Chapter Meetings and Events


**June 30 – SCV EMS** – “The Dream – and Focusing to Make it Real” & “Making It - How To Go Into Business For Yourself” - bootstrapping a new company in Silicon Valley, and making it with your own business startup.

**July 6 – SCV LEOS** – “Liquid Lens Technology”. The electrowetting phenomenon is used to modify the interface between two non-miscible transparent liquids, thus forming a variable lens with voltage control.

**July 9 – SCV CNSV** – “IEEE Entrepreneur's SIG Meeting”.


**Upcoming Conferences in the Bay Area**

- **July 14-16 – San Jose – IEMT'04**: IEEE Int'l Electronics Manufacturing Technology (IEMT) Symposium
- **IEMT Professional Dev’t Courses Early-Bird registration through July 2nd**
- **August 9-13 – Santa Clara – EMC’04**: IEEE Int’l Symposium on Electromagnetic Compatibility (EMC’04)
- **EMC’04 Workshops (Monday and Friday) Early-Bird registration through July 9th**
- **August 13-15 – Santa Clara – PSES’04**: IEEE First Annual Symposium on Product Safety Engineering (PSES’04)
- **August 16-19 on the Stanford University Campus**: IEEE Computational Systems Bioinformatics Conference Early-Bird registration through July 9th

**Tutorials, Short Courses in the Bay Area**

- **July 13 – San Jose – Professional Dev’t Courses with IEMT’04**
  - Flip-Chip, Nano, Lead-Free, RF/MMIC, ... [more]
- **August 9 & August 13 – Santa Clara**
  - Tutorials/Workshops at this year’s EMC’04 ... [more]
- **Partial List**
  - NARTE EMC Exam: Monday: Exam Prep Workshop – Friday: NARTE EMC Engineer Exam [more]
  - PCB Design: Double-Sided and Multilayer: for the novice to intermediate product designer – PCBs that meet EMC requirements.
  - Basic EMC Measurements: an introduction to basic EMC measurements and instrumentation – EMC design methodologies.
  - Fundamentals of EMC Design: designing circuits and systems with built-in compatibility – medical, military, communications, IT.
  - Introduction to Numerical EMC Modeling: numerical EMC modeling techniques - strengths and weakness – which are appropriate.
  - Aerospace EMC at the Centennial of Flight: the needs of the aerospace industry – new electromagnetic effects and challenges.
  - Fundamentals of Signal Integrity: propagation, impedance, termination – Multi-conductor buses, SI measurements.
- **Plus a Dozen More**
  - Early-Bird registration through July 9th

Support our advertisers

**MARKETPLACE** – Services

Conference Calendar

Pages 16-17
From the editor . . .

Yes, we get cards and letters – well, mainly emails. Here’s one that came in last week:

Dear Paul,

I want to drop you a quick note to say how wonderful the new e-GRID [notification email] looks! I really like the easy-to-read formatting, use of color, and previews linking to the actual articles, and I am confident that under your continued leadership, the GRID will be an even better communications forum for the Bay Area’s IEEE members.

Thank you very much. I hope you are enjoying the start of the summer!

Best,
Clara Shih
Chair, Stanford IEEE

Well, the HTML-formatted e-GRID notification emails you’ve been receiving are something I’ve been perfecting for a couple of years now. I’m sure most of you get HTML-formatted subscription e-Bulletins from various businesses or other organizations, with their use of color, multiple columns of summary information, and hyperlinks to web pages for more details. These provide “rich content” and can quickly give previews of our upcoming meetings.

Over a dozen Bay Area Members asked me to send them text-only versions, either because of email program incompatibilities, a fear of viruses or malware – or because text is better for mobile devices (PDAs, phones) and for the visually impaired (and can more easily be converted to audio) – so we now also have the option for a brief text-only notification email, pointing to the web-based version of the HTML-formatted one. This works out fine for them – though it isn’t as “rich” in its ability to give you a grasp of the upcoming events, or be passed around to others in your workgroup.

Send me your opinions on what we’re doing!

Paul Wesling editor@e-grid.net

NOTE: This PDF version of the IEEE GRID – the 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: www.e-GRID.net
Conference Information
This symposium addresses safety engineering for equipment and devices, allowing engineers, students and others with an interest in electrical product safety to discuss and disseminate technical information and to enhance their professional skills.

- Talk to and discuss problems with vendors displaying the latest Regulatory Compliance products.
- Attend Technical Sessions, Workshops, Tutorials and Demonstrations specifically targeted to the electrical safety engineering professional.
- Registered PSES participants can also attend the TC-8 Workshop hosted by the EMC Society on Friday August 13, at no additional cost.
- Social event Friday evening, August 13.
- The PSES Symposium will immediately follow the IEEE Electromagnetic Compatibility Society's (EMC) annual symposium, at the same location.

Technical Program
Half-day Workshops
- EMC Effects on Functional Safety
- New Concept for Protection against Electric Shock
- Hazard-Based Safety Engineering (HBSE): Applying Engineering Fundamentals to the Design and Analysis of Products to Maximize User Safety
- One-day IEC Standards Workshop

Talks and Tutorials
- Product Safety in China, Singapore, Brazil, Argentina
- Product Safety Incident Investigations and Forensics
- Cemented Joints in Solid Insulation
- Designing for Safety -- How to Communicate with the Engineering Team
- Designing for Safety -- Heat Release Rates of Household Items
- Medical Product Design & Medical Standards
- CPSC: Who We Are and What We Do
- Outsourcing Product Design and Manufacturing
- Thermal Safety of Laptop Computers
- War stories by staff and attendees

Plus More
See the speaker and topic listing on the website

While product safety has been addressed in various committees over the years, there has never been a professional society or symposium solely devoted to product safety engineering, as a discipline, until now. Attend the first annual Product Safety Engineering Symposium and be a part of this important new direction.

Early-Bird Discount
Register before July 1 to receive discounted rates. Additional discount also allowed for registrants of EMC’04.

Exhibit information
Judy Johnson, judithej@shentel.net

To Register, and for more information
Go to: [www.e-grid.net/conf/pses.html](http://www.e-grid.net/conf/pses.html)
or call Diana Krynski at 800 810 4333.

Sponsor:

In cooperation with:
HOT INTERCONNECTS 12 brings together designers and architects of high-performance chips, software, and systems at the University and global business levels. Presentations focus on up-to-the-minute developments demonstrating leading-edge designs by engineers and researchers throughout the world. Two days of technical sessions and a day of tutorials will keep you on top of the latest developments within industry and academic laboratories.

