237
Email: b.siegal@ieee.org or
bsiegal@thermengr.com

Treasurer

Annette Teng Cheung

115 Concord Circle
Mountain View, CA 94040
Fax: 408 321-6407
Email: Annette@corwil.com

Secretary

Allen Earman

4327 Lake Santa Clara Drive
Santa Clara, CA 95054-1331
Tel: 408 654-8045
Fax: 408 456-2971
Email:
AEarman@lightwavemicro.com
or aearman@ieee.org

Program Chair

Santa Clara Valley Section for 2004

Harvey Miller

InfraFocus
255 Town & Country Village
Palo Alto, CA 94301
Tel: 650 327-2029
Fax: 650 327-2360
Email: h.miller@ieee.org

Webmaster/Training

Paul Wesling
Email: p.wesling@ieee.org

COMPUTER SOCIETY

Chair

Dr. T. Y. Lin
Dept. of Computer Science
San Jose State University
One Washington Square
San Jose, CA 95192
Tel: 408 924-5121
Email: tylin@cs.sjsu.edu

Vice Chair

Linda Schnell
Cadence Design Systems, Inc.
2655 Seely Avenue
San Jose, CA 95134
Tel: 408 428-5290
Email: l.schnell@ieee.org

Treasurer

Dr. Michael Graebner
426 Concord Drive
Menlo Park, CA 94025
Tel: 650 324-8917
Email: graebner@pacbell.net

Secretary

Porter Wong
1930 Churton Ave.,
Los Altos, CA 94024
Tel: 650 380-0039
Email: porter_wong@yahoo.com

CONSULTANTS NETWORK OF SILICON VALLEY

Chair

Art Rahman
5665 Park Crest Drive
San Jose, CA 95118-3350
Tel: 408 265-3457
Email: a.rahman@ieee.org

Vice Chair

Hafiz Nijim
P.O. Box 64418
Sunnyvale, CA 94088-4418
Tel: 408 226-6111
Email: hnijim@ieee.org

Treasurer

Dave McChesney
1865 Fardon Ave.
Los Altos, CA 94024
Tel: 650 961-0183
Email:
mcchesne@ix.netcom.com

Secretary

Ciaran O'Donnell, Ph.D.
Joseph Media Tools
2745 Warburton Ave.
Santa Clara, CA 95051
Tel: 408 983-0490
Email:
ciaran_o2000@yahoo.com

CONTROL SYSTEMS SOCIETY

Chair/Treasurer

Tejesh Mankanawala
107 Serenity Place
Milpitas, CA 95035
Tel: 408 313-4912 (cell)
Email: t.c.makanawala@ieee.org

Vice Chair/Secretary

Giuseppe Prisco
Tel: 408 523-2418
Email: gmprisco@ieee.org

ELECTROMAGNETIC COMPATIBILITY SOCIETY

Chair

Len Goldschmidt
Cisco Systems
170 West Tasman Drive
San Jose, CA 95134-1706
M/S SJ-18-1
Tel: 408 902-8252
Fax: 408 902-8387
Email: lgoldsch@cisco.com

Vice Chair

Bertram K.C. Chan, Ph.D., PE
Foundry Networks Inc.
1534 Orillia Court
Sunnyvale, CA 94087-4435
Tel: 408 586-1983
Fax: 408 586-1900
Email: bchan@foundrynet.com

Treasurer

Tom Winegar
Tel: 408 497-4224
Fax: 408 779-9189
Email: t.w.winegar@ieee.org

Secretary

Dale James Gutierrez
Email: dalegut@ieee.org

ELECTRON DEVICES SOCIETY

Chair

Raif Hijab
Semirel
878 W. Hillsdale Blvd
San Mateo, CA 94403
Tel: 650 345-3194
Email: raif@semirel.com

Vice Chair

Constantin Bulucea

Santa Clara Valley Section for 2004

National Semiconductor
M/S E-155
2900 Semiconductor Drive
Santa Clara, CA 95052
Tel: 408 721-4140
Fax: 408 721-5100
Email:
constantin.bulucea@nsc.com

Treasurer
Jeffrey T. Watt

Altera
101 Innovation Drive
San Jose, CA 95134
Tel: 408 544-8270
Fax: 408 544-7594
Email: jwatt@altera.com

Secretary

Philippe Jansen
National Semiconductor
M/S E-155
2900 Semiconductor Drive
Santa Clara, CA 95052
Tel: 408 721-8917
Fax: 408 551-4505
Email:
philippe.jansen@nsc.com

Past Chair

Ranjeet Pancholy
Seagate Technology
2720 Orchard Parkway
SJ3-201
San Jose, CA 95134
Tel: 408 456-3532
Fax: 408 456-3525
Email:
ranjeet.k.pancholy@seagate.com

**ENGINEERING
MANAGEMENT SOCIETY**

Chair

Gregory J. West
4916 Massachusetts Drive
San Jose, CA 95136
Tel: 408 629-1938
Email: greg.west@ieee.org

Vice Chair

Suresh Sankaralingam
100 Ballatore Ct.
San Jose, CA 95134
Tel: 408 432-9596
Email:
ssuresh@stanfordalumni.org

Treasurer

Richard Stallkamp
18305 Murhpy Springs Dr.
Morgan Hill, CA 95037
Tel: 408 779-6038
Email: rstallkamp@ieee.org

Secretary

Juliawati Sulisthio
1062 Remington Dr.
Sunnyvale, CA 94087
Tel: 408 245-2652
408 316-6279 (c)
Email: jsulisthio@ieee.org

**ENGINEERING IN MEDICINE
& BIOLOGY SOCIETY**

Chair/Secretary

Jim McIntosh
6149 Royal Acorn Place
San Jose, CA 95120
Tel: 408 626-9360 or
408 997-6468
Email: smeci@earthlink.net

Treasurer
Steve Brugler

2041 Webster St.
Palo Alto, CA 94301
Tel: 650 322-3323
Email: brugler@ieee.org

Webmaster

Jim Stoneburner
Email: jds@sonolithics.com

Programs

Wido Menhardt
Email: wido@menhardt.com

Jim Bearden

Email: jbearden@ieee.org

**INSTRUMENTATION &
MEASUREMENT SOCIETY**

Chair/Secretary

John C. Westmoreland, P.E.
3467 Kettmann Road
San Jose, CA 95121-1226
Tel: 408 954-3111
Email:
jwestmoreland@ieee.org

