

TABLE OF CONTENTS

Welcome

Chairman's Letter	2
Letter from Michigan Governor Jennifer M. Granholm	3
Letter from Wayne County Executive Robert A. Ficano.....	4
Letter from Detroit Mayor Kwame M. Kilpatrick.....	5

Symposium Schedule At A Glance	6-9
--------------------------------------	-----

EMC 2008 Symposium Committee.....	10
-----------------------------------	----

Technical Program

Introduction	11
Monday Workshops & Tutorials	12-15
Tuesday Technical Sessions	16-19
Wednesday Technical Sessions	20-23
Thursday Technical Sessions	24-25
Friday Workshops & Tutorials.....	26-29

Global EMC University 2008	30
----------------------------------	----

EMC Demonstrations and Experiments..	31-32
--------------------------------------	-------

EMC Society Technical Committees	33
--	----

Committee Meetings and Related Industry Meetings	34-35
---	-------

Social Activities

Welcome Reception	36
Gala Event	36
Awards Luncheon	36

Companion and Youth Programs	36
------------------------------------	----

Guest Tours	37
-------------------	----

General Information

Registration Hours	38
Shuttle Bus Schedule.....	38
Speaker Breakfast	38
Speaker Ready Room	38
Professional Development Hours	38
Internet Café	38
Message Center	38

Cobo Center Map	39
-----------------------	----

Marriott Map.....	40
-------------------	----

Exhibits

Exhibit Hall Floor Plan	41
Exhibitor Listing.....	42-43
Exhibitor Profiles	44-59

Advertisers	60
-------------------	----

EMC 2009 Call For Papers	61-62
--------------------------------	-------

2008 IEEE EMC CHAIRMAN'S MESSAGE

Dear EMC Society Members, Colleagues and Visitors:

Welcome to the 2008 IEEE International Symposium on Electromagnetic Compatibility in Detroit, Michigan. Welcome also to the Southeastern Michigan Section of the IEEE and to the local Chapter of the IEEE Electromagnetic Compatibility Society.

The local Symposium Organizing Committee has been industriously planning and scheduling to ensure that everyone attending the EMC2008 Symposium in Detroit has a rewarding and satisfying experience.

This is a very exciting time for our EMC Chapter here in the Detroit metropolitan area, since we are hosting our favorite IEEE event in our favorite town and offering all of our EMC colleagues from around the world a taste of Detroit's great Midwestern hospitality.

As you can clearly see when you arrive, the region is currently undergoing a renaissance with new developments and attractions. Downtown Detroit's development boom is unparalleled in the country, and we hope you will be able to find time in the busy Symposium schedule to visit some of our truly wonderful sights and places of diverse interest.

Culturally, Detroit has become one of the most cosmopolitan cities it has been my pleasure to visit in the last few years. It is not uncommon to walk down the halls at one of our twice a year Section Conference meetings and hear a half dozen languages spoken in the space of only a few meters. Along with this diversity has come some of the best of the food from all over the world, and Detroit restaurants can rival those in any city that I know. I hope you have time to try a few while you are here.

The Detroit 2008 Symposium Committee has worked hard to bring you an EMC Symposium experience that is both familiar and novel. Mobile and portable electronics EMC are a big part of this year's technical program. You can look forward to significant contributions from the Aerospace, Military, Commercial and Wireless segments of our industry, as they all reflect on how much electronics in general has adapted to our increasingly mobile society with the knowledge that we all take our electronics into electromagnetically "challenging" environments.

The EMC 2008 social program is designed to maximize personal interactions among our attendees. Our intention and goal has been to ensure the most 'networking' opportunities possible. Our "Gala" banquet this year will be held in the Symposium host hotel, the Detroit Marriott at the Renaissance Center. That means no long bus trips to and from a banquet site, and maximum opportunity to talk with associates.

Please see the rest of this final program to take the flavor of the technical and social program we have assembled for your enrichment and enjoyment. It is my hope that everyone who attends EMC 2008 will feel the traditional EMC Society spirit of welcome and inclusion here in Detroit.

We hope you enjoy the Education, Networking and Midwestern Hospitality offered by EMC 2008.

Kimball Williams
Chairman, 2008 IEEE EMC Symposium
Kimball@emcsociety.org





STATE OF MICHIGAN
OFFICE OF THE GOVERNOR
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

JOHN D. CHERRY, JR.
LT. GOVERNOR

Dear Friends:

I am honored to have the opportunity to welcome you to Detroit's world class conference and exposition location, Cobo Center. Since its inception in 1956, the Electromagnetic Compatibility Society of the Institute of Electrical and Electronics Engineers has served its members with technical education, peer networking, news of interest and interpretation of technical standards to the exceptional benefit its members.

During your visit to Detroit, I encourage you to take advantage of its world-class facilities, relax in the finest contemporary accommodations and sample gourmet fare at a host of award-winning restaurants. You can also explore some of the metro area's unique attractions, including the world-renowned Detroit Institute of Arts, The Henry Ford Museum- America's greatest history attraction, and the Charles H. Wright Museum of African American History.

Again, welcome to Detroit, and best wishes for a successful conference.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jennifer M. Granholm".

Jennifer M. Granholm
Governor



Robert A. Ficano
County Executive

August 18, 2008



Greetings,

On behalf of the citizens of Wayne County, I am delighted to welcome participants to the **Institute of Electrical & Electronic Engineers 2008 International EMC Symposium**. As the world's leading professional association for the advancement of technology, it is fitting that this important symposium be held here in Detroit.

I want to commend the **Institute of Electrical & Electronic Engineers** for your long-standing dedication to fostering an interest in the engineering profession by serving members as a source of technical and professional information, resources and services. I wish your organization continued success as you continue to support innovation and technological advancement.

To add more fun and enjoyment to your symposium experience, I want to urge each of you to take time to visit local restaurants, museums and other entertainment venues. You're always welcome in Wayne County, and we look forward to seeing you again soon.

Sincerely yours,

A handwritten signature in black ink that reads "Robert A. Ficano". The signature is written in a cursive, flowing style.

Robert A. Ficano
Wayne County Executive





KWAME M. KILPATRICK, MAYOR
CITY OF DETROIT
EXECUTIVE OFFICE

COLEMAN A. YOUNG MUNICIPAL CENTER
2 WOODWARD AVE., SUITE 1126
DETROIT, MICHIGAN 48226
PHONE 313•224•3400
FAX 313•224•4128
WWW.CLDETROIT.MI.US

August 18, 2008

Dear Friends:

On behalf of the citizens of Detroit, it gives me great pleasure to welcome the Institute of Electrical & Electronics Engineers (IEEE) to our great city.