HOT INTERCONNECTS sessions (Aug 25, 26):
- Architectures
- Routers and Switches
- System-Level Interconnects
- Packet Classification and Lookup
- Multiprocessor Interconnects
- Security and Network Processors

Find out more on our website!

TUTORIALS Friday August 27  FREE PARKING!  (Tutorial-only registrations OK)
Using the Open Network Laboratory (full day)
Prof. Jonathan Turner
Resilient Network Infrastructures for Global Grid Computing (half day)
Dr. Luca Valcarenghi
Internet Infrastructure Security (half-day)
Dr. G. Manimaran
High-Speed Networking: High-Bandwidth Low-Latency Communication (full day)
Dr. J. Sterbenz

Free symposium parking at Stanford University
- See driving and parking directions on our website
- On-site registration available

Sponsored by the IEEE Computer Society Technical Committee on Microprocessors and Microcomputers

For full information and registration, visit the HOT INTERCONNECTS website:
www.e-grid.net/conf/hoti.html
The IEEE Engineering in Medicine and Biology Society will hold its annual international conference at the historic St. Francis Hotel on Union Square in the center of San Francisco in 2004. The conference offers an opportunity for professional interaction in all areas relevant to biomedical engineering. In addition to the technical programs, professional tours will be available, affording attendees the opportunity to visit local research facilities in both educational and industrial settings.

**EMBC 2004** sessions address the following themes:

- Biosignal Processing and Biosystem Modeling
- Biomedical Imaging and Image Processing
- Sensors and Instrumentation
- Micro and Nano Biotechnology
- Biorobotics and Biomechatronics
- Bioinformatics and Computational Biology
- Healthcare Information Technology
- Clinical Engineering
- Drug Delivery and Gene Therapy
- Cardiovascular and Pulmonary Systems
- Neural and Rehabilitation Engineering
- Molecular, Cellular, and Tissue Engineering
- Biomechanics
- Industrial Applications
- Education
  ... plus 15 Mini-Symposia

**Important Date:**

**Reduced Rates through July 1, 2004**

*Student/Retired rate available*

For full information and registration, visit the **EMBC 2004** website:

[www.e-grid.net/conf/emb.html](http://www.e-grid.net/conf/emb.html)

---

**KEYNOTE SPEAKERS**

**Paul C. Lauterbur, Nobel Laureate**

2003 Nobel Prize in Medicine

Dr. Lauterbur is recognized as the father of MRI, and will share with us his experience of inventing the imaging principles for MRI as well as his view on interdisciplinary research.

**Peter G. Katona, Sc.D.**

President & CEO, The Whitaker Foundation

Dr. Katona will discuss the Whitaker Foundation’s support of Biomedical Engineering and its impact on the development of the field.

**WORKSHOPS and TUTORIALS**  
**Wednesday, 9/1**

(Workshop-only registrations OK)

- Ethics in Biomedical Research
- Cardiorespiratory Variability: Models, Mechanisms
- Individual and Population Biomedical Models
- Computational Biology and Bioinformatics
- Level-Set Methods for Medical Imaging App’ns
- Medical Infrared Imaging
- Magnetic Resonance Imaging
- Biomedical Robotics and Biomechatronics
- Medical Image Analysis
- Microanalytical Devices for Bioprocessing
- Who/What Top Employers Hire
- Healthcare Wireless - Mobile Solutions in Hospitals
- Pulse Oximetry
- Project Management in a Regulated Industry
- Clinical Engineering Practices Review
  ... and more! Check website for scheduling details

**Free admission to the Exhibits!**

**Exhibit Hours**  
(Preregister, or register on-site)

- Wednesday, Sept. 1  Noon-6 p.m
- Thursday, Sept. 2  8 a.m.-6 p.m.
- Friday, Sept. 3  8 a.m.-6 p.m.
- Saturday, Sept. 4  8 a.m.-5 p.m

**Transportation:** Park at the Union Street or Ellis O’Farrell garage, or ride BART or MUNI to the Powell Street station.
The 2004 International Conference on Ferrites (ICF) is the ninth in a series of conferences that provide a forum for the presentation and discussion of the latest scientific and technological developments in ferrites (magnetic ceramics) and related materials.

The conference will cover all areas of basic science and technology for ferrites and related materials. Special emphasis will be placed on advanced findings and emerging technologies that are expected to open new horizons for ferrites in the twenty-first century. More than 250 presentations on the results of academic, technical, and industrial studies will be given.

**Technical Program**

**Science**
- Physics of ferrites and related materials
- Chemistry of ferrites and related materials
- Crystal growth, sintering and microstructure
- Thin films, multilayers, and fine particles
- Other basic science

**Processing and Applications**
- Raw materials and manufacturing processes/facilities
- Soft magnetic materials and cores
- Hard magnetic materials and magnets
- Magnetic recording media, heads and systems
- Magneto-optics and applications
- High frequency and microwave ferrites
- Bio-magnetics and medical applications
- Power magnetics
- Transducers and sensors

**Special Topics**
- Nano-structured ferrites and related materials
- Magnetic & magnetorheological fluids, novel devices
- Multilayer chip inductors
- Other novel emerging technologies

**Special Symposia**
- Novel Applications and Materials for Electromagnetic Interference (EMI) Devices
- Application and Technology of Soft Ferrites
- Industrial Challenges for Soft Ferrite Producers
- Half Metallic Oxide Junctions and Highly Spin-Polarized Currents

**Technical Tours**
A tour of the Advanced Light Source at Lawrence Berkeley National Laboratory is planned for Wednesday, Aug. 25, 9:00 a.m. to noon. The cost of the tour is $25 and includes transportation. Buses will leave from the hotel at 7:30 a.m.

**Social Program**
Exhibits & Welcome Reception Sunday, Aug. 22, 6-8 p.m.
Conference Banquet Tuesday, Aug. 24, 7-9 p.m.
Wine Country Tour Friday, Aug. 27, 8 a.m.-5 p.m.

**Exhibits and Sponsorships**
This conference also offers the opportunity to interface with those potential customers who otherwise may be difficult to reach:
- Manufacturers of processing equipment
- Manufacturers of characterization equipment
- Designers and users of ferrite components
- Suppliers of ferrite materials

**Exhibit Hours**
Free admission to the Exhibits! (Register on-site)
Sunday, Aug. 22 6-8 p.m.
Monday, Aug. 23 10 a.m.-4 p.m.
Tuesday, Aug. 24 10 a.m.-4 p.m.
Wednesday, Aug. 25 10 a.m.-4 p.m.