Vice Chair

Stephen Adam
1413 Brookmill Road
Los Altos, CA 94024
Tel: 650 968-4900
Fax: 650 960-1398
Email: s.adam@ieee.org

Treasurer

Ed Jacklitch
1736 Fabian Drive
San Jose, CA 95124
Tel: 408 723-0834
Email: edjack@earthlink.net

Past Chair/Webmaster
Yeou-Song (Brian) Lee

Santa Clara Valley Section for 2004

490 Jarvis Drive
Morgan Hill, CA
Tel: 408 201-1976
Email: brian.lee@ieee.org

INFORMATION THEORY SOCIETY

Chair/Treasurer

Art Astrin

1051 Greenwood Ave.
Palo Alto, CA 94301
Tel: 650 328-1777
Email: artastrin@aol.com

LASERS & ELECTRO OPTICS SOCIETY

Chair

Chris Simoneaux

Tel: 408 515-9180 (c)
Email:
Chris.Simoneaux@alcoa.com

Vice Chair

Ram Sivaraman

Tel: 512 296-8734 (c)
Email: ramsivaraman@ieee.org

Treasurer

Brij Lal

Tel: 408 742-5809
Email: brij.b.lal@lmco.com

Secretary

Valerie Schlecht

Tel: 925 389-1674 (c)
Email: vaschlecht@ucdavis.edu

Webmaster/Editor

Brian Pheiffer

Tel: 408 375-3429
Email: bkp@ieee.org

Educational Outreach

Coordinators:

Robert Dahlgren

Silicon Valley Photonics, Ltd.
P.O. Box 1569
San Jose, CA 95109
Tel: 408 437-9292
Email: bob.dahlgren@ieee.org

Edwin El-Kareh

Tel: 408 875-5203 or
408 774-9300 (h)
Email: eelkareh@sbcglobal.net

MAGNETICS SOCIETY

Chair

Gerardo Bertero

Komag Inc.
1710 Automation Parkway
San Jose, CA 95131
Tel: 408 576-2895
Fax: 408 944-0107
Email:
gerardo.bertero@komag.com

Treasurer

Joost Mortelmans

Hitachi Global Storage
Technologies
Advanced Magnetic Recording
Tel: 408 717-5745
Fax: 408 717-9142
Email:
Joost.Mortelmans@hgst.com

Secretary

B. Ramamurthy Acharya

MMC Technology
2001 Fortune Drive
San Jose, CA 95131
Tel: 408 717-5745
Fax: 408 717-9142
Email: acharya@ieee.org

MICROWAVE THEORY & TECHNIQUES SOCIETY

Chair

Dr. Mohammad S. Shakouri

Alvarion
1522 Constanso Way
San Jose, CA 95129
Tel: 408 482-3850 (c)
Fax: 408 255-0360
Email:
mohammad.shakouri@alvarion.com

Co-Vice Chair

Jim Sowers

Space Systems/Loral
3825 Fabian Way, M/S G16
Palo Alto, CA 94303
Tel: 650 852-5172
Fax: 650 852-7128
Email: jim@ssd.loral.com

Co-Vice Chair

Sushil Kumar

Agilent
Tel: 408 435-6456
Email:
sushil_kumar@agilent.com

Treasurer

Richard T. Lira

196 42nd Avenue
San Mateo, CA 94403
Tel: 650 570-6779
Fax: 650 458-8239
Email: richlira@rcn.com

Secretary

Benson Chan

Santa Clara Valley Section for 2004

M/ACOM
1314 Buckthorne Way
San Jose, CA 95129
Tel: 408 257-7697
Email:
chanb@tycoelectronics.com

POWER ELECTRONICS SOCIETY

Chair
Ron Berthiaume
Fairchild Semiconductor
Tel: 408 656-3173 (c)
Email: PwrEngr@ieee.org

Vice Chair/WebMaster
Brooks Leman
Tel/Fax: 408 984-6538
Email: Brooks.Leman@ieee.org

Treasurer
Ari Srager
40737 Gualala Place
Fremont, CA 94539
Tel: 510 797-1100
Fax: 510 249-9504
Email: ashrager@etm-inc.com

POWER ENGINEERING & INDUSTRY APPLICATIONS SOCIETY

Chair
James Alvers
Square D/Schneider Electric
6160 Stoneridge Mall Rd., Suite 200
Pleasanton, CA 94588
Tel: 925 730-3105
510 604-6979 (c)
Email:
james.alvers@us.schneider-electric.com

Vice Chair
Richard Celio

Applied Power Technologies
10601 S. De Anza Blvd., #106
Cupertino, CA 95014
Tel: 408 342-0790
Email: rcelio@apt4power.com

Treasurer
Fred Jones
DMJMH+N, Electric Power Office
NASA Ames Research Center
M/S 213-8
Moffett Field, CA 94035-1000
Tel: 650 604-1918
Email: fjones@mail.arc.nasa.gov

Secretary
Randal Kaufman
PowerSmiths Corp.
P.O. Box 69
Redwood city, CA 94064
Tel/Fax: 650 299-9555
rkaufman@powersmiths.com

PRODUCT SAFETY ENGINEERING SOCIETY

Chair
Thomas M. Burke, PE
Underwriters Laboratories, Inc.
1655 Scott Blvd.
Santa Clara, CA 95050-4169
Tel: 408 876-2286
Fax: 408 296-3256
Email:
thomas.m.burke@us.ul.com

Vice Chair
John W. McBain
27504 Loma Prieta Way
Los Gatos, CA 95033
Tel: 408 353-5330
Email: johnmcbain@ieee.org

Treasurer
Mark Montrose

Montrose Compliance
Services, Inc.
2353 Mission Glen Drive
Santa Clara, CA 95051-1214
Tel/Fax: 408 247-5715
Email: m.montrose@ieee.org
or
mmontros@ix.netcom.com

Secretary
Julia Luke
175 Sun Blossom Drive
San Jose, CA 95123
Tel: 408 463-0885 x 112
Fax: 408 463-0888
Email: jlake@ccsemc.com

RELIABILITY SOCIETY

Chair
Fred Schenkelberg
Hewlett-Packard Company
968 White Cloud Dr.
Morgan Hill, CA 95037
Tel: 650 236-2737
Fax: 650 852-8560
Email: fms@hp.com