I am excited that you have selected Detroit to host your 2008 International EMC Symposium. You will be pleased by our city's outstanding facilities and our friendly and courteous service.

During your stay please take time to experience Detroit and enjoy the unique attractions our city offers. Detroit is home to the largest museum of African American history, the Detroit Institute of Arts, Motown Historical Museum, the New Detroit Science Center and numerous other cultural attractions.

Our downtown includes two state-of-the-art sporting venues, Comerica Park, home of the Detroit Tigers and Ford Field, home of the Detroit Lions. Our city also features three Las Vegas style casinos and lots of exciting nightlife in historic Greektown.

On behalf of my entire administration and the citizens of Detroit, I say "welcome" and thank you for selecting Detroit. Please accept my best wishes for a successful symposium.

Sincerely,

Kwame M. Kilpatrick
Mayor, City of Detroit



2008 EMC SYMPOSIUM SCHEDULE AT A GLANCE (as of 8/1/2008)

SUNDAY, 17 AUGUST 2008

2:00pm to 6:00pm Registration Open Wayne Atrium

MONDAY, 18 AUGUST 2008

7:00am to 5:00pm Registration Open Wayne Atrium

7:00am to 5:00pm Speaker Ready Room Room O2-44

7:00am to 8:15am Speaker Breakfast Room O2-44 (Monday workshop & tutorial organizers and presenters only are invited)

8:30am to 12:00pm Workshops and Tutorials

	Room W2-65 MO-AM-1	Room W2-67 MO-AM-2	
	Introduction to EMI Modeling Techniques	Guide to Accreditation of EMC Laboratories in the US	Automotive Field Le

10:00am to 10:30am Morning Break 2nd Floor Foyer

12:00pm to 1:30pm Lunch On Your Own

1:30pm to 5:30pm Workshops and Tutorials

	Room W2-63 MO-PM-1	Room W2-65 MO-PM-2	
	Limitations of Simulation Techniques and Proper Model Validation for Both Signal Integrity and EMC	Basic EMC Measurements Tutorial	Advanced Field Probes

1:30pm to 5:30pm Global EMC University W2-66 (separate registration required)

3:00pm to 3:30pm Afternoon Break 2nd Floor Foyer

TUESDAY, 19 AUGUST 2008

7:00am to 5:00pm Registration Open Wayne Atrium

7:00am to 5:00pm Speaker Ready Room Room O2-44

7:00am to 8:15am Speaker Breakfast Room O2-44 (Tuesday technical & special session chairs and presenters only are invited)

8:30am to 12:00pm Technical Program

	Room W2-64 TU-AM-1	Room W2-65 TU-AM-2	
	Computational EM I	PCB Design I	Measur

8:00am to 12:00pm Global EMC University W2-66 (closed session, advance registration required)

9:30am to 5:00pm Exhibit Hall open Wayne Hall

9:30am to 4:00pm Demonstrations & Experiments Wayne Hall

10:00am to 10:30am Morning Break Wayne Hall

12:00pm to 1:30pm Lunch On Your Own

1:30pm to 5:00pm Technical Program

	Room W2-65 TU-PM-1	Room W2-63 TU-PM-2	
	Signal Integrity I	EM Environment	System

1:30pm to 5:00pm Global EMC University continued W2-66 (closed session, advance registration required)

3:00pm to 3:30pm Afternoon Break Wayne Hall

6:30pm To 8:30pm EMC 2008 Welcome Reception GMnext Showroom, Renaissance Center
A special thank you to General Motors Corporation for their generous donation of the GMnext Showroom for this event.



(Events take place at COBO Center unless otherwise noted.)

Room W2-63
MO-AM-3
High Power and
Immunity Testing

Room W2-64
MO-AM-4
Basic Antenna & Probe Use in EMC

Room 03-45/46
MO-AM-5
Fundamentals of EMC Part 1

Room W2-62
MO-AM-6
EMC and Wireless Devices Part 1

Room W2-64
MO-PM-3
Topics for Antennas and
Radiated Measurements

Room W2-67
MO-PM-4
iNARTE Exam Preparation

Room 03-45/46
MO-PM-5
Fundamentals of EMC Part 2

Room W2-62
MO-PM-6
EMC and Wireless Devices Part 2

Room W2-62
TU-AM-3
Measurement Techniques I

Room W2-63
TU-AM-4
Automotive EMC

Skyline Room
TU-AM-5-OF
Open Forum I

Room W2-62
TU-PM-3
System EMC Analysis

Room W2-64
TU-PM-4-SS
Special Session: Validation of Simulation Modeling Results

Skyline Room
TU-PM-5-OF
Open Forum 2

2008 EMC SYMPOSIUM SCHEDULE AT A GLANCE (as of 8/1/2008)

WEDNESDAY, 20 AUGUST 2008

7:00am To 5:00pm	Registration Open	Wayne Atrium		
7:00am To 5:00pm	Speaker Ready Room	Room O2-44		
7:00am To 8:15am	Speaker Breakfast	Room O2-44 (Wednesday technical & special session chairs and presenters only are invited)		
8:30am To 12:00pm	Technical Program	Room W2-64 WE-AM-1 Computational EM 2 (8:30am to 10:00am)	Room W2-64 WE-AM-2 EMC Management (10:30am to 12:00pm)	PC
8:00am To 12:00pm	Global EMC University	W2-66 (closed session, advance registration required)		
9:30am To 5:00pm	Exhibit Hall Open	Wayne Hall		
9:30am to 4:00pm	Demonstrations & Experiments	Wayne Hall		
10:00am To 10:30am	Morning Break	Wayne Hall		
12:00pm To 1:30pm	Lunch On Your Own			
12:00pm To 1:30pm	Amateur Radio Lunch (B.Y.O.)	Room M2-30		
1:30pm To 5:30pm	Technical Program	Room W2-64 WE-PM-1 Computational EM 3	Room W2-65 WE-PM-2 Signal Integrity 2	Measur
3:00pm To 3:30pm	Afternoon Break	Wayne Hall		
6:30pm To 10:30pm	IEEE EMC 2008 Gala Banquet	Renaissance Ballroom, Marriott Detroit at Renaissance Center		