**Early-Bird Discount**
Register before **July 23, 2004** to receive discounted rates.

**To Register, or for more information**
Go to: [www.e-grid.net/conf/icf.html](http://www.e-grid.net/conf/icf.html)
or call 614-794-5890 to register by phone.

Can’t attend? Order the ICF-9 Proceedings.
Welcome to the exciting new world of Wescon, combining exhibits with industry forums on OEM electronics, nanotechnology, supply chain management and net-centric defense industry manufacturing.

Wescon is the re-engineered industry event for the total design and supply chain. The Wescon/2004 Exhibit and Conference Program broadens its focus to the needs of the total supply chain for the electronics design, manufacturing and distribution process. IEEE, AFEI, NANOWorld and Wescon come together at a joint plenary session presenting new visions of where technology is taking us, today and tomorrow.

Wescon brings engineers and scientists together in an environment that advances their education and careers by opening doors to a wealth of intellectual property, a wide range of technology tools and components, and access to immediate solutions for commercial applications.

Some of the highlights:

EDA Tools & Engineering Software

Test & Measurement Equipment
Stand-Alone Test Instruments - PC-based Instruments/ Cards - Wired Telecom/Datacom Test - Fiber-Optic/Electro-Optic Test - RF/Microwave/Wireless Communications Test - EMC Test - Environmental Test - Software - Test Accessories and Services

Component Technology
Connectors and Interconnects – Semiconductors and ICs - Active and Passive Components - Power Components - Electro-Mechanical Components - Mechanical Packaging

The Autonomous Vehicle Technology Showcase is a new and exciting event focused on advanced technologies and their impact today and tomorrow, with 7 contenders from the recent DARPA Grand Challenge – includes an introductory workshop and sidebar briefings on the exhibit floor, covering mobility, processing, sensors, radar/ladar, data storage, GPS, mapping, algorithms, emergency stopping, and more.

Wescon – owned by engineers and run by engineers to benefit engineers.

September 21-23
Anaheim Convention Center

Welcome to the exciting new world of Wescon, combining exhibits with industry forums on OEM electronics, nanotechnology, supply chain management and net-centric defense industry manufacturing.

Wescon is the re-engineered industry event for the total design and supply chain. The Wescon/2004 Exhibit and Conference Program broadens its focus to the needs of the total supply chain for the electronics design, manufacturing and distribution process. IEEE, AFEI, NANOWorld and Wescon come together at a joint plenary session presenting new visions of where technology is taking us, today and tomorrow.

Wescon brings engineers and scientists together in an environment that advances their education and careers by opening doors to a wealth of intellectual property, a wide range of technology tools and components, and access to immediate solutions for commercial applications.

Some of the highlights:

EDA Tools & Engineering Software

Test & Measurement Equipment
Stand-Alone Test Instruments - PC-based Instruments/Cards - Wired Telecom/Datacom Test - Fiber-Optic/Electro-Optic Test - RF/Microwave/Wireless Communications Test - EMC Test - Environmental Test - Software - Test Accessories and Services

Component Technology
Connectors and Interconnects – Semiconductors and ICs - Active and Passive Components - Power Components - Electro-Mechanical Components - Mechanical Packaging

The Autonomous Vehicle Technology Showcase is a new and exciting event focused on advanced technologies and their impact today and tomorrow, with 7 contenders from the recent DARPA Grand Challenge – includes an introductory workshop and sidebar briefings on the exhibit floor, covering mobility, processing, sensors, radar/ladar, data storage, GPS, mapping, algorithms, emergency stopping, and more.

Registered for NANOWorld or Ei EXPO gets you free admission to all WESCON exhibits and pavilions!

For more Wescon, NANOWorld and Ei EXPO details, please visit: www.e-grid.net/conf/wescon.html

When registering, use priority code 94566
CSB2004 is sure to be one of the key bioinformatics events in 2004, providing a broad spectrum of peer-reviewed, bioinformatics-related topics covering the breadth and depth of this dynamically evolving field. Our topic submission procedures, keynote speakers, paper and poster presentations, tutorials and social events have all been designed to cater to bioinformatics’ eclectic mix of disciplines. CSB2004 also has the lowest registration fees of any conference if its kind in the US, making it possible for everyone to attend. However, attendance is limited so please register early.

**KEYNOTE SPEAKERS:**

**Philip Green, Ph.D.**
Professor, Genome Sciences & Adjunct Professor, Computer Science and Engineering, University of Washington, Seattle

**Benoit Mandelbrot, Ph.D.**
Sterling Professor of Mathematical Sciences, Yale University, IBM Fellow Emeritus, IBM TJ Watson Research Center

**Gene Myers, Ph.D.**
Professor, Computer Science, University of California, Berkeley

**Ron Shamir, Ph.D.**
Professor, Computer Science Genetics Branch, Raymond and Beverly Sackler Chair in Bioinformatics, Tel Aviv University

**INVITED SPEAKERS:**

**Hamid Bolouri, Ph.D.**
Professor, Institute for Systems Biology

**Michael Eisen, Ph.D.**
Assistant Adjunct Professor of Genetics & Development, University of California, Berkeley, & Scientist, Life Sciences Division, Lawrence Berkeley Lab

**Jim Kent, Ph.D.**
Research Scientist, Baskin School of Engineering, University of California, Santa Cruz

**Paul S. Meltzer, M.D., Ph.D.**
Acting Chief and Senior Investigator, Genetics Branch, Head, Molecular Cytogenetics Section, National Human Genome Research Institute

**Sandy Shaw**
Vice President, Fractal Technology, Health Discovery Corp

**Stephen Wong, Ph.D., PE**
Director, HCNR Center for Bioinformatics, & Associate Professor, Department of Radiology, Harvard Medical School and Brigham & Women's Hospital

---

**Bioinformatics** - scientific and engineering disciplines bringing new biological discoveries to fields as varied as human health, agriculture, the environment, energy and biotechnology. Find out more at [CSB2004](http://www.e-grid.net/conf/csb.html)

**Who should attend:**
Bioinformaticists, Biologists, Computer Scientists, IT Professionals, and Engineers who want to quickly learn about the evolving field of bioinformatics.