Vice Chair
Mike Silverman
20151 Guava Court
Saratoga, CA 95070
Tel: 408 472-3889
Email:
mikes@opsalacarte.com

Treasurer
Arthur Rawers

Santa Clara Valley Section for 2004

Xilinx
585 Calle Siena
Morgan Hill, CA 95037
Tel: 408 626-6410
408 482-2117 (c)
Fax: 408 559-1368
Email: arthur.rawers@xilinx.com

Secretary

Alan Wood

Hewlett-Packard Company
19333 Vallco Parkway, M/S 4413
Cupertino, CA 95014
Tel: 408 285-2713
Email: AlanW@hp.com

Program Chair

David Angst

TCAD
Tel: 650 965-0205
650 906-2419 (c)
Fax: 650 965-8443
Email: angst@tcad.com

Webmaster

Wei Hou

Email: wh2k@netzero.com

SIGNAL PROCESSING SOCIETY

Chair

Saseetharran Mahadeva

Sunnyvale, CA 94087

Email: sasheeli@ieee.org

Vice Chair

Sheng "PS" Chang

1841 Northwest Circle
San Jose, CA 95131
Tel: 408 453-1230 (h)
408 902-3834 (w)

Email: pschang@ieee.org

Treasurer

Ramakrishna Venuthurupalli

444 Saratoga Ave., Apt. #26-
Santa Clara, CA 95050
Tel: 408 984-5238 (h)
408 934-4512 (w)
Email: ramki@genesis-microchip.com

Secretary

Nelson Zierbach

201 W. California Ave., #1224
Sunnyvale, CA 94086
Tel: 408 738-0718 (w)
408 505-8321 (c)
Email: nzeroth@mindspring.com

SOLID STATE CIRCUITS SOCIETY

Chair

Dan Oprica

Engineering Consultant
P.O. Box 62288
Sunnyvale, CA 94088-2288
Tel: 408 985-9166
Email: opricad@ieee.org

Vice Chair

Sorin Andrei Spanoche, Ph.D.

OKI Semiconductors
785 N. Mary Avenue
Sunnyvale, CA 94086-2908
Tel: 408 737-6392
Email: s.spanoche@ieee.org

Treasurer

Eric Hoffman

Exar Corporation
48720 Kato Road, MS 405
Fremont, CA 94538
Tel: 510 668-7708
Email: eric.hoffman@ieee.org

Secretary

Jun Song

LSI Logic Corporation
3115 Alfred Street, MS J110
Santa Clara, CA 95054
Tel: 408 433-6435
Email: sjun@lsil.com

Host

Jonathan B. David

Cadence Design Systems
2655 Seely Avenue, Bldg 9
San Jose, CA 95134
Tel: 408 894-2646
Email: j.david@ieee.org

Webmaster

Perry Chow

Tel: 408 926-295
Email: aceperry@ieee.org

Hospitality

Julia Sulisthio

Tel: 408 316-6279
Email: jsulisthio@ieee.org

Past Chair

Cherh-Lin Chen

Philips
Tel: 408 991-2241
Email:
cherhlin000@netscape.net

VEHICULAR TECHNOLOGY SOCIETY

Santa Clara Valley Section for 2004

Chair/Treasurer

Clay Maynard

2311 Brandywine Drive

Yuba City, CA 95993

Tel: 530 790-6611

Fax: 530 790-6950

Email: clay@maynard.com

Vice Chair

Bert Stephens

1535 Vineyard Drive

Los Altos, CA 94024

Tel: 650 961-6841 (h)

Tel: 408 875-2845 (w)

Fax: 408 875-2815

Email: bert.stephens@klatencor.com

Secretary

Tom Uldrick

Motorola, Inc.

1700 S. Amphlett, Suite 300

San Mateo, CA 94402

Tel: 415 286-7083

Fax: 415 286-7090

Email: cara30@email.mot.com

WOMEN IN ENGINEERING

Chair

Roxsana Hadjizadeh

1429 Kew Gardens Ct.

San Jose, CA 95120

Tel: 408 997-0861 (h)

Email: Roxsana@ieee.org

Vice Chair

Joanne Olecko

4068 Walnut Dr.

Pleasanton, CA 94566

Tel: 925 249-9021 (h)

Email: jolecko@ieee.org

Treasurer

Evelina Yeung

5241 Ligurian Court

San Jose, CA 95138

Email: evelina@vlsi.stanford.edu

Secretary

Daisy Cheng

918 O'Connor St.

East Palo Alto, CA 94303

Email: dais73@yahoo.com

TUESDAY FEBRUARY 3

SCV Lasers & Electro Optics Society

Subject: **Histophysics: What Physicists and Historians Can Do Together**

Speaker: Prof. Lui Lam (San Jose State University)

Time: Pizza social at 7:00 p.m., presentation at 8:00

Place: National Semiconductor Credit Union Large Auditorium, 955 Kifer Road, Sunnyvale

RSVP: RSVP@silicavalley.com

Histophysics: What Physicists and Historians Can Do Together

History is the most important discipline of study. The system investigated in history is a many-body system consisting of biological material bodies, Homo sapiens, and hence can be studied scientifically. Prof. Lui Lam, Department of Physics, San Jose State University, will discuss this topic at the February 3 meeting of the Santa Clara Valley LEOS chapter.

The unique role physicists can play in advancing the science of human history will be presented. Prof. Lam will discuss the methods of study in history; worldviews; modeling history as a complex, dynamical system; predicting the future and retrodicting the past; and artificial history. In particular, active walk is shown to provide the foundation for a new worldview, and found to be widely applicable in modeling history, as illustrated by three examples from economic, evolutionary and social histories, respectively.

Dr. Lui Lam did his thesis at Bell Labs and earned his PhD from Columbia University. He invented bowlics (1982), one of three existing types of liquid crystals in the world; active walks (1992), a new paradigm in complex systems; and a new discipline called histophysics (2002). Prof. Lam has published ten books and over 150 scientific papers. He is the founder of the International Liquid Crystal Society, and the founder and editor-in-chief of the Springer books series Partially Ordered Systems. His current interest is in complex systems and histophysics.

