

Dated Material - Meeting Notice.  
IEEE SCV EMC Society  
C/O Tom Winegar  
11741 Regnart Canyon Dr.  
Cupertino, CA 95014

Presorted Std.  
U. S. Postage  
Paid  
Cupertino, CA  
Permit No. 98

# Spectral Lines

[www.scvemc.org](http://www.scvemc.org) Santa Clara Valley Chapter of IEEE Electromagnetic Compatibility Society

May 2003 Issue

## Officers:

**Chairman:** Chuck Troia  
408-525-6080  
fax: 408-525-5172  
[ctroia@cisco.com](mailto:ctroia@cisco.com)

**Vice Chair:** Len Goldschmidt  
408-902-8252  
fax: 408-902-8387  
[lgoldsch@cisco.com](mailto:lgoldsch@cisco.com)

**Treasurer:** Bertram Chan  
408-586-1983  
fax: 408-586-1900  
[Bchan@foundrynet.com](mailto:Bchan@foundrynet.com)

**Secretary:** Tom Winegar  
408-446-3130  
fax: 408-446-3127  
[Tom@DJMElectronics.com](mailto:Tom@DJMElectronics.com)

## Committees:

**Activities:**  
Raymond Mascia  
[raym@runner.engr.sgi.com](mailto:raym@runner.engr.sgi.com)

**Institutions:** Jack Huber  
408-241-5699  
[jhuber@lairdtech.com](mailto:jhuber@lairdtech.com)

**Membership:** Rich Watkins  
408-736-3425  
[HERSHEY185@aol.com](mailto:HERSHEY185@aol.com)

**Nominating:**  
Hans Mellberg  
(831) 454-9450  
[emcconsultant@yahoo.com](mailto:emcconsultant@yahoo.com)

**Webmaster:** Mike Walker  
[webmaster@scvemc.org](mailto:webmaster@scvemc.org)

## SCV IEEE/EMC Society Meeting Tuesday, May 13, 2003

Time: 5:30 p.m. Social, 7:00 p.m. Intro, 7:15 p.m. Presentation

Place: Applied Materials Bowers Cafe, 3090 Bowers Avenue,  
Santa Clara, CA 95051-0804

Subject: "Considerations for Advanced EMC Design Flow"

Speaker: Sudip Das, Senior EMC Engineer, Cisco Systems, Inc.

## Abstract:

In an ideal world, every hardware project should have an engineer responsible for functional design, regulatory compliance, signal integrity (SI), CAD, and manufacturing. Each of them would get ample time to thoroughly check and simulate their portions of the design. But in the real world, we are often faced with a lack of both time and resources. What can be done to make our design process effective, even in very fast-paced projects, so that none of the design objectives are overlooked? Another challenge would be: how to introduce this new process without breaking down the existing legacy process? And, of course, how and where does EMC fit in this overall process flow? One approach would be to embed the design requirements in the CAD tools, and by efficiently designing the schematics and PCB layout to preserve the compliance and SI knowledge base from one project to another.

## Biography:

Sudip Das is an EMC engineer at Cisco systems. He has been working as an EMC engineer for the last eight years. Before joining Cisco Systems, he was previously employed at Sun Microsystems. His primary focus areas are EMC, CAD design and SI, and overall hardware design process flow. He has worked with various types of products starting from high-end super computers to low-end ultra-cost sensitive home office products using offshore companies. He has authored several papers in IEEE EMC journals. He received his Ph. D and MS degree in Electrical Engineering from University of Kentucky and B.Tech in Electronics from IIT Kharagpur, India.

## IEEE/EMC/SCV CHAPTER Meeting Tuesday May 13, 2003

LOCATION: Applied Materials Bowers Café  
3090 Bowers, Santa Clara, CA 95051-0804  
5:30 p.m. Social  
7:00 p.m. Presentation



"Total Solution, Single Source"



**ETS-LINDGREN**  
An ESDI Technologies Company

Anechoics, Shielding, Antennas, and Accessories  
info@ets-lindgren.com www.ets-lindgren.com

**Altamont Technical Sales**  
Phone: 925-294-9774 Fax: 925-294-9775  
Email tom@atsemc.com

**GLOBAL EMC AND SAFETY SERVICES**

- Design Consultation
- Pre-Compliance and Certification Testing
- Technical Seminars
- Facility Management
- Two Bay Area Locations



**LABORATORIES, INC.**

*Celebrating our 27th Year*  
**(800) 500-4EMC**  
www.ckc.com




**Montrose Compliance Services, Inc.**  
Electromagnetic Compatibility and Product Safety

**Mark I. Montrose**  
Consulting and Design Services Seminars - Public and Private  
Printed Circuit Board Layout and Design  
CE Test Laboratory (ISO Guide 25 Assessed)  
Specializing in ITE and Industrial Products for CE Compliance

[www.montrosecompliance.com](http://www.montrosecompliance.com)