**Location:**
Held on the Stanford University campus, CSB2004 is easily accessible to professionals living in the SF Bay Area and Silicon Valley.

*See our website for driving and parking directions.*

Sponsored by the IEEE Computer Society with corporate support of the Hewlett-Packard Company

"I think the next century will be the century of complexity."

...Stephen Hawking

For more Conference details including session titles, technical presentations, and on-line registration, please visit: [www.e-grid.net/conf/csb.html](http://www.e-grid.net/conf/csb.html)

**Tutorials Offered on Monday, August 16**
(as low as $100 – includes one AM and one PM)

**MORNING SESSIONS**
- Introduction to Evolutionary and Functional Genomic Analysis
- Tandem Mass Spectrometry in Proteomics
- Use the Genome Browsers to Get the Most Out of Public Genomes
- Computational Genetics: Haplotype Inference and Applications in Human Disease Gene Mapping
- Intro. to Dynamic Programming & Its Applications to Bioinformatics

**AFTERNOON SESSIONS**
- Bioinformatics: The Machine Learning Approach
- Using dChip for Microarray and SNP Chip Data Analysis
- Discovering Regulatory Networks from Gene Expression and Promoter Sequence
- Computational Methods in Phylogenetics
- From Sequence to Structure: Protein Structure Prediction

Listing of topics and instructors at [www.e-grid.net/conf/csb.html](http://www.e-grid.net/conf/csb.html)
World’s EMC Experts Converge in Santa Clara this August

IEEE INTERNATIONAL SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY

August 9-13, 2004 – Santa Clara, CA
Santa Clara Convention Center

Join over 1,000 of the world’s leading Electromagnetic Compatibility (EMC) engineers at the 2004 Symposium here in the Santa Clara Valley. For five full days, over August 9 to 13, EMC engineers will attend workshops and special sessions, hear technical papers presented by leaders in the industry, and view numerous experiments and demonstrations which are designed to put into practice the theory and applications learned in the technical sessions. In addition, over 200 exhibitors of EMC-related products and services will be on hand to present the latest technological advances in this industry. Engineers representing the diverse fields of telecom, automotive, and medical EMC will attend. The heart of Silicon Valley will also draw engineers working with printed circuit boards and integrated circuits. EMC design and test challenges are present across a wide range of industries.

The local Santa Clara Valley Chapter of the IEEE EMC Society organizes this symposium. Its steering committee members are from leading technology companies such as Cisco Systems, Hewlett Packard, Apple Computer, Lockheed Martin, and Underwriters Laboratories, among others. Chairman John Howard, a noted EMC Consultant, commented, “Not only will this year’s symposium provide a great opportunity for engineers to attend cutting edge technical sessions, but it will also encourage the unique networking with fellow engineers that can only enhance one’s career. No where else does this level of EMC technical expertise converge in one place at one time.”

SYMPOSIUM AT A GLANCE - Sessions

| PCB Analysis and Design | Measurement Techniques |
| Shielding - Signal Integrity | Computer Modeling |
| Coupling - Lightning Protection | Model Parameter Determination |
| Filters and Conducted Emissions | CAD Modeling and Extraction |
| Automotive EMC - System EMC | Modeling & Simulation Validation |
| Gasketing and Grounding | Modeling for Signal Integrity |
| Cables and Connectors | Test Facilities, Instrumentation |
| | Reverberation Chambers |
| | Immunity Testing |
| | Radio Systems Interference |
| | Wireless Testing SAR |
| | FCC and Digital Devices |
| | Standards and Regulations |
| | Plus Experiment Demonstrations, Committee & Standards Meetings |

Introductory Level Workshops Offered

• 20 workshops, plus a NARTE exam prep session and the NARTE EMC Engineer exams
• Included with full conference registration, or register for only the “workshop” day you want

Reduced registration fees through July 9th

For more information on the Symposium, a complete listing of exhibitors, and registration forms, please visit:

www.e-grid.net/conf/emc.html

Note: attendees can select from full-day or full-week registration options.

Limited exhibit space is still available; local exhibitors are welcome. Interested exhibitors should contact Sue Kingston at s.kingston@ieee.org for more information.
### Current Exhibitors for the 2004 EMC International Symposium

Use the registration form to receive a free day pass to the EMC’04 exhibits

**Exhibit Hours:**
- **Tues & Wed August 10, 11** - 9:00am - 5:30pm
- **Thursday August 12** - 9:00am - 3:00pm

(Print out and bring)