THURSDAY, 21 AUGUST 2008

7:00am To 5:00pm	Registration Open	Wayne Atrium	
7:00am To 5:00pm	Speaker Ready Room	Room O2-44	
7:00am To 8:15am	Speaker Breakfast	Room O2-44 (Thursday technical & special session chairs and presenters only are invited)	
8:30am To 12:00pm	Technical Program	Room W2-64 TH-AM-1 Computational EM 4	Room W2-65 TH-AM-2 Electromagnetic Coupling
8:00am To 12:00pm	Global EMC University	W2-66 (closed session, advance registration required)	
9:30am To 1:00pm	Exhibit Hall Open	Wayne Hall	
9:30am to 12:00pm	Demonstrations & Experiments	Wayne Hall	
10:00am To 10:30am	Morning Break	Wayne Hall	
12:00pm To 2:00pm	Awards Luncheon	Riverview Ballroom	
2:30pm To 5:00pm	Technical Program	Room W2-64 TH-PM-1 Computational EM 5	Room W2-65 TH-PM-2 Emissions and Immunity

FRIDAY, 22 AUGUST 2008

7:00am to 2:00pm	Registration Open	Wayne Atrium		
7:00am to 5:00pm	Speaker Ready Room	Room O2-44		
7:00am to 8:15am	Speaker Breakfast	Room O2-44 (Friday workshop & tutorial organizers and presenters only are invited)		
8:00am to 5:00pm	iNARTE Certification Exams	Cadillac, Marriott Hotel		
8:30am to 12:00pm	Workshops and Tutorials	Room W2-67 FR-AM-1 EMC and Modern Power Electronic Systems	Room W2-65 FR-AM-2 Fundamentals of Signal Integrity	Aerospace
10:00am to 10:30am	Morning Break	2 nd Floor Foyer		
12:00pm to 1:30pm	Lunch on Your Own			
1:30pm to 5:30pm	Workshops and Tutorials	Room W2-63 FR-PM-1 The European EMC Directive 2004/108/EC: Conformance Requirements	Room W2-67 FR-PM-2 The State of Electromagnetic Environments (EME)	Practic
3:00pm to 3:30pm	Afternoon Break	2 nd Floor Foyer		

(Events take place at COBO Center unless otherwise noted.)

Room W2-62 WE-AM-3 IB Techniques 2	Room W2-65 WE-AM-4 Measurement Techniques 2	Room W2-63 WE-AM-5-SS Special Session: Recent Advances in Jitter and BER Analysis in High Speed Serial Links	Skyline Room WE-AM-6-OF Open Forum 3
--	---	---	--

Room W2-62 WE-PM-3 Measurement Techniques 3	Room W2-63 WE-PM-4-SS Special Session: Algorithm and Techniques for Parallel Processing for EMI/EMC	Skyline Room WE-PM-5-OF Open Forum 4
---	--	--

Room W2-62 TH-AM-3 Test Facilities and Instrumentation	Room W2-63 TH-AM-4-SS Special Session: Impact of External Noise Sources on High Speed Signal Integrity
--	---

Room W2-62 TH-PM-3 Shielding	Room W2-63 TH-PM-4 Product Safety
------------------------------------	---

Room W2-64 FR-AM-3 Lightning Protections	Room W2-63 FR-AM-4 Basic to Advanced EMI Failure Analysis	Room W2-62 FR-AM-5 Automotive EMC Part I	Room W2-66 FR-AM-6 Module Level EMI Measurements and Estimation
--	---	--	--

Room W2-65 FR-PM-3 EMI Filter Design	Room W2-64 FR-PM-4 Aircraft EMP Hardening Specifications and Measurement Methods	Room W2-62 FR-PM-5 Automotive EMC Part 2	Room W2-66 FR-PM-6 Carbon Nanotube Technology for Next-Generation Nanointerconnects
--	---	--	--

2008 EMC SYMPOSIUM COMMITTEE

2008 EMC Symposium Chair

Kimball Williams
Denso International America Inc.

Honorary Symposium Co-Chair

Dr. M Shridhar
University of Michigan at Dearborn

Symposium Vice Chair Local Arrangements Chair

Vino Pathmanathan
EMC Consultant

Transportation

Kendra Pridemore
Underwriters Laboratories

Secretary

Poul Andersen
Poul Andersen Consulting

Treasurer

Mark Ciechanowski
Ford Motor Company

Technical Program Co-Chairs

Mark Steffka
General Motors Corporation

Tom Jerse
The Citadel

Workshop/Tutorials Co-Chairs

Candace Suriano
Suriano Solutions

John Maas
IBM

Thomas Holmes
Agilent Technologies

Technical Papers Co-Chairs

Keith Frazier
Ford Motor Company

Scott Mee
Johnson Controls Inc.

Special Sessions Co-Chairs

Bogdan Adamczyk
Grand Valley State University

Rich Wiese
General Motors Corporation

Registration Chair

Sreeniwas Ranganathan
DPS Telecom

Marketing Chair

Robert Neff
Ingenium EMC Testing
Facton Project/Product Cost Analysis
Cybertech Technical Recruiting and Staffing

Continuity Chair

Trisha Taylor
Visteon Corporation

Web Site Chair

Scott Lytle
Yazaki North America, Inc.

Volunteer Coordination Chair

Dr. Phil Fanson
Ford Motor Company

Social Activities Chair

Andrew Shune
Chrysler

Reception

April Coles
IEEE

Gala

Robert Kado
Chrysler

Awards Luncheon

Breanne Scherbaty
Chrysler

Companion Program Chair

MaryLou Williams

Youth Program Chair

Amy Pinchuk

TECHNICAL PROGRAM: INTRODUCTION

The 2008 technical program has something for everyone — from the novice EMC engineer to the advanced practitioner.