WEDNESDAY FEBRUARY 4

SF Power Engineering Society

Subject: **An Overview of Superconducting Cables**

Speaker: Michael McCarthy (American Superconductors)

Fee: \$4 - lunch will be provided

Time: 12:00 Noon

Place: PG&E Building, 77 Beale Street, Conference Room 300, San Francisco

RVSP:(by February 2) bxr0@pge.com or Bhaskar Ray. 415 973-0582

Web: http://www.ewh.ieee.org/r6/san_francisco/sfpes.htm

An Overview of Superconducting Cables

Superconductors lose all resistance to the flow of direct electrical current and nearly all resistance to the flow of alternating current (AC) when cooled below a critical temperature, which is different for each superconducting material.

The initial discovery of superconductive materials was made in 1911. Before 1986, the critical temperatures for all known superconductors did not exceed 23 Kelvin (23 K or -418 degrees Fahrenheit). The primary applications of superconductivity have been magnetic resonance imaging and superconducting magnetic energy storage applications because commercially available superconductors need to be cooled to near 0 K.

American Superconductors (**AMSC**) is a developer and manufacturer of high temperature superconductor (HTS) wire. HTS operate from 20 to 77 K. AMSC's first generation HTS wire, based on a multi-filamentary composite architecture, is capable of carrying over 140 times the power of copper wires of the same dimensions. HTS AC power cables are used for the transmission and distribution of electricity.

HTS power cables can be strategically placed in the grid to draw flow away from overtaxed conventional cables or overhead lines, thereby relieving network congestion. Co-axial and tri-axial HTS power cables are low environmental impact because they emit

Continued next page

SF Power Engineering Society

WEDNESDAY FEBRUARY 4

no electro-magnetic fields, their compact design reduces or eliminates the disruption caused by the cable construction and installation activities and they use no oil, which is used to cool some conventional power cables.

Michael McCarthy will discuss AMSC's first generation HTS cable at the February 4 meeting of the San Francisco Power Engineering Society. The cable is used for a variety of applications including power cables, motors, generators, and specialty magnets. He will also provide a preview of AMSC

second generation HTS wire. This cable is scheduled to be available in commercial quantities in the next few years. It is also expected to cost two to five times less than first generation HTS wire and will significantly broaden the market for HTS-based products and applications.

Mr. McCarthy is sales director in the Advanced Grid Solutions business unit of AMSC. Prior to joining AMSC in 2001, he worked GE Osmonics, Stone & Webster Engineers and Constructors, and Honeywell. Mr. McCarthy earned a BSME from North Dakota State University.

LONG TERM DISABILITY CLAIMS

Since 1977 our firm has been representing and assisting professionals in pursuing LTD claims, under both individual insurance policies and ERISA regulated group policies.

**Call us for a free consultation.
Our practice is limited to LTD claims only.**

LAW OFFICE OF SILVER & TAUBE

300 South First Street, Suite 205
San Jose, California 95113
(408) 298-9755 • fax: (408) 298-9699
www.SilverandTaube.com

UNUM • MET LIFE • AETNA • CIGNA • PAULREVERE • CNA • PROVIDENT • KEMPER •
STANDARD • SUN LIFE • CANADA LIFE • RELIANCE • MUTUAL • PRUDENTIAL •
OTHERS

IEEE IAS

The 11th Annual IEEE Industry Applications Society Electrical Safety Workshop will be held February 10-13 at the Marriott City Center Hotel in Oakland. Full details of the this workshop and on-line registration is available at www.ewh.ieee.org/cmte/ias-esw/

For the first time, there will be parallel sessions on Wednesday and Thursday afternoons, as a way to enable attendees to better customize their Workshop experience. An optional Friday afternoon tutorial is scheduled on the 2004 Edition of NFPA70E, The Standard for Electrical Safety Requirements for Employee Workplaces.

TUESDAY FEBRUARY 10

SCV Electromagnetic Compatibility Society

Subject: **Signal Detection with EMI Receivers**

Speaker: Werner Schaefer (Cisco Systems, Inc.)

Time: Social at 5:30 p.m., presentation at 7:00

Place: Applied Materials Bowers Cafe, 3090

Bowers, Santa Clara

RSVP: Not required

Signal Detection with EMI Receivers

Werner Schaefer will be the speaker for the February 10 meeting of the Santa Clara Valley EMC Chapter. He will discuss how the sweep time settings for a scanning receiver or the dwell time for a stepping receiver will affect the probability of intercept of broadband and narrow-band signals. An interpretation of the expected test results on the receiver display is also provided, together with an explanation of the limitations of test equipment. The impact of frequency versus receiver display resolution on signal detection is explained as well as the available receiver display detection modes and their appropriate use and limitations.

In addition, the different receiver IF detectors, per CISPR 16-1-1, are presented and their hardware implementation, purpose and correct use are explained. Some EMI receiver specifications, as contained in CISPR 16-1-1 are discussed at the end of the presentation. This will also include a discussion of specifications like dynamic range and IF bandwidth specifications which are not called out in the standard.

Werner Schaefer is a quality manager and senior compliance engineer at Cisco Systems Corporate Compliance Center in San Jose. He has 19 years of EMC experience, including EMI test system and software design, EMI test method development and EMI standards development. He currently is the secretary of CISPR/A, the chairman of CISPR/A/WG1 and a member of CISPR/A/WG2 and CISPR/H, ANSI C63, SC1/3/6, and serves as an A2LA lead assessor for EMI and wireless testing and RF/microwave calibration laboratories. He is also a NARTE certified EMC engineer and a RAB certified quality systems lead auditor.

WEDNESDAY FEBRUARY 11

SCV CPMT

Subject: **Itanium 2 Package Development Tradeoffs**

Speaker: Kevin Haley (Intel)

Time: Seated dinner (vegetarian available) at 6:30 p.m., presentation at 7:30

Place: Ramada Inn, 1217 Wildwood Ave (Fwy 101 frontage road, between Lawrence Expressway and Great America Parkway), Sunnyvale, (800 888-3899)

Cost: (dinner) \$25 - register and prepay for dinner (\$25) in one step from your PayPal account or credit card

RSVP: cpmt.scv.sec@ieee.org - reserve for presentation-only if not attending the dinner.

Itanium 2 Package Development and Tradeoffs

SCV CPMT

Itanium 2 Package Development Tradeoffs

The Pentium II package design evolved from the needs of the silicon, non-silicon product features and the capabilities of available packaging technologies. This presentation by Intel's Kevin Haley will look at the major feature drivers and tradeoffs made during the design cycle.