<table>
<thead>
<tr>
<th>Exhibitors</th>
<th>Booth numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panashield, Inc.</td>
<td>811</td>
</tr>
<tr>
<td>Panel Components Corporation</td>
<td>721</td>
</tr>
<tr>
<td>Pearson Electronics Inc</td>
<td>617</td>
</tr>
<tr>
<td>PPM Ltd</td>
<td>608</td>
</tr>
<tr>
<td>REO – USA</td>
<td>910</td>
</tr>
<tr>
<td>RF Installations, Inc.</td>
<td>718</td>
</tr>
<tr>
<td>RFI Corporation</td>
<td>922</td>
</tr>
<tr>
<td>Rogers Corp.</td>
<td>910</td>
</tr>
<tr>
<td>Rohde &amp; Schwarz</td>
<td>201</td>
</tr>
<tr>
<td>Savor Coatings</td>
<td>603</td>
</tr>
<tr>
<td>Schaffner EMC</td>
<td>315</td>
</tr>
<tr>
<td>Schlegel Systems, Inc.</td>
<td>916</td>
</tr>
<tr>
<td>Shieldex Trading</td>
<td>T-6</td>
</tr>
<tr>
<td>Schurter</td>
<td>820</td>
</tr>
<tr>
<td>Seven Mountains Scientific Inc</td>
<td>839</td>
</tr>
<tr>
<td>Siemic, Inc.</td>
<td>935</td>
</tr>
<tr>
<td>Simlab Software GMBH</td>
<td>1144</td>
</tr>
<tr>
<td>Solar Electronics</td>
<td>1036</td>
</tr>
<tr>
<td>Southwest Research Institute</td>
<td>815</td>
</tr>
<tr>
<td>Specialty Silicon Products Inc</td>
<td>840</td>
</tr>
<tr>
<td>Spectrum Control, Inc.</td>
<td>1033</td>
</tr>
<tr>
<td>Spira Manufacturing</td>
<td>912</td>
</tr>
<tr>
<td>Steward, Inc.</td>
<td>847</td>
</tr>
<tr>
<td>Sunol Sciences Corp.</td>
<td>724 823</td>
</tr>
<tr>
<td>Taiyo Yuden USA, Inc.</td>
<td>810</td>
</tr>
<tr>
<td>TDK RF Solutions</td>
<td>834 933</td>
</tr>
<tr>
<td>Tech- Etch, Inc.</td>
<td>612</td>
</tr>
<tr>
<td>Technology International</td>
<td>510</td>
</tr>
<tr>
<td>Tecknit, Inc.</td>
<td>509</td>
</tr>
<tr>
<td>TennMax Inc.</td>
<td>321</td>
</tr>
<tr>
<td>TennRich Electronics</td>
<td>709</td>
</tr>
<tr>
<td>Test Equipment Corporation</td>
<td>711</td>
</tr>
<tr>
<td>Test &amp; Measurement World</td>
<td>T-7</td>
</tr>
<tr>
<td>Thermo KeyTek</td>
<td>921</td>
</tr>
<tr>
<td>Thermshield LLC</td>
<td>504</td>
</tr>
<tr>
<td>TIMCO Engineering Inc.</td>
<td>620</td>
</tr>
<tr>
<td>Traxstar Technologies</td>
<td>719</td>
</tr>
<tr>
<td>TUV America, Inc.</td>
<td>216</td>
</tr>
<tr>
<td>Tyco Electronics Corp.</td>
<td>909</td>
</tr>
<tr>
<td>Underwriters Laboratories</td>
<td>1705</td>
</tr>
<tr>
<td>US Navy</td>
<td>837</td>
</tr>
<tr>
<td>Vanguard Products Corp.</td>
<td>816</td>
</tr>
<tr>
<td>Vishay Intertecnhology, Inc.</td>
<td>622</td>
</tr>
<tr>
<td>W. L. Gore &amp; Associates</td>
<td>715</td>
</tr>
<tr>
<td>Wyle Laboratories</td>
<td>844</td>
</tr>
<tr>
<td>X2Y Attenuators, LLC</td>
<td>848</td>
</tr>
<tr>
<td>York EMC Services Ltd.</td>
<td>704</td>
</tr>
</tbody>
</table>

---

3M Electronic Products Div.  701  ETH Zurich '05 Symposium  1711
3M Electronics Markets Mtls Div.  702  ETS-Lindgren  301
A. H. Systems  418  Fair-rite Products  515
Acemark/Cherry Mtls Consulting  705  Ferrshield Inc  723
Advanced Test Equipment Rentals  619  Ferroxcube USA  507
Agilent Technologie  824  Fischer Custom Comm's  316 415
AK Stamping Co.  710  Florimics  911
American Assoc for Lab Accreditation  845  Fotofab  943
American TCB  944  G-Mag/ETronic  609
AMIC (Advanced Mtls & Integration)  1045  Garwood Laboratories, Inc.  1047
Amphenol Canada Corp.  939  Global Trading  937
Amplifier Research  401  Haefely EMC  501
Andro Computational Solutions  843  HV Technologies  423
ANSI-ASC  636  IBM  846
Antenna Research Assoc. (ARA)  516  IEEE 2005 EMC Symposium break area
Applied Simulation Technology  506  IEEE EMC Society  1707
Arc Technologies, Inc.  419  IEEE PSES Society  1710
Arnellabs  803  Instruments for Industry  831
Avalon Equipment  505  Intermark (USA) Inc.  932
Bay Area Compliance Lab  219  International Certification Services  422
Braden Shielding Systems  924  Isodyne, Inc.  818
California Instruments  320  Item Publications  1702
Canon  1139  JDS Uniphase- OCLI Products  T-8
Captor Corporation  621  Johanson Dielectrics, Inc.  720
CKC Laboratories, Inc.  915  Kluwer Academic Publishers  1035
CMC Electronics/Cincinnati  808  Laird Technologies  502
Colograf  1040  Leader Tech. Inc.  1133
Communications & Power Industries  936  Liberty Labs, Inc.  945
Compliance Certification Services  1152  Magnetics, Div. of Spang  322
Conoc Corp.  610  MAJR Products Corp.  224
Conformity Magazine  523  MET Laboratories  920
Coteau Vert/NTT Advanced Tech  1143  Michigan Scientific Corp.  323
Credence Technologies  716  Micom Labs  817
CSA  1044  Microwave Journal  T-11
Cuming Microwave  804  MPE Ltd.  708
D. L. S. Electronic Systems  1243  Murata Electronics N. A., Inc.  616
Dayton T Brown Inc  1034  Narte Inc  522
Detectus  717  National Instruments  917
Dexter Magnetic Technologies, Inc.  601  National Technical Systems  606
Dynamic Sciences International  602  Naval Surface Warfare Ctr, Dahlgren  801
Educated Design & Development  615  NAWCAD  835
EE - Evaluation Engineering  802  Nebraska Ctr -Excellence in Electronics  838
Electro Magnetic Test, Inc.  T-4  NEC/ Tokin America  712
Electro- Magnetic Applications, Inc.  424  NIST  274
Elite Electronic Engineering, Inc.  1147  Noise Laboratory Co. Ltd.  215
Elliott Laboratories  508  Northwest EMC  319
EM Software & Systems  1039  NTS  606
EMC Compliance Mgmt. Group  822  Ophir RF, Inc.  940
EMCIA (Nutwood UK Ltd)  706  Optical Filters Ltd  324
emi-tec GMBH  948  Orion Industries, Inc.  519
EMS-Plus  T-9  Pacific Aerospace Electronics  503
EMSCAN Corp.  1136  PADS Japan Co., Ltd.  1138 1237
Convergence of CE and the Computer Industry: A Tsunami of Digital Revolution

Kick-off meeting of the new Consumer Electronics Chapter

Speaker: Arup Gupta, CTO Consumer Electronics Group, Intel
Location: HP-Cupertino Oak Room, Bldg 48. Just North of Hwy 280 (Wolfe Rd Exit) at the corner of Pruneridge Ave. and Wolfe Rd. Turn right on Pruneridge Ave and left into HP site. Follow signs to Building 48 Lobby / Oak Room.

RSVP: for further details (time of talk, etc), please send email to: Abhi Dugar at abhi.dugar@esstech.com

SCV Consumer Electronics
TUESDAY JUNE 29


While product safety has been addressed in various committees over the years, there has never been a professional society or symposium solely devoted to product safety engineering, as a discipline, until now. Attend the first annual Product Safety Engineering Symposium and be a part of this important new direction. It's here – locally – in Santa Clara.