Over 20 Workshops and Tutorials are offered ranging from EMC fundamentals to the latest topics in EMC, including:

- Introduction to EMI Modeling Techniques
- Guide to Accreditation of EMC Laboratories in the US
- Automotive EMC High Power and Field Level Immunity Testing
- Basic Antenna & Probe Use in EMC
- Fundamentals of EMC
- EMC and Wireless Devices
- Limitations of Simulation Techniques and Proper Model Validation for Both Signal Integrity and EMC
- Basic EMC Measurements Tutorial
- Advanced Topics for Antennas and Field Probes in Radiated Measurements
- iNARTE Exam Preparation
- EMC and Modern Power Electronic Systems
- Fundamentals of Signal Integrity
- Aerospace Lightning Protections
- Basic to Advanced EMI Failure Analysis
- Automotive EMC
- Module Level EMI Measurements and Estimation
- The European EMC Directive 2004/108/EC: Conformance Requirements
- The State of Electromagnetic Environments (EME)
- Practical EMI Filter Design
- Aircraft EMP Hardening Specifications and Measurement Methods
- Carbon Nanotube Technology for Next-Generation Nanointerconnects



Mark Steffka
General Motors



Tom Jerse
The Citadel

More than 160 carefully reviewed technical papers will be presented, including several special sessions of invited papers. This wealth of papers has been organized into technical areas and placed into tracks to make it easier for attendees to follow a particular area of interest. The technical tracks include:

- Computational EM
- PCB Design and Techniques
- Measurement Techniques
- Automotive EMC
- Signal Integrity
- EM Environment
- System EMC Analysis
- Electromagnetic Coupling
- Test Facilities and Instrumentation
- Emissions and Immunity
- Shielding
- Product Safety
- Special Session: Impact of External Noise Sources on High Speed Signal Integrity
- Special Session: Algorithm and Techniques for Parallel Processing for EMI/EMC
- Special Session: Validation of Simulation Modeling Results
- Special Session: Recent Advances in Jitter and BER Analysis in High Speed Serial Links

Back for a second year is the highly successful Global EMC University, with a renowned faculty of EMC experts from all over the world. This multi-session course has been designed for individuals with a background in EMC or who have attended the Fundamentals of EMC workshop in previous years.

In addition, the popular series of live Experiments and Demonstrations will be presented to reinforce the concepts of EMC with hands-on activity. The EMC Expo gives you the opportunity to get close to all the new technology and techniques in your field.

No matter what your level of experience, the 2008 IEEE International Symposium on EMC offers an unmatched opportunity to expand your EMC knowledge.

Mark Steffka, General Motors
Tom Jerse, The Citadel
Technical Program Co-chairs

MONDAY MORNING, 18 AUGUST 2008

	ROOM W2-65	ROOM W2-67	ROOM W2-63
8:30AM TO 12:00PM	<p>MO-AM-1 Introduction to EMI Modeling Techniques <i>Chair: Charles Bunting, Oklahoma State University</i></p>	<p>MO-AM-2 Guide to Accreditation of EMC Laboratories in the US <i>Chair: Werner Schaefer, Cisco Systems</i></p>	<p>MO-AM-3 Automotive EMC High Power and Field Level Immunity Testing <i>Chairs: Vince Rodriguez and Janet O'Neil, ETS-Lindgren</i></p>
	<p>This workshop will provide an introduction to all of the commonly used numerical EMC modeling techniques. It is intended to provide EMC engineers who are interested in learning the basics of these modeling techniques a fundamental understanding of all the different techniques, without the need for detailed math. Practicing modelers will also benefit from learning the fundamentals of modeling techniques they are currently not using. Each technique will be presented along with their strengths and weakness, so engineers can decide which techniques are appropriate for their types of problems.</p> <p>MO-AM-1-1 The Transmission Line Method <i>David P. Johns, CST of America</i></p> <p>MO-AM-1-2 Introduction to the Partial Element Equivalent Circuit Technique <i>G. Antonini, Uaq EMC Laboratory University of L'Aquila, Italy</i></p> <p>MO-AM-1-3 Introduction to the Finite-Difference Time-Domain (FDTD) Technique <i>Sam Connor, IBM</i></p> <p>MO-AM-1-4 Introduction to the Finite Element Method <i>Charles Bunting, Oklahoma State University</i></p> <p>MO-AM-1-5 Integral Equation Methods (MOM) in Numerical Modeling <i>Ji Chen, University of Houston and Jim Drowniak, Missouri University of Science and Technology</i></p>	<p>The workshop is planned as a true exchange of information between laboratory personnel who are either considering to seek accreditation for their laboratory or who are already accredited. A formal outline of the workshop is prepared and can be followed. However, emphasis is placed on answering questions from the audience to ensure that the true interests of attendees are covered. The author, a lead assessor with A2LA, also manages the quality system for accredited laboratories and is actively participating in and contributing to national and international EMC and Quality standards work. The presenter's extensive background knowledge about RF and microwave test instrumentation allows for an in-depth discussion of complex subjects as suitability of test equipment calibration services, test equipment suitability and measurement uncertainty calculations</p>	<p>The workshop will present an overview of immunity testing, concentrating on the ISO 11451-2 standard for full vehicle as well as the ISO 11452-2 standard for vehicle components. The issues of generating and measuring high field levels will be addressed as well as selection criteria for the antennas, amplifiers and field probes used during high power testing. The test environment of an anechoic chamber and reverberation chamber will be reviewed (the reverberation chamber is also an approved approach for immunity testing) with an overview of performing a test in these environments. Finally, the impact of this high power testing on OEMs will be addressed by a representative from one of the "Big Three" automotive companies in the greater Detroit area.</p> <p>MO-AM-3-1 Automotive RF Immunity Testing OEM Perspective <i>Keith Frazier, Ford Motor Company</i></p> <p>MO-AM-3-2 Test Instrumentation Considerations for Automotive EMC High Power and Field Level Immunity Testing <i>Hans-Peter Bauer, Rohde and Schwarz</i></p> <p>MO-AM-3-3 Generation and Measurement of High Field Levels for Automotive EMC High Power and Field Level Immunity Testing <i>Vince Rodriguez, ETS-Lindgren</i></p> <p>MO-AM-3-4 Test Environment Considerations for Automotive EMC High Power and Field Level Immunity Testing <i>Garth D'Abreu, ETS-Lindgren</i></p>
12:00PM TO 1:30PM	Lunch on your own		