Kevin Haley is a packaging manager at Intel Corporation in the Enterprise Platforms Group and was responsible for the mechanical design of the Itanium 2 package, socket, heatsink and processor voltage regulator. Previously Mr. Haley led package design teams for the 8038SL Processor, the 80486SL Processor, the Mobile Pentium TCP tape carrier package, the Mobile Pentium Module and the Mobile Pentium II cartridge. He received a BS mechanical engineering from the University of Washington in 1981, and has been issued 18 U.S. patents.

THURSDAY FEBRUARY 12

SCV Microwave Theory & Techniques Society

Subject: MMIC Chip-Set for 60GHz

Radio Links

Speaker: Dr. Kohei Fujii (Agilent Technologies)

**Time: Refreshments and social at 6:00 p.m.,
presentation at 7:00**

**Place: Agilent Technologies, Bldg 50 L, Santa
Cruz Conference Room. 5301 Stevens
Creek Blvd., Santa Clara**

RSVP: Not required

MMIC Chip Set for 60GHz Radio Links

Dr. Kohei Fujii will be the speaker for the February 12 meeting of the Santa Clara Valley MTT Chapter. His talk describes the development of a MMIC chipset for 60GHz radio links and radars. The chipset includes a low noise amplifier, an image rejection mixer, a frequency quadrupler, and a power amplifier. All were optimized to work together as a 1-Gbit/s radio link in the unlicensed 59GHz to 64GHz wireless band, although most are suitable for any application from 55GHz to 70GHz. These MMICs are fabricated in Agilent's advanced e-beam PHEMT process and have been demonstrated in fully operational 1-Gbit/s radio-links in field testing.

Kohei Fujii received his Doctor of Engineering degree from the University of Electro-Communications, Tokyo, Japan, in 2000. He joined Japan Radio Company in 1980 where he worked on the research and development of MMICs. In 2001, he joined Agilent Technologies in San Jose, where he has been involved in the research and development of mm-wave MMICs.

TUESDAY FEBRUARY 17

IEEE Consultants Network of Silicon Valley

Subject: **Five Ways to Ruin a Development Project**

Speaker: John V. Levy (John Levy Consulting)

Time: Networking at 7:00 p.m., presentation at 7:30

Place: Sheraton Hotel, 1100 North Matilda Avenue, Sunnyvale (408 745-6000)

RSVP: Not required (seating is limited - arrive early)

Five Ways to Ruin a Development Project

Most obstacles to successful product development are not technical, but managerial. Development projects can be undermined by a variety of obstacles created by managers and missteps made by managers - and their consultants. Here are five principles you can use to insure that your next project fails:

1. Wait 'til you see where I put it! Geographical obstacles.
2. The manager is WHO? Managers and incompetence.
3. Who are the bozos next door? Teams and competition.
4. Don't fire anyone! Maintaining headcount at all costs.
5. Don't change the toolset! New methods as subversive action.

None of us want to contribute to the failure of our projects. Join us on February 17 to learn what John Levy has to say to help clients avoid catastrophes on their development projects. He will leave plenty of time for questions, and you will leave with practical tips on this valuable topic.

John Levy is well qualified to speak on this topic. He has been a management consultant since 1982. He provides services to high-tech firms including project & team evaluation and diagnosis; project management and leadership coaching; and expert witness and intellectual property services. He specializes in product development organizations where both hardware and software are involved.

John earned a PhD in computer science from Stanford University, and holds Bachelors and Masters degrees in engineering. His industrial background includes engineering management with Quantum Corporation, Apple Computer, Tandem Computers, and Digital Equipment Corporation. He holds seven patents on computer bus design and has published numerous articles. His latest publication is an article in EDN (Nov. 13, 2003), titled, "If Extreme Programming is Good Management, What Were We Doing Before?"

A Certified Management Consultant (CMC), John Levy is currently web site administrator for the Institute of Management Consultants USA College of CMCs. Dr. Levy co-produces an hour-long radio show, West Marin Tech, broadcast weekly on KWMR, 90.5 FM, in Point Reyes Station, California.

WEDNESDAY FEBRUARY 18

SCV Engineering in Medicine & Biology Society

Subject: **Cell-based Biosensor Systems for Toxin Detection and Drug Discovery**

Speaker: Gregory T. A. Kovacs, MD, PhD (Stanford)

Time: Dinner at 6:00 p.m., presentation at 7:30

Place: Dinner in the Stanford Hospital Cafeteria, presentation in Room M114 of the Stanford Medical School

RSVP: Not required

Cell-based Biosensor Systems for Toxin Detection and Drug Discovery

For many years, researchers have been able to grow living cells on integrated circuit substrates, and their qualitative responses to pharmaceutical agents have long been demonstrated. Little work, though, has been done to use this technology in realistic, repeatable, and quantitative instruments. Complete sensor systems can now be built that include full microenvironments for the cells and are field portable. These instruments include the sensor-containing substrates on which cells are grown, sensors for closed-loop microincubator control, dual cell chambers (for control and test samples), and all of the necessary fluidic interfaces.

Cultured cells can be transported into the field and maintained in a sterile environment essentially identical to that found in a conventional incubator. These technologies can be applied not only to the detection of chemical and biological warfare agents, but also to the discovery of new pharmaceuticals.

Gregory T. A. Kovacs will address this topic at the February 18 meeting of the Santa Clara Valley Engineering in Medicine & Biology Society. His presentation will cover advances in the areas of cellular/electronic interfaces, engineered cells, signal interpretation algorithms, and system integration leading to the development and field testing of a self-contained, hand-held cell-based biosensor.

Dr. Kovacs is an associate professor of electrical eEngineering at Stanford University with a courtesy appointment in the Department of Medicine. His present research areas include biomedical instruments and sensors, miniaturized spaceflight hardware, and biotechnology. In addition, Dr. Kovacs is the director of medical device technologies for the Astrobonics Program at the NASA Ames Research Center, and for the Stanford-NASA National Biocomputation Center.

Continued next page

He helps direct a variety of projects spanning wearable physiologic monitors, biosensor instruments for detection of chemical and biological warfare agents and space biology applications, and free-flyer experiment payloads. He is involved in hands-on field testing of NASA wearable monitors in high altitude conditions. He is currently serving as the investigation scientist for the debris team of the Columbia Accident Investigation Board, having worked for the first four months after the accident at the Kennedy Space Center, Florida.

He has published extensively in technical literature, including authorship of a popular engineering textbook. He is a long-standing member of the Defense Sciences Research Council

(DARPA), and has served as associate chair and chairman. He also has extensive industry experience including co-founding several companies, most recently Cepheid in Sunnyvale.