This symposium addresses safety engineering for equipment and devices. It allows engineers, students and others with an interest in electrical product safety to discuss and disseminate technical information and to enhance their professional skills.

• Talk and discuss problems with vendors displaying the latest Regulatory Compliance products.
• Attend Technical Sessions, Workshops, Tutorials and Demonstrations specifically targeted to the electrical safety engineering professional.

More information:
www.e-grid.net/conf/pses.html
The Case For Starting a Business for Yourself … and In Silicon Valley:

Forum: “The Dream – and Focusing to Make it Real”
Speaker: Manu Pillai (Product Acceleration Inc.)
Time: 6:00 PM

Presentation: “Making It - How To Go Into Business For Yourself”
Speaker: Orin Laney (PhD Candidate, Touro U.)
Time: 7:45 PM

Time: Forum at 6:00pm, Dinner at 7:00pm, after dinner presentation at 7:45pm
Place: Wyndham Garden Hotel, 1300 Chesapeake Terrace, Sunnyvale - off Lawrence Expwy/ Caribbean Drive at Hwy 237
Reservations: through website: www.ieee-scv-ems.org
Cost: (with reservations thru Friday June 25): $25 (IEEE member), $30 (non member), $5 surcharge thereafter (cash or check at the door). Student IEEE members - $5.
Other information: leave message with Rich Hendrickson at (408) 203-3462

As a sequel to our outsourcing/offshoring theme of the last few months, this month the Santa Clara Valley Engineering Management Society discusses local operations at startups. The before-dinner forum is on bootstrapping a new company in Silicon Valley, highlighting the experiences of the company’s founder. Following networking and a sit-down dinner, the after-dinner topic will be on making it with your own business startup.

Before-Dinner Forum presentation -

The Dream – and Focusing to Make it Real

After the tech bust, outsourcing and agonizing, it’s time to use lessons learned and innovate ourselves out of this economy. The presentation will cover a year 2000 startup, its survival and its growth strategies. Topics will range from developing and refining go-to market ideas in product and services, to leveraging the engineering discipline, to initiating and managing sales, to building solid teams (outsourced/offshore and in-house/local) and focusing. We will discuss cash flow and fundraising options - with their risk-reward tradeoffs, including VC fundraising, government SBIR/ATP funds, and using your personal funding sources (and support systems needed for that). Marketing and advertising budget, in the areas of market intelligence, strategy development, channel selection and partner development will be discussed in the context of developing strategic partnerships. This will be a "gloves off" format, and attendees are encouraged to actively participate. At the end of this presentation, attendees should be able to start the process of assessing their risk tolerance, survival chances, and the fundamental value proposition … and perhaps go to the next level of building their own businesses.

Manu Pillai is CEO/Founder of Product Acceleration Inc. (PAI), started in 2000 with personal funds. PAI is based on his experiences in speeding up product design and delivery across hardware and software design, manufacturing and test. PAI has now grown into a focused Engineering Software and Services company, with its own EDA products for the FPGA implementation space, and services that include design process re-engineering as well as custom software development. PAI includes Fortune 250 clients as well as emerging startups, and continues to be funded primarily by internal growth, with assistance from specific individual investors (angel investors) as well as strategic corporate investors. Manu has a BE (EE) from University College, Dublin, Ireland, and an MBA from Santa Clara University. Prior to founding PAI, he worked with Mitsubishi Electric in India, UAE and Japan, followed and then with Solectron Corp., Fujitsu PC and Maxtor in Silicon Valley. PAI was recently (continued, next page …)
featured by the San Jose Mercury News as an example of a small but growing company, and is hiring at a steady pace.

**After-Dinner presentation -**

**Making It: How To Go Into Business For Yourself**

After graduation, many engineers are surprised to discover that employers value them less for their academic prowess than for certain intangible qualities. The flip side of the coin is that employers are always surprised when the engineers who exemplify those intangible qualities are first to quit their "careers" to found new businesses. This is a talk on how to amaze your friends, surprise your enemies, and disconcert your spouse by starting a successful business of your own. In cooperation with the forum speaker, this talk will build on your new strategic knowledge and concentrate on the personal aspects and challenges required to transition from wage slave to a tough-as-nails captain of industry (and floor sweeper). Personal characteristics make a crucial difference in early stage success. Topics include preparation and risk taking, decision making, and how to test your readiness. For the skeptics among you, certain reasons not to go into business will be discussed and the relative merits of employment will be included for comparison. Several of the most important mistakes of new businesses will be developed at length.

Orin Laney became interested in electronics when he built his first crystal radio at age twelve. He was raised in the Washington DC area and received his BSEE from the University of Maryland under its Co-op Engineering Program. He later obtained his MBA from Brigham Young University and has used it to found numerous small businesses in the electronics field. Mr. Laney is currently pursuing his Ph.D BA at Touro University. A senior member of the IEEE and a member and former chair of the IEEE-USA Intellectual Property Committee, he is busier than ever, designing, researching, and making deals.

**July 13-16:**  
**IEEE Int'l Electronics Manufacturing Technology (IEMT) Symposium**  
San Jose Marriott - in conjunction with SEMICON/West.

The IEEE's IEMT is an international forum on electronic/photonic/MEMS components and systems manufacturing technology, a joint effort of SEMI and the IEEE CPMT Society. It brings to Silicon Valley a unique venue for engineers and scientists with technical papers on research, development, and applications of manufacturing technology for components, assemblies, and systems. Individual sessions will deal with reliability, green manufacturing, MEMS packaging, design for manufacturing, the effects of using low k materials, wafer level and stacked die packaging, and testing.

You will learn:
- Practical solutions to current production problems
- How to meet the process challenges of the 90nm node
- The latest trends in final manufacturing technology from recognized experts
- What is new in advanced packaging, reliability, materials, and design for test

Who should attend:
- Process, equipment and materials engineers in assembly, packaging and test
- Process and product development managers

See also the six Professional Development Courses.