MONDAY MORNING, 18 AUGUST 2008

ROOM W2-64	ROOM O3-45/46	ROOM W2-62
<p align="center">MO-AM-4 Basic Antenna & Probe Use in EMC <i>Chair: Candace Suriano, PhD, Suriano Solutions</i></p>	<p align="center">MO-AM-5 Fundamentals of EMC Part I <i>Chair: Daryl Beetner, Missouri University of Science and Technology</i></p>	<p align="center">MO-AM-6 EMC and Wireless Devices Part I <i>Chair: Dan Hoolihan, Hoolihan EMC Consulting</i></p>
<p>This workshop will provide an introduction to antenna and probe theory and application relevant to EMC. It will address fundamental principles of operation for various common antenna and field probe configurations covering the frequency spectrum associated with EMC testing.</p> <p>Introduction Candace Suriano, Suriano Solutions</p> <p>MO-AM-4-1 Fundamentals of Antennas and Probes <i>Zhong Chen, ETS-Lindgren</i></p> <p>MO-AM-4-2 Understanding Basic Techniques of Near Field/Far Field Analysis <i>Qin Yu, Alcatel-Lucent</i></p> <p>MO-AM-4-3 Understanding Measurement and Noise Figure in EMC <i>Tom Holmes, Agilent Technologies</i></p> <p>MO-AM-4-4 Basics of Pre-amplification: Noise Figure and Gain Compression</p> <p>MO-AM-4-5 Antennas, Ferrites and Coax <i>Paul Zdanowicz, Fair-Rite Products Corp</i></p>	<p>Organized by the EMC Society Education and Student Activities Committee, this tutorial is designed to present the basics of EMC to those who are new to the field of EMC, those who are seeking information on an aspect of EMC that they have not previously encountered, or those who desire a refresher on the proposed EMC topics.</p> <p>8:30am to 8:35am, MO-AM-5-1 Introduction <i>Daryl Beetner, Missouri University of Science and Technology, Rolla, MO</i></p> <p>8:35am to 10:00am, MO-AM-5-2 Current, If Not Obstructed, Will Always Flow In The "Path Of Least..." <i>Elya Joffe, K.T.M. Project Engineering, Hod Hasharon, Israel</i></p> <p>10:00am to 10:30am, Break</p> <p>10:30am to 12:00pm, MO-AM-5-3 Inductance and Capacitance in Electrical System Design <i>Daryl Beetner, Missouri University of Science and Technology, Rolla, MO</i></p>	<p>This workshop will provide key information on EMC concerns as they pertain to present and future wireless/cellular phone technologies and associated packaging issues. The first part of this workshop will introduce and define the concept of Platform and Cellular Device RF/Microwave Interference. It will include presentations on the concept of RF/microwave EMI for wireless systems including measurement techniques, design methodologies and case studies to establish risks and determine mitigation requirements for platform and device-generated RF/microwave EMI.</p> <p>MO-AM-6-1 Radio Frequency Interference: The Problem and its Scope <i>Harry Skinner, Intel Corporation</i></p> <p>MO-AM-6-2 Structure of RFI Source Signals <i>Kevin Slattery, Intel Corporation</i></p> <p>MO-AM-6-3 Software Defined Radio and Cognitive Radio Techniques <i>David A. Case NCE, NCT, Cisco</i></p> <p>MO-AM-6-4 Dynamic Frequency Selection <i>David W. Bare, Elliot Laboratories, Inc.</i></p>

MONDAY AFTERNOON, 18 AUGUST 2008

	ROOM W2-63	ROOM W2-65	ROOM W2-64
1:30PM TO 5:30PM	MO-PM-1 Limitations of Simulation Techniques and Proper Model Validation for Both Signal Integrity and EMC <i>Chair: Dr. Bruce Archambeault, IBM</i>	MO-PM-2 Basic EMC Measurements <i>Chair: Don Heirman, Don HEIRMAN Consultants</i>	MO-PM-3 Advanced Topics for Antennas and Field Probes in Radiated Measurements <i>Chairs: Zhong Chen and Janet O'Neil, ETS-Lindgren</i>
	<p>As signal speeds increase into the Gbit/sec range, the use of modeling and simulation is more important than ever before and has become quite common in real-world product design. However, using the right tool for the right job has become critical, since all simulation techniques have limitations. This workshop will include a number of experts in different modeling and validation techniques. Each speaker will provide a presentation concerning different modeling techniques, their practical limitations and how to validate simulation results.</p> <p>MO-PM-1-1 Introduction to the Limitations of Modeling/Simulation Techniques <i>Bruce Archambeault and Sam Connor, IBM</i></p> <p>MO-PM-1-2 Evaluation of Antenna Effective Length using MOM: Closing the Gap with Validation <i>Bob Johnk, Institute for Telecommunication Sciences, Boulder Colorado, USA</i></p> <p>MO-PM-1-3 FIT Numerical Modeling for EMI Discovery and "Design" <i>Jim DREWNIAK, Missouri University of Science and Technology, USA</i></p> <p>MO-PM-1-4 Method of Moments, Use, Validation and Limitations <i>Colin E. Brench, Southwest Research Institute, San Antonio Texas, USA</i></p> <p>MO-PM-1-5 Computational EM Applied to System Level Problems <i>Charles Bunting, Oklahoma State University</i></p> <p>MO-PM-1-6 Modeling and Measuring: Bridging the Great Schism in Engineering Electromagnetics <i>Vince Rodriguez, ETS-Lindgren</i></p>	<p>This tutorial will provide an introduction to basic EMC measurements with a primary focus on emission testing. While intended for those new to these disciplines, the latest activity in national and international standards related to EMC measurements and standards will be presented. A special focus will be on measurements and associated issues above 1 GHz as well as measurement uncertainty. An open discussion will follow the presentations.</p> <p>MO-PM-2-1 Emission Measurements for Tabletop Equipment <i>Steve Koster, Washington Laboratories, Ltd., Maryland USA</i></p> <p>MO-PM-2-2 Emission Measurements for Floor Standing Equipment <i>Bob Hofmann, Hofmann EMC Engineering</i></p> <p>MO-PM-2-3 IEC Transient-Immunity Testing Immunity <i>Thomas E. Braxton, Shure Incorporated, Niles IL, USA</i></p> <p>MO-PM-2-4 Immunity to Continuous RF Disturbances <i>John Maas, IBM</i></p> <p>MO-PM-2-5 Basic Measurement Sites, Methods and Associated Errors <i>Don Heirman, Don HEIRMAN Consultants</i></p> <p>MO-PM-2-6 Selecting a Quality EMC Lab <i>Daniel D. Hoolihan, Hoolihan EMC Consulting</i></p> <p>MO-PM-2-7 Uncertainty Considerations in Stating Pass/Fail <i>Don Heirman, Don HEIRMAN Consultants</i></p>	<p>This tutorial covers antenna and probe theory with a focus on advanced application specific topics relevant to EMC. It will address aspects of applications of antennas and field probes beyond those specified in typical manufacturer's data sheets. The discussions are concentrated on the usage of antennas and probes in testing to EMC industry standards. This tutorial will also provide the latest updates on ANSI and CISPR standards on antenna calibrations, and IEEE 1309 and IEC 61000-4-3 standards on probe calibrations.</p> <p>MO-PM-3-1 Half Power Beamwidth and High Power Measurements: The Dangers of Using Far Field Approximations in the Far Field <i>Vince Rodriguez, ETS-Lindgren</i></p> <p>MO-PM-3-2 Time-Domain Analysis of Antennas used for EMC <i>Dennis Camell, NIST</i></p> <p>MO-PM-3-3 Site Validation Above One GHz <i>Alexander Kriz, Austrian Research Center</i></p> <p>MO-PM-3-4 Practical Topics on Field Probes – Advanced <i>Zhong Chen, ETS-Lindgren</i></p> <p>MO-PM-3-5 Update for Antenna/Probe Standards and Applications <i>Michael J. Windler, Underwriters Laboratories, Inc.</i></p>