He received an NSF Young Investigator Award, held the Noyce Family Chair, and was a Terman and then University Fellow at Stanford. He is a fellow of the American Institute for Medical and Biological Engineering. Dr. Kovacs is a private pilot, scuba diver, and a fellow national of the Explorers Club. Dr. Kovacs received a BAsC degree in electrical engineering from the University of British Columbia, an MS degree in bioengineering from the University of California, Berkeley, and a PhD and an MD degree from Stanford University.

THURSDAY FEBRUARY 19

OEB Communications Society

Subject: **How are Credit Card Numbers Hacked on the Web?**

Speaker: Jan Bialkowski (NetContinuum, Inc.)

Time: Pizza at 6:30 p.m., presentation at 7:00

Place: Bishop Ranch 1, 6101 Bollinger Canyon Road, San Ramon (just off I-680)

RSVP: (by Feb. 18) oeb@comsoc.org - for pizza order

Info: Malik Audeh, 510 305-6022 or malik_audeh@yahoo.com

Web: <http://www.comsoc.org/oeb/>

How Credit Card Numbers are Hacked on the Web

Ever accelerating trends in the IT industry place mission critical business process applications on the Web. Along with simplified management of universal Web access for employees and business partners, system administrators also get increased exposure to hackers routinely exploiting a diverse range of applications' security vulnerabilities.

Jan Bialkowski's presentation at the February 19 OEB Communications meeting will introduce basic Web application deployment settings in the data centers and application security concepts. The talk will focus on common application vulnerabilities such as buffer overflows, cross-site scripting, and parameter tampering.

Their potential adverse impact will be highlighted by an overview of the basic hacking toolbox including simple, common exploitation methods. A survey of a range of practical intrusion

defenses, such as security scanning, remedial application patching and application firewalls will emphasize their critical strengths and weaknesses.

Finally he will introduce some of the industry efforts to standardize interactions between the defensive systems prompted by the growing awareness of the application vulnerabilities.

Jan Bialkowski is a founder and the chief technology officer of NetContinuum, a provider of web security appliances that consolidate all critical DMZ functionality into a single system to enable cost-effective deployment of secure web applications.

Prior to founding NetContinuum, Jan was a distinguished engineer at FORE systems responsible for defining the architecture of the company's next generation switching system. Before that, Jan was a founding engineer of Berkeley Networks and the primary architect of the ASIC-based forwarding engine and product line of L3/L4 switches.

Earlier, Jan was chief technologist at Bay Networks, responsible for developing advanced system architectures and a consulting engineer at Wellfleet Communications. Among his many achievements is the design and implementation of a fault-tolerant multiprocessing OS used in the Wellfleet/Bay Network routers. Jan started his career as a software engineer at Data General.

Jan has a BS in computer and information science from Syracuse University where he graduated with highest honors in 1985.

The chapter will continue its feature at the meeting of providing some networking time for those that want to stand and make a brief announcement. If you're looking for a new position, have a position to fill, want to let us know that your new start-up is ready for business or have a similar announcement, bring your resumes, job descriptions or company brochures and be prepared to make a match. Please keep your statements brief, so we'll have time for everyone. There will be time before and after the formal meeting for one-on-one discussions.

THURSDAY FEBRUARY 19

OEB Industry Applications Society

Subject: Application of a High Speed Motor and Adjustable Speed Drive**Speaker: Barry Wood (ChevronTexaco Energy Technology Company)**Time: No-host social at 5:30 p.m.,
presentation at 6:15pm, dinner at 7:15,
presentation continues at 8:00Place: Marie Callendar Restaurant, The
Garden Room, 2090 Diamond Blvd.,
Concord (nearby to Concord Hilton
Hotel) 925 827-4930 for directions.RSVP: (by February 18) Gregg Boltz,
925 210-2571 or
gboltz@brwnald.comCost: (dinner) \$22 for IEEE members,
\$25 for non-members.

Application of a High Speed Motor and an Adjustable Speed Drive

The February 19 meeting of the Industry Applications Society, for the Oakland East Bay Area, will feature a talk on high-speed motors and adjustable speed Drives. The speaker will be Barry M. Wood from ChevronTexaco.

This is a case study from a real-life application in industry with useful engineering results that can be shared with everyone. During the mid-1990's Chevron's El Segundo oil refinery was faced with the need to revise its refining process to produce reformulated gasoline in compliance with the state and federal clean air acts. They found justification to purchase specially made high-speed electric motors with adjustable-speed drives (ASD). High-speed motors are defined as those which operate

at speeds above 3600 RPM. Specifically, the motors would be rated at 11,000 RPM and 3,500 HP, a first in the industry. These would be employed to replace the existing drivers for their steam turbine recycle compressors. This talk will explain the decision-making process and rationale that led to the purchase. It will also describe the product design/development process and testing/approval procedures, as motors having such high speed and large horsepower had never been built before.

The audience will also learn about what was done during this project in the areas of: motor design; vibration analysis; rotor dynamics; critical speed mapping; resonance study; advance-design of ASD with enhanced reliability features; disturbance ride-through capability; harmonic analysis; and commissioning and startup.

Barry M. Wood received the BSEE degree from Virginia Polytechnic Institute and State University, Blacksburg, and the MSEE degree from the University of Pittsburgh in 1972 and 1978, respectively.

From 1972 through 1977, he was employed by Westinghouse Electric Corporation, Pittsburgh, PA, as a power systems engineer for the Industry Services Division. In 1978 he joined McGraw Edison Company, Canonsburg, PA, as a senior power systems engineer, and in 1981 he joined Electro-Test, Inc., San Ramon, CA, where he held positions as senior electrical engineer and supervisory electrical engineer.

Since 1987, Mr. Wood has been with ChevronTexaco where he is currently a senior staff electrical engineer with ChevronTexaco Energy Technology Company, Richmond, CA. His primary responsibilities include consulting for company facilities worldwide in the areas of electrical power systems, adjustable speed drives, motors, and generators. Mr. Wood is an IEEE fellow and a registered electrical engineer in the States of California and Pennsylvania. At the 1995 IEEE-PCIC conference, held in Denver, Mr. Wood delivered an earlier version of this talk with his colleagues.