2353 Mission Glen Drive ( and FAX (408) 247-5715  
Santa Clara, CA 95051-1214 [mmontros@ix.netcom.com](mailto:mmontros@ix.netcom.com)

The **One-Stop Source** for

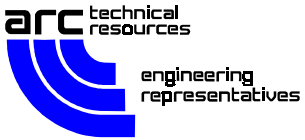


**EMC**  
**RF** and  
**Microwave**  
Test Equipment and Products

amplifiers • shielded rooms • antennas • receivers  
powerline filters • esd guns • anechoic chambers  
used equipment • analyzers • transient generators

[www.djmelectronics.com](http://www.djmelectronics.com)

DJM-ELEC (866)



technical resources (408) 263-6486 PH.  
engineering representatives (425) 940-3180 FAX  
www.arctechnical.com  
Equipment for Regulatory Compliance

Anechoic Chambers	Burst / Surge	Emissions
Shielded Enclosures	Immunity	ESD Equipment
Power Analyzers	Antennas	LISN's & CDN's
Harmonics / Flicker	Towers	Positioners
RF Amplifiers	Magnetic Fields	AC Sources

*Complete Systems & Services for the EMC Professional*

**TURNTABLES**  
**ANTENNA TOWERS**

**Sunol Sciences Corp**  
[www.sunolsciences.com](http://www.sunolsciences.com)  
**925-485-9260**



**HD USA**  
The Positioning Company

Ph: 1-877-77 HDUSA sales@hdusa.net  
Fax: 301-931-1049 www.hdusa.net

**Positioning Systems**  
Masts, Turntables, Rotators, Custom Solutions



[www.lairdtech.com](http://www.lairdtech.com)  
**Jack Huber**  
Tel 408 241-5699; Fax 408 241-5689  
E-mail: [jhuber@lairdtech.com](mailto:jhuber@lairdtech.com)  
**Laird Technologies**

Testing systems for EMC



Conducted Immunity  
Radiated Immunity  
Emissions Systems  
Transient Systems  
GTEM! Systems  
CDN's & Clamps

Open Systems  
Industry Standard hardware

**COMPLIANCE SYSTEMS CORPORATION**  
(714) 572-1338 (714) 572-2338 FAX  
[www.compliancesys.com](http://www.compliancesys.com)

**100 Hz to 40 GHz**  
Test Equipment, Antennas & Accessories for  
Communication, Surveillance, & EMC Testing



Tel: (631) 274-5506  
Fax: (631) 274-5508  
[emc@aratech-inc.com](mailto:emc@aratech-inc.com)

**www.aratech-inc.com**



**Underwriters Laboratories Inc.**  
11825 Niles Canyon Road  
Sunol, CA 94586  
925-862-9051  
<http://www.ul.com/emc/emctech.html>

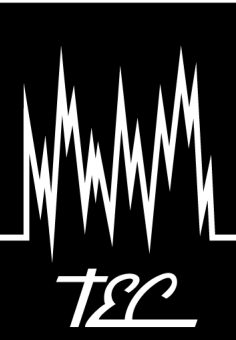
Daily Site Rentals  
Domestic/International EMC Testing  
4 - 3/10m OATS  
3m Semi-anechoic Chamber  
NVLAP Accreditation




**Telco Surge:** New Surge Platform  
Bellcore GR-1089  
FCC Part 68 / ETSI  
ANSI / UL tests

**CE Mark Equipment:** ESD, EFT, Surge testers  
Conducted Immunity  
Magnetic Fields, Dips, Sags  
Harmonics / Flicker

(703)904-5725 Fax (703)904-5739  
<http://www.haefely.com/>  
*Much More Than CE Mark Testing*



**EMC TEST EQUIPMENT**  
**RENTAL and SALES**

- Most major EMC brands in stock
- Knowledgeable technical support
- Calibration and repair services
- Rental, leasing, and financing options
- In the business since 1974

**1-888-RENT-EMC**  
**1-888-736-8362**  
sales@testeq.com <http://www.testeq.com/>



**Elliott**  
Elliott Laboratories - the Bay Area Compliance Leader - is happy to invite you to attend our...

**GRAND OPENING PARTY!**  
On May 2nd we welcome you to come see our brand new 27,000 square foot testing & engineering center in Fremont, California.

**Free Workshops!**  
**Free Food!**  
**Free Drinks!**  
**Live Music!**  
**Bring your friends & family!**

For more info or to RSVP visit: [www.ElliottLabs.com](http://www.ElliottLabs.com)

(215)385-0242  
[www.quantumchange.com](http://www.quantumchange.com)



**Quantum Change**  
EMC SYSTEMS

*Clifford's Fremont Laboratories*

Telecommunications Certification  
EIA/TIA-IS-968 (FCC Part 68)  
SDOC or TCB Approvals  
Industry Canada CS-03 & JATE

Fremont, California  
(510) 445-0500 [www.FremontLabs.com](http://www.FremontLabs.com)