MONDAY AFTERNOON, 18 AUGUST 2008

ROOM W2-67	ROOM O3-45/46	ROOM W2-62
<p align="center">MO-PM-4 iNARTE Exam Preparation <i>Chair: Brian Lawrence, iNARTE, Inc.</i></p>	<p align="center">MO-PM-5 Fundamentals of EMC Part 2 <i>Chair: Daryl Beetner, Missouri University of Science and Technology</i></p>	<p align="center">MO-PM-6 EMC and Wireless Devices Part 2 <i>Chair: Dan Hoolihan, Hoolihan EMC Consulting</i></p>
<p>The iNARTE Examinations Preparation Tutorial is recommended for all who plan to take the NARTE Certification Examinations on August 22 at the conclusion of EMC 2008, and will also be of value to those who plan to attend The Global EMC University and who will want to later validate their new-found credentials. At the tutorial, we will advise attendees as to the format of the two part examinations, we will discuss the best approach to ensure success and will provide some working examples of typical exam questions.</p>	<p>1:30pm to 3:00pm, MO-PM-5-4 What is "Partial Inductance"? <i>Clayton Paul, Mercer University, Macon, GA</i></p> <p>3:00pm to 3:30pm, Break</p> <p>3:30pm to 5:00pm, MO-PM-5-5 Automotive EMC <i>Todd Hubing, Clemson University, Clemson, SC</i></p>	<p>The second part of this workshop will address specific device issues particularly as they relate to radiated electromagnetic interference and immunity for modern communications systems including cell devices, as well as the impact of new communications device technologies and dynamic frequency selection. Additional specific case studies will be presented along with a focus on selected wireless technology, packaging considerations, spectrum and laboratory measurement methods.</p> <p>MO-PM-6-5 EMC and Wireless in the Test Lab <i>Mike Violette</i></p> <p>MO-PM-6-6 Radio Frequency Interference <i>Kevin Slattery, Intel Corporation</i></p> <p>MO-PM-6-7 Evaluating Impact of RFI on WLAN and WWAN Performance <i>Harry Skinner, Intel Corporation</i></p> <p>MO-PM-6-8 Transmission Hyperspace: An Approach for Efficient and Interference-Free Spectrum Management for Diverse Radio Systems and Cellular Telecommunications Equipment <i>Andy Drozd, ANDRO Computational Solutions, LLC</i></p> <p>MO-PM-6-9 Wireless Interference and Hearing Aids <i>Stephen Berger, TEM Consulting</i></p>

TUESDAY MORNING, 19 AUGUST 2008

8:30am to 12:00pm	ROOM W2-64	ROOM W2-65	
	TU-AM-1 Computational EM I <i>Session Chair: Jun Fan, Missouri University of Science and Technology</i>	TU-AM-2 PCB Design I <i>Session Chair: Kermit Phipps, Electric Power Research Institute</i>	Measu <i>Sessi</i> <i>Hof</i>
8:30am	TU-AM-1-1 Modeling Experiences With Full-Wave Time-Domain Modeling Software	TU-AM-2-1 An Investigation on the Reduction Technique of EMI from Chassis with PCB	TU-AM-3-1 Statistical App Measurement Disturbance V
9:00am	TU-AM-1-2 Analysis of Distributed Coupling along Nonparallel Traces using PEEC with Phase Term Expansions	TU-AM-2-2 Inductance Calculations For Advanced Packaging in High-Performance Computing	TU-AM-3-2 In Situ Testing Methods for
9:30am	TU-AM-1-3 Statistical Response of Nonlinear Equipment in a Reverberation Chamber	TU-AM-2-3 Fast Evaluation of Electromagnetic Interference Between Antenna and PCB Traces for Compact Mobile Devices	TU-AM-3-3 In Situ Testing Method for R
10:00am	Morning Break		
10:30am	TU-AM-1-4 Multiconductor Transmission Line Modeling with VHDL-AMS for EMC Applications	TU-AM-2-4 Determining the Maximum Allowable Heatsink Voltage to Ensure Compliance With a Given Radiated Emissions Specification	TU-AM-3-4 Converting T to Equivalent
11:00am	TU-AM-1-5 Aperture modeling using a hybrid method for RFI analysis	TU-AM-2-5 Experimental Validation of Imbalance Difference Model to Estimate Common-Mode Excitation in PCBs	TU-AM-3-5 Calculation o Radiated Emi
11:30am			TU-AM-3-6 New Radiate Method using
12:00pm	Lunch on your Own		