TUESDAY FEBRUARY 24

Product Safety Engineering Society

Subject: **SEMI Safety Guidelines**

Speaker: Eric Sklar (Safety Guru LLC)

Time: Dinner at 5:30 p.m., presentation at 7:00

Place: Dinner at El Torito, 2950 Lakeside Drive, Santa Clara (408 727-4426), presentation at Applied Materials Bowers Café, 3090 Bowers Avenue, Santa Clara

RSVP: Not required

Info: Julia Luke, 408 463-0885 Ext. 112 or jlake@ccsemc.com

SEMI Safety Guidelines

Semiconductor Equipment and Materials International (SEMI) publishes 22 Safety Guidelines and EHS Guidelines. Despite their titles, several of these are the *de facto* standards for equipment safety in the semiconductor device manufacturing industry.

Eric Sklar, principal of Safety Guru, LLC, specializes in process and equipment risk assessment and mitigation for the semiconductor industry. He will be the featured speaker at the February 24 meeting of the Santa Clara Valley Product Safety Engineering society (formerly the Product Safety Technical Committee of the EMC Society).

Eric's presentation will describe the scopes of the documents, highlight some of their features, and describe how they relate to one another. Emphasis will be placed on those documents that are new (*e.g.*, S22, *Safety Guideline for the Electrical Design of Semiconductor Manufacturing Equipment*) or have recently been revised (*e.g.*, S10, *Safety Guideline for Risk Assessment and Risk Evaluation Process*). The efforts underway to make substantial modifications to some of the documents (*e.g.*, S6, *Safety Guideline for Ventilation*) will also be described.

The major rewriting of S2, *Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment*, to create its February 2000 edition (S2-0200) has been discussed previously in this forum. There have, however, been several substantive changes published since then and those changes will be described, as well as some of the changes that are being considered.

WEDNESDAY FEBRUARY 25

SCV Engineering Management Society

Forum Subject: **Employee Stock Options -
Optimizing Your Strategy**

Speaker: Rich Chambers, CFP

Subject: **Working With Our Previous Enemy**

Speaker: Robert Dodd (Space Systems/Loral)

Time: Forum at 6:00 p.m., dinner at 7:00,
after-dinner presentation at 7:45

Place: Wyndham Garden Hotel, 1300
Chesapeake Terrace, Sunnyvale - near
Lawrence Expressway and Hwy 237

RSVP: <http://www.ieee-scv-ems.org>

Cost: (with reservations Feb 20 or before) \$25
(IEEE member), \$30(non member), \$5
surcharge thereafter. (Cash or check at the
door) student IEEE members - \$5

Info: Rich Hendrickson, 408 203-3462

Working for Stock Options and Living with the Russians

The Santa Clara Valley Engineering Management Society presents a before-dinner forum on personal management of your stock options. Following networking and a sit-down dinner, the after-dinner topic will be on managing satellite activities at a foreign launch base.

Before-Dinner presentation -

Employee Stock Options - Optimizing Your Strategy

Stock Options can be a great source of wealth or ruin. Rich Chambers will briefly discuss how Incentive Stock Options (ISO) and Non-qualified Stock Options (NQSO) work. Then he'll review the common mistakes made and how you can avoid them.

Rich will discuss a number of possible strategies you could use to maximize the profit potential of your stock options. A demonstration of a sample analysis will be shown using StockOpter, the best software available for stock option analysis.

Participants can learn how to evaluate their stock option plans and develop multiple strategies that can optimize the tradeoff between profits, taxes, and risk management, given various market scenarios.

Rich Chambers is a Fee-Only, Certified Financial Planner who provides financial planning and investment advice for everyday life. Rich has presented the stock options program numerous times in workshop environments and at local high-tech companies. He is a member of the IEEE and was a practicing electrical engineer until 1999

Continued next page

After-Dinner presentation -

Working with our former enemy

The age of Globalization creates unique relationships. Previous competitors are now partnering on programs. Manufacturing takes place with components from different parts of the world. Design and service teams are spread around the globe. One of the unique situations is dealing with our former enemies.

When nations change their mutual relationships, their people do not automatically and immediately change to reflect the new national condition. Cultural perspectives, traditions, attitudes and behaviors retain their unique character for a long time. So it is between the United States and the former Soviet republics and it's made even more interesting by the latter's change in economic systems.

Launching a US satellite from Kazakhstan and the experience of living with Russians at Baikonur offer international launch teams a unique perspective on these cultural patterns and how the Russians deal with their new realities. All this in a place which itself is a symbol of the past: Baikonur officially

did not exist during the cold war, although all of the Russian manned space missions started there as well as most unmanned ones.

The Russians denied even the very existence of this base during the cold war. Baikonur is still not on most maps. This is the location where all of the Russian manned missions were launched in Kazakhstan. Our speaker, Bob Dodd, has had the unique experience of living among the Russians at their launch base. There were many surprises, highs and lows in the experience testing our management skills to the max.

Bob Dodd is a staff engineer at Space Systems/Loral. He has been an advanced payload manager and subsystem manager. Prior to Loral he was the director of engineering at Dalmo-Victor. He has been the manager of the electronic systems division at SAIC and a division manager at Watkins-Johnson. He was also the director of engineering at STI. He has 2 patents and has written numerous technical articles. He is active in many professional societies; most notably, he was the previous chair of the Engineering Management Society.

WEDNESDAY FEBRUARY 25

SCV Reliability Society

Subject: **Best of RAMS**

Speakers: Panel discussion

Time: Refreshments at 6:30 p.m., presentation
at 7:00

Place: HP-Cupertino, Oak Room, Bldg 48,
Pruneridge Avenue, Cupertino

RSVP: Not required

Best of RAMS

The 2004 Annual Reliability and Maintainability Symposium (RAMS) was held January 26-29, in Los Angeles. The theme of this year's RAMS is the challenge of emerging technologies. Information on RAMS is available on the web at <http://www.rams.org/>.

The February 25 Santa Clara Valley Reliability Society meeting will feature a panel discussion of selected papers from RAMS. The panel is being organized by Fred Schenkelberg. He is looking for additional panel members, especially paper authors or RAMS attendees. If you are interested in helping select papers, being on the panel, leading a discussion, or contributing in another way, please e-mail us at reliability@ieee.org.

THURSDAY FEBRUARY 26

SCV Solid State Circuits Society

Subject: **Smart Dust: Circuits and Applications**

Speaker: Dr. Kris Pister (Dust Inc.)