More information:
[www.e-grid.net/conf/iemt.html](http://www.e-grid.net/conf/iemt.html)

---

**BERG SOFTWARE DESIGN**

**BRIAN A. BERG**  
Software Consultant

- SCSI
- Fibre Channel
- Storage Area Networks
- Optical Storage
- Expert Witness

bberg@bswd.com  [www.bswd.com](http://www.bswd.com)  
408.741.5010

---

**CSB2004**

Computational Bioinformatics  
August 16-19 at Stanford U. Sessions, Tutorials, Keynotes  
Reduced Rates thru July 19!  
[www.e-grid.net/conf/csb.html](http://www.e-grid.net/conf/csb.html)
Liquid Lens Technology

Speaker: Bruno Berge, Founder, President and CTO of Varioptic, Lyon, France
Time: Pizza Social 7:00PM, presentation 8:00PM
Place: National Semiconductor Credit Union Bldg 31, large auditorium, 955 Kifer Road, Sunnyvale
RSVP: RSVP@silicavalley.com
Web: www.silicavalley.com

The electrowetting phenomenon is used to modify the shape of the interface between two non-miscible transparent liquids, thus forming a variable lens with voltage control. Varioptic is a company which develops products based on this new technology, after 10 years of academic research. The basic principle of the technology and the physical limitations will be discussed, especially the size issue. Application will be discussed in different fields of optics, including CMOS cameras for the mobile phone market.

Dr. Berge received his Ph.D in physics from the University of Grenoble (1984), then served as full time researcher at CNRS, and did two years of post-doctoral research at the University of Chicago, in Pr. Albert Libchaber, renowned for his achievements in Chaos Theory. Dr Berge studied condensed matter problems in the field of interfacial phenomena. In 1998 Dr Berge was appointed as full Professor at Ecole Normale Superieure de Lyon, a prestigious French academic institution, where he conducted research on biophysics.

Dr. Berge's pioneering work in electrowetting, culminated in publication of "Electrowetting of water on insulator films" in 1993, reestablished this field of applied physics, which had languished since the 1930s. Electrowetting is now a burgeoning field, and Dr. Berge's foundational work and deep understanding of the underlying principals gives Varioptic a substantial competitive advantage against companies attempting to use electrowetting in optics.

Dr. Berge serves as Founder, President and CTO of Varioptic. He is responsible for overseeing R&D and collaborates with Mr. Paillard in setting the strategic direction of the Company. His research continues to generate intellectual property for Varioptic, and his refinements and variations on the vLens position it as the appropriate solution in a broad range of industrial and consumer applications.

Aug. 16-19 on the Stanford University Campus:
IEEE Computational Systems Bioinformatics Conference
Tutorials: Monday, August 16
For more information, and to register online:
www.e-grid.net/conf/csb.html
IEEE Entrepreneur's SIG Meeting

Time: 3:00 - 5:00 P.M.
Place: NOVA 505 W. Olive
Palo Alto Room (inside 767) Sunnyvale, CA
For further information contact Art Rahman, Chair of IEEE CNSV, at ataur.rahman@worldnet.att.net
Web: www.ieee-sv-consult.org/

---

SCV Consultants Network
FRIDAY JULY 9

IEEE Entrepreneur's SIG Meeting

Time: 3:00 - 5:00 P.M.
Place: NOVA 505 W. Olive
Palo Alto Room (inside 767) Sunnyvale, CA
For further information contact Art Rahman, Chair of IEEE CNSV, at ataur.rahman@worldnet.att.net
Web: www.ieee-sv-consult.org/

---

SF – Power Engineering

WEDNESDAY AUGUST 18

Summer Banquet
Electric Power: Demand Response Issues in California

Speakers: Mary Ann Piette (Director DR, LBNL) and Joe Desmond (Deputy Secretary of Energy Resources, CA)
Time: More details later – hold this date!

---

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

July 13-16: **IEEE International Electronics Manufacturing Technology Symposium in San Jose**

The IEEE’s IEMT is an international forum on electronic/photonic/MEMS components and systems manufacturing technology, a joint effort of SEMI and the IEEE’s CPMT Society. It brings to Silicon Valley a unique venue for engineers and scientists with technical papers on research, development, and applications of manufacturing technology for components, assemblies, and systems. Individual sessions will deal with reliability, green manufacturing, MEMS packaging, design for manufacturing, the effects of using low k materials, wafer level and stacked die packaging, and testing. Early registration discount through July 2nd. For registration information, an Advance Program and a listing of the Professional Development Courses: [www.e-grid.net/conf/iemt.html](http://www.e-grid.net/conf/iemt.html)

Aug. 9-10: **Workshop on Memory Design and Testing will be in San Jose**

The workshop (MTDT'04) covers all aspects of memory design, process technologies and testability related topics, such as memory circuit designs, cell structures, fabrication processes, design architectures and related testing and verification methods for SRAM, DRAM, Flash and non-volatile memories, EPROM, EEPROM, embedded memories, logic-enhanced and FIFO memories, 3-D memories, and content addressable memories. For more information, contact Rochit Raysuman, 408 727 2222, r.rajsuman@advantest-ard.com


Attend workshops and special sessions, hear technical papers presented by leaders in the industry, and view numerous experiments and demonstrations which are designed to put into practice the theory and applications learned in the technical sessions. Visit with over 200 exhibitors of EMC-related products and services. See our [GRID display pages](http://www.e-grid.net/conf/emc.html). For registration information, see the website: [www.e-grid.net/conf/emc.html](http://www.e-grid.net/conf/emc.html)


This symposium addresses safety engineering for equipment and devices. It will allow engineers, students and others with an interest in electrical product safety to discuss and disseminate technical information and enhance their professional skills. Talk and discuss problems with vendors displaying the latest Regulatory Compliance products. Attend Technical Sessions, Workshops, Tutorials and Demonstrations specifically targeted to the electrical safety engineering professional.

See our [GRID display page](http://www.e-grid.net/conf/pses.html) for more details.

For registration information, see the website: [www.e-grid.net/conf/pses.html](http://www.e-grid.net/conf/pses.html)

Aug. 16-19: **IEEE Computational Systems Bioinformatics comes to Stanford in August**

CSB2004 is one of the important bioinformatics events and provides a broad spectrum across the bioinformatics field. Our keynote speakers, paper and poster presentations, tutorials and social events have all been designed to cater to bioinformatics’ eclectic mix of disciplines. CSB2004 has the lowest registration fees of any conference of its kind worldwide to make it possible for everyone to attend. And this year it is in our own “back yard.”

The tutorials will be given on Monday, August 16, offering the opportunity to learn about new areas of bioinformatics research, get an introduction to important established topics, and/or develop higher skill levels in areas for which they are already knowledgeable. See our [GRID display page](http://www.e-grid.net/conf/csb.html).