TUESDAY MORNING, 19 AUGUST 2008

ROOM W2-62	ROOM W2-63	SKYLINE ROOM
<p>TU-AM-3 Measurement Techniques I <i>Session Chair: Bob Hofmann,</i> <i>Hofmann EMC Engineering</i></p>	<p>TU-AM-4 Automotive EMC <i>Session Chair: Richard Wiese,</i> <i>General Motors Corporation</i></p>	<p>TU-AM-5-OF <i>Open Forum I</i></p>
<p>Approach to Alternative Test Method: Alternative Method of Conducted Voltage</p>	<p>TU-AM-4-1 Outdoor Vehicular Test Range Turntable Impact on Electric-Field Uniformity Study</p>	<p>TU-AM-5-OF-1 Comparing Full Lateral Metallization and Reference Plane Stitching in LTCC Boards for Satellite Applications</p>
<p>Measurement of Large Machines: Alternative Conducted Emission Measurement</p>	<p>TU-AM-4-2 Study of a conformal hidden wire antenna used for the detection of stolen cars</p>	<p>TU-AM-5-OF-2 Shielding Effectiveness of Planar Negative- Permeability Screens</p>
<p>Measurement of Large Machines: Alternative Radiated Emission Measurement</p>	<p>TU-AM-4-3 Functional Safety and EMC for the Automotive Industry</p>	<p>TU-AM-5-OF-3 Techniques for Measuring the Common Mode current and Voltage of ASIC Devices</p>
<p>Total-Radiated-Power Measurements E-Field Data</p>	<p>TU-AM-4-4 Estimation of the Statistical Variation of Crosstalk in Wiring Harnesses</p>	<p>TU-AM-5-OF-4 The Influence of Printed Circuit Board Design on TEM Cell Measurements</p>
<p>Influence of Antenna Pattern on Emission Measurement Uncertainty</p>	<p>TU-AM-4-5 Radiated Immunity Tests of Automotive EMC Challenge Vehicle Active Antenna Designs</p>	<p>TU-AM-5-OF-5 Radio Frequency Compatibility of an RFID Tag on Glideslope Navigation Receivers</p>
<p>RF Immunity/Susceptibility Test RF-pulsed Rotating-EM Field</p>	<p>TU-AM-4-6 Frequency Modulated (FM) Radio Band Audio Interference Pre-Compliance Test Method</p>	<p>TU-AM-5-OF-6 On Contact Conditions in Connectors to Cause Common Mode Radiation</p> <p>TU-AM-5-OF-7 Analysis and Improvement the Isolation between Antennas on Airborne Platform with Traveling Wave Antennas Method</p> <p>TU-AM-5-OF-8 Effect of Slider Conductive Adhesive on EMI Radiation of Hard Disk Drives</p>

TUESDAY AFTERNOON, 19 AUGUST 2008

		ROOM W2-65	ROOM W2-63	
1:30pm to 5:00pm		<p align="center">TU-PM-1 Signal Integrity I <i>Session Chair: Sam Connor, IBM</i></p>	<p align="center">TU-PM-2 EM Environment <i>Session Chair: Dave Southworth, SPAWAR Systems Center, California</i></p>	<p align="center">Sys Sess</p>
	1:30pm	TU-PM-1-1 Signal Integrity Analysis of Single-ended and Differential Signaling in PCBs with EBg Structure	TU-PM-2-1 Understanding Pantograph Arcing in Electrified Railways — Influence of Various Parameters	TU-PM-3-1 A Study on the Capacitance of Magnetic Field Lines
	2:00pm	TU-PM-1-2 Signal Integrity Analysis of a 26-layer Board with Emphasis on the Effect of Non-functional Pads	TU-PM-2-2 The Use of High Performance HF Antenna Arrays to Optimize Reception in Urban Noise Environment	TU-PM-3-2 Modelling Inter-Cosite Radio Evaluate System
	2:30pm	TU-PM-1-3 A Novel HU-shaped Common-mode Filter for GHz Differential Signals	TU-PM-2-3 Electromagnetic Environment Characterization of Below-Deck Spaces in Ships	TU-PM-3-3 Digital to RF Mixed-Signal
3:00pm	Afternoon Break			
3:30pm	TU-PM-1-4 Power/Ground Noise Immunity Test in Wireless and High-Speed UWB Communication System	TU-PM-2-4 Description and Classification of Electromagnetic Environments: Revision of IEC 61000-2-5	TU-PM-3-4 The Behavior of DNA Methods	
4:00pm	TU-PM-1-5 A 6.4Gbps On-chip Eye Opening Monitor Circuit for Signal Integrity Analysis of High Speed Channel	TU-PM-2-5 EMC Feasibility Study of the use of 2.4-GHz-WLAN Applications on Bridges of Cruise and Container Vessels	TU-PM-3-5 Characterization of a Frequency-Dependent	
4:30pm	TU-PM-1-6 Method and Applications of Oscilloscope Waveform De-embedding to Remove Measurement Parasitics	TU-PM-2-6 Characterization of the EM Environment of Railway Spot Communication Systems	TU-PM-3-6 EMI Analysis of Converter Efficiency	

TUESDAY AFTERNOON, 19 AUGUST 2008

ROOM W2-62	ROOM W2-64	SKYLINE ROOM
<p>TU-PM-3 System EMC Analysis <i>Session Chair: Robert Scully, NASA</i></p>	<p>TU-PM-4-SS Special Session: Validation of Simulation Modeling Results <i>Session Chair: Bruce Archambeault, IBM</i></p>	<p>TU-PM-5-OF <i>Open Forum 2</i></p>
<p>The Correlation between Stray Fields of a Signal Transformer and Fields Emitted from Communication Equipment</p>	<p>TU-PM-4-SS-1 Proper Model Validation is Important for all EMI/EMC Applications</p>	<p>TU-PM-5-OF-1 Multimodal Circuit Model for The Analysis of Asymmetric Shunt Impedance Transitions</p>
<p>Interference Phenomena between Communication Equipments to System-Performance Degradation</p>	<p>TU-PM-4-SS-2 Differential Vias Transition Modeling in a Multilayer Printed Circuit Board</p>	<p>TU-PM-5-OF-2 Determination of Gain for Pyramidal-Horn Antenna on Basis of Phase Center Location</p> <p>TU-PM-5-OF-3 Investigation of Conducted Immunity and Spatial Distribution of RF Currents for a 2-Sided PCB</p>
<p>Coupling Analysis Methodology for Complex Systems</p>	<p>TU-PM-4-SS-3 Time-Domain Modeling Techniques for Periodic Structures</p>	<p>TU-PM-5-OF-4 Cable EMI Shielding Measurements using a Reverberation Chamber</p>
<p>Full System Simulation of EMI System by Modeling at the System Level</p>	<p>TU-PM-4-SS-4 Progress in the Development of a 2D Feature Selective Validation (FSV) Method</p>	<p>TU-PM-5-OF-5 Efficient Computation of the Shielding Effectiveness of Metallic Enclosures Loaded with Conductors</p>
<p>Simulation and Modeling of Faceplates by Frequency Dependent Impedance Matrix</p>		<p>TU-PM-5-OF-6 A Study for Grounding Effect to Improve Performance of WWAN</p> <p>TU-PM-5-OF-7 Synchronous Rectified Step-Down Converter Susceptibility to Conducted and Radiated EMI</p>
<p>Simulation Methods for Synchronous Buck Converter EMI Root Cause Analysis</p>		<p>TU-PM-5-OF-8 HF RFID Emissions and System Susceptibility</p>