Time: Refreshments at 6:30 p.m., presentation at 7:00

Place: Cadence Design Systems, Bldg. 5, 2655 Seely Ave., San Jose

RSVP: ssc_scv_rsvp@yahoo.com - for email reminder subscribe to ssc-chpt-scv@majordomo.ieee.org

Web: http://www.ewh.ieee.org/r6/scv/scv_ssc.html

Smart Dust: Circuits and Applications

recently come to the attention of the media and the venture community. Companies such as Crossbow, Dust Inc, Ember, and Millennial are all working to commercialize this “next big thing.” Applications of the technology include building automation, industrial automation, medical monitoring, asset tracking, security, and homeland defense. The science fiction community was introduced to some of these ideas through stories written by Vernor Vinge, who is also a communications professor at UCSD.

The Key concept here is a peer-to-peer network created by a number of very low power transceivers that form a communication mesh. In the science fiction version, they are as small as dust, and are distributed as an aerosol. In present incarnations, they are quite a bit larger, as we will hear from our Speaker.

Dr. Kris Pister has spent the last decade of his life pushing the academic limits of research in this field, as a professor at UCLA and then UC Berkeley. Much of the enthusiasm for the field of wireless sensor networks can trace its roots to his DARPA-funded Smart Dust project, which set several world records in ultra-low power circuits and extreme miniaturization. For an example of his recent work see ‘An ultralow-energy ADC for Smart Dust,’ *IEEE Journal of Solid-State Circuits*, July 2003, pages 1123 - 1129.

Kris is an experienced leader who brings a record of successfully partnering with industry and government to deliver groundbreaking research into commercial applications. As the inventor of Smart Dust, he provides the leadership and vision to bring this technology to market. His prior successes include commercializing CAD for MEMS with Tanner Research, polysilicon MEMS Micromirrors with OMM Inc, and xenon difluoride etchers for semiconductor processing with STS and Xactix, which was subsequently licensed by Sony.

Kris is co-director of the Berkeley Sensor & Actuator Center (BSAC), actively participates in the Department of Defense research planning, and is a member of the JASONs. He serves on the advisory boards for CrossBow and Nanomix. Kris holds a PhD and MS in electrical engineering from UC Berkeley and a BS from UC San Diego. He is currently on extended leave from his position as professor of electrical engineering at UC Berkeley. In January of 2003, Pister became CEO of Dust Inc, with the goal of bringing low-cost, long-life mesh networking to the masses.



John W. Steadman, P.E., Ph.D.
2004 IEEE-USA President

Communicating Effectively with U.S. IEEE Members is Top Priority

Welcome to the first 2004 IEEE-USA president's column. I very much appreciate the opportunity to serve you this year, and hope that working together we can make this a very productive year for IEEE-USA. For that to happen, I will need the help of the very capable volunteers who serve with me on the IEEE-USA Board of Directors and the excellent staff who support all of us.

My highest priority is to communicate effectively with all U.S. IEEE members, which I consider to be our greatest asset. When you have thoughts, suggestions or concerns about IEEE-USA, our activities, organization or other issues, please contact me. The most effective

way to reach me is at j.steadman@ieee.org. I'm confident that other members of the Board and the staff share this desire to make IEEE-USA responsive. You can get names and other information about our volunteer leaders and staff members at www.ieeeusa.org/volunteers.

One of our primary activities in 2003 was to combat the unprecedented levels of unemployment among our U.S. members. While many things contributed to this problem — many beyond the control of IEEE-USA or any other organization — we took action on several fronts to address the issues. One of these was urging Congress to remove increases in the H-1B visa quota. We were able to establish IEEE-USA as an organization with credibility in this arena, and Congress let the annual cap return to its historic level of 65,000. It is clear that the topic will come up again in 2004, however, so we must remain vigilant and be ready to provide factual, persuasive testimony when called upon. Furthermore, other activities, such as an improved job-listing site, attention to L-1 visa abuses, and providing services like resume writing and soft skill training, must be continued.

A second high priority for 2004 is to improve our recruitment and retention of U.S. IEEE members. I'm asking members of our Board of Directors to join me in finding the most effective membership activities among the many Sections and Chapters throughout the IEEE, so we can learn from these experiences and share these best practices with our colleagues. I realize that we have not been consistent in getting the message out to all members — nor to potential members working beside us — about the value and benefits of IEEE membership. We will work hard to improve on this in the coming year, concentrating especially on the areas we have responsibility for in IEEE-USA.

The IEEE-USA Operating Committee meeting in late January will further refine our high-priority activities for the coming year. I would appreciate your suggestions in this regard so they can be included in the discussion. To make my time working for IEEE-USA most effective, I would appreciate it if you will include "Suggested Activity for IEEE-USA" in the subject line of an e-mail message to me with your thoughts.

Thanks again for this opportunity to serve you, and here's to a great 2004.

Patent Agent

Jay Chesavage, PE
MSEE Stanford
3833 Middlefield Road, Palo Alto, CA 94303
patents(at)chesavage(dot)com
TEL: 650-494-9162
FAX: 650-494-3835

DR. FLOYD M. GARDNER

Consulting Electronics Engineer
Phaselock, Communications
Synchronization, Signal Processing
1755 University Avenue
Palo Alto, CA 94301 (650) 328-8855
Website: www.fmgardner.com

James Long, Ph.D., P.E. **Analog and RF Consulting Engineer**

- new designs
- design reviews
- troubleshooting existing designs

(408) 733-8329 www.Analog-RF.com

SHAX Engineering and Systems

Electronics Design Services

- Analog and Digital circuit design
- VHDL/Verilog coding and synthesis
- ASIC/FPGA from concept to production

(650) 966-1835

ishakour@shax-eng.com www.shax-eng.com

TECHNOLOGY WRITER
TECHNICAL COMPOSITION, INC.

R. C. AYERAS

*WRITE, FORMAT, ILLUSTRATE, HARDCOPY, ONLINE,
SOFTWARE, HARDWARE, SYSTEMS, COMPONENTS*

Tel: (408) 262 7606 Fax: (408) 262 5941
r.c.ayeras@technology-writer.com
www.technology-writer.com

Mixed-Signal IC Development

- From Inception to Production Transfer
- Turnkey, Design Services & Consulting
- Design Reviews & Trouble Shooting

Mixel, Inc.

Excellence in Mixed Signal Design

(408) 274-2736

sales@mixl.com www.mixl.com