For more information, and to register online: [www.e-grid.net/conf/csb.html](http://www.e-grid.net/conf/csb.html)

Aug. 22-24: **Hot Chips Symposium at Stanford**

The IEEE Symposium on High Performance Chips (HOT CHIPS 16) will be held in Stanford’s Memorial Auditorium with tutorials on Sunday followed by two days of paper presentations on Monday and Tuesday. For more information, visit the Hot Chips website: [www.hotchips.org](http://www.hotchips.org).

Aug. 23-27: **Int’l Conference on Ferrites in S.F.**

ICF’04 provides a forum for the presentation and discussion of the latest scientific and technological developments in ferrites (magnetic ceramics) and related materials. The conference covers all areas of basic science and technology for ferrites and related materials. Special emphasis is placed on advanced findings and emerging technologies that are expected to open new horizons for ferrites in the twenty-first century. More than 250 presentations on the results of academic, technical, and industrial studies will be given. Exhibits give the opportunity to visit with suppliers. Reduced registration rates through July 23. See our [GRID display page](http://www.e-grid.net/conf/icf.html) for more details.

For more information, and to register online: [www.e-grid.net/conf/icf.html](http://www.e-grid.net/conf/icf.html)
Aug. 25-27: Symposium on High Performance Interconnects being held at Stanford

**HOT INTERCONNECTS 12** brings together designers and architects of high-performance chips, software, and systems at the University and global business levels. Presentations focus on up-to-the-minute developments demonstrating leading-edge designs by engineers and researchers throughout the world. Two days of technical sessions and a day of tutorials will keep you on top of the latest developments within industry and academic laboratories. Free parking on the campus!

See our [GRID display page](www.e-grid.net/conf/hoti.html) for more details.

For more information, and to register online:

[www.e-grid.net/conf/hoti.html](www.e-grid.net/conf/hoti.html)

Sept 1-4: Conference on Engineering in Medicine and Biology comes to San Francisco

The IEEE Engineering in Medicine and Biology Society holds its annual international conference at the historic St. Francis Hotel on Union Square in the center of San Francisco. The conference offers an opportunity for professional interaction in all areas relevant to biomedical engineering. In addition to the technical programs, professional tours will be available, affording attendees the opportunity to visit local research facilities in both educational and industrial settings. Workshops and tutorials are on Wednesday, 9/1, and local engineers may register for only the workshops. Keynote speaker is Paul C. Lauterbur, 2003 winner of the Nobel Prize in Medicine. Extensive exhibits are free to Bay Area professionals.

See our [GRID display page](www.e-grid.net/conf/emb.html) for more details.

For more information, and to register online:

[www.e-grid.net/conf/emb.html](www.e-grid.net/conf/emb.html)

Sept 21-23: Wescon comes to Anaheim this year, with NANOWorld, EI EXPO, plus more

The re-engineered Wescon/2004 brings together the technical programs of NANOWorld, the **Enterprise Integration EXPO**, the **Autonomous Vehicle Technology Showcase**, and more. The vendor exhibits include pavilions on test and measurement equipment, components, EDA tools, engineering software, power components, and prototype and short-run production.

See our [GRID display page](www.e-grid.net/conf/wescon.html) for more details.

For more information, visit the website:

[www.e-grid.net/conf/wescon.html](www.e-grid.net/conf/wescon.html)

Oct 7-8: LEOS Workshop: SBIR Grants for the Curious Engineer in Business

The US government and other domestic agencies provide funding for projects and assistance for R&D to small businesses under the Small Business Innovative Research (SBIR) program. Funds from tens to hundreds of thousands of dollars are available for work on topics ranging from nanotechnology to astronomy.

This workshop is for engineers, entrepreneurs, and small-business executives who wish to learn how to "read between the lines" of government solicitations and how to win grants and contracts. This two-day Workshop will be held in Sunnyvale, at the National Semiconductor Credit Union meeting rooms. More details: [www.ieee.org/sbir/](www.ieee.org/sbir/)

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](www.Analog-RF.com)

The **CONFERENCE CALENDAR** is a service to our IEEE Members. It outlines upcoming IEEE workshops and conferences in the Bay Area. Please submit items to the GRID Editor: editor@e-grid.net.

Conferences are encouraged to purchase display space in the **GRID.pdf** and publicize their event on our website and in our **e-GRID** email notification service. For the Conference Publicity flyer, please download:

[www.e-grid.net/docs/conf-flyer.pdf](www.e-grid.net/docs/conf-flyer.pdf)
Patent Agent
Jay Chesavage, PE
MSEE Stanford
3833 Middlefield Road, Palo Alto 94303
patents(at)chesavage(dot)com
TEL: 650-494-9162 FAX: 650-494-3835

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

Mixed-Signal IC Development
• From Inception to Production Transfer
• Turnkey, Design Services & Consulting
• Design Reviews & Troubleshooting
Mixel, Inc.
Excellence in Mixed Signal Design
(408) 274-2736
sales@mixl.com www.mixl.com

Elliot Laboratories
Compliance Testing & Consulting
• EMC
• Product Safety
• NEBS (Verizon Certified ITL)
• Telecom & Wireless
www.elliottlabs.com info@elliottlabs.com
phone: (408) 245-7800

Elliott Laboratories
Compliance Testing & Consulting
• EMC
• Product Safety
• NEBS (Verizon Certified ITL)
• Telecom & Wireless
www.elliottlabs.com info@elliottlabs.com
phone: (408) 245-7800

Bernie Siegal
Thermal Engineering Associates, Inc.
650-961-5900
info@thermengr.com www.thermengr.com

Mixel, Inc.
Excellence in Mixed Signal Design
(408) 274-2736
sales@mixl.com www.mixl.com

Wi-Fi, UWB, WBA, 3G, Bluetooth, Telematics, Satellites, DoD …
Wireless Systems
Contract R&D Technical consulting
Antenna Design & development, RF/
Subsystem, Radio Frontend Integration,
Reference Designs, Concept to Products
Contact Dr. Jamal S. Izadiant
ANTENNEM COMMUNICATION, LLC, 408-927-6880
info@antennem.com www.antennem.com

GRID.pdf Do you provide a service?
e-GRID Would you like more inquiries?
• Access 25,000 engineers and managers
• IEEE Members across the Bay Area
• Monthly and Annual Rates available
Visit our Marketplace (page 18)
Download Rates and Services information:
www.e-grid.net/docs/marketplace-flyer.pdf