WEDNESDAY MORNING, 20 AUGUST 2008

8:30am to 12:00pm	ROOM W2-64	ROOM W2-64	ROOM W2-62
	<p>WE-AM-1 Computational EM 2 <i>Session Chair: Charles Bunting, Oklahoma State University</i></p>	<p>WE-AM-2 EMC Management <i>Session Chair: Robert Scully, NASA</i></p>	<p>WE-AM-3 PCB Techniques 2 <i>Session Chair: Philip Keebler, Electric Power Research Institute</i></p>
8:30am	WE-AM-1-1 Simulation and Measurement of Low Frequency Open Surface Magnetic Field Shielding		WE-AM-3-1 A Study of Grounded-Heatspreader for EMI Mitigation of ASIC IC Package
9:00am	WE-AM-1-2 Evaluation of Equipment-Level Enclosure Shielding Properties in a Reverberation Chamber: Numerical and Experimental Analysis		WE-AM-3-2 PCB Ground Fill Design Guidelines for EMI
9:30am	WE-AM-1-3 Domain Separation with Port Interfaces for Calculation of Emissions from Enclosure Slots		WE-AM-3-3 Transient Detection Circuit for System-Level ESD Protection and Its On-Board Behavior with EMI/EMC Filters
10:00am	Morning Break		
10:30am		WE-AM-2-1 An Electromagnetic Compatibility Course for Computer Engineers	WE-AM-3-4 Advanced Full Wave ESD Generator Model for System Level Coupling Simulation
11:00am		WE-AM-2-2 Problematic Concepts in the Introduction of EMC	WE-AM-3-5 Noise Coupling Between Signal and Power/Ground Nets Due To Signal Vias Transitioning Through Power/Ground Plane Pair
11:30am		WED-AM-2-3 Structure for the Introduction of EMC Design	WE-AM-3-6 Numerical Investigation of Techniques for Reducing Radiated Emission of PCBs with Attached Cables in Complex Systems
12:00pm	Lunch on your Own		

WEDNESDAY MORNING, 20 AUGUST 2008

ROOM W2-65	ROOM W2-63	SKYLINE ROOM
WE-AM-4 Measurement Techniques 2 <i>Session Chair: Cliff Hauser, Raytheon Missile Systems</i>	WE-AM-5-SS Special Session: Recent Advances in Jitter and Ber Analysis in High Speed Serial Links <i>Session Chair: Qiubo Ye, Communications Research Centre Canada</i>	WE-AM-6-OF <i>Open Forum 3</i>
WE-AM-4-1 Analysis of the MIL-STD-461E and MIL-STD-461F RE102 Test Setup Configurations below 100 MHz	WE-AM-5-SS-1 Jitter Modeling in Statistical Link Simulation	WE-AM-5-OF-1 An Approach for The Prediction of Sensitive I/O Ports using Noise Distribution on PCB-Level
WE-AM-4-2 Time Synchronized Near-field and Far-field for EMI Source Identification	WE-AM-5-SS-2 Estimation of Very Low BER Using Quasi-Analytical Method	WE-AM-5-OF-2 An Optical Feeding Antenna with Wide Bandwidth for Evaluation of Radiated Emission Test Site above 1 GHz
WE-AM-4-3 Determination of Coupling of UWB Pulses into Complex PCB Line Structures using Multi-alignment Measurements	WE-AM-5-SS-3 Crosstalk Analysis of a System Based on XAUI HM-Zd Evaluation Backplane Data	WE-AM-5-OF-3 A New Direct Method for SEdB Determination
WE-AM-4-4 Analysis on Electrode Speed Correlation of Discharge Parameters Applying Short-gap Electrostatic Discharge Model	WE-AM-5-SS-4 A Flexible and Efficient Bit Error Rate Simulation Method for High-Speed Differential Link Analysis Using Time-domain Interpolation and Superposition	WE-AM-5-OF-4 The high sensitivity electromagnetic fields sensor using resonance
WE-AM-4-5 Aspects of Using the IEC-61000-4-20 for Transient Testing with Broadband Signals	WE-AM-5-SS-5 Statistical Channel Modeling Inclusive of Cross Talk Effects for Bit Error and Eye Analysis	WE-AM-5-OF-5 Assessment of the Robustness of Commercial Data Communication Interfaces to a Military EMI Environment
WE-AM-4-6 CISPR Specification and Measurement Uncertainty of the Time-domain EMI Measurement System	WE-AM-5-SS-6 Duty-Cycle Distortion and Specifications for Test-Signal Generation	WE-AM-5-OF-6 Suppression Method of Radiated Emission from Solar Cell on a Photovoltaic Power Generation System
		WE-AM-5-OF-7 Improved LC Filter for WWAN Noise
		WE-AM-5-OF-8 A Finite Element Method for Transient Analysis of Power Electronic Motor Drives Including Parasitic Capacitive Effect and External Circuit

WEDNESDAY AFTERNOON, 20 AUGUST 2008

1:30pm to 5:30pm		ROOM W2-64	ROOM W2-65	
		WE-PM-1 Computational EM 3 <i>Session Chair: James Knighten, TerraData Corp.</i>	WE-PM-2 Signal Integrity 2 <i>Session Chair: Michael McOlash, GE Medical</i>	Measu <i>Sessi</i> <i>Don</i>
1:30pm		WE-PM-1-1 Advanced EMC Modeling by Means of a Parallel MLFMM and Coupling with Network Theory	WE-PM-2-1 Effects of Discrete Bypass Capacitors in Power/Ground Planes with EBG Structures	WE-PM-3-1 Broadband D Method
2:00pm		WE-PM-1-2 Validation of MOM/FEM in Modeling Studies of Loaded Enclosures with Apertures	WE-PM-2-2 Study on the Mitigation of the Resonance due to the Power-Bus Structure using Periodic Metal-Strip Loaded Sheets	WE-PM-3-2 Detecting E a Transmission
2:30pm		WE-PM-1-3 Statistical Analysis of Induced Ground Voltage Using the TLM+UT Method	WE-PM-2-3 Fast Frequency Domain Crosstalk Analysis for Board-Level EMC Rule Checking and Optimization	WE-PM-3-3 A Study of E Measurement Mode-Stirred
3:00pm	Afternoon Break			
3:30pm		WE-PM-1-4 Parameter Extraction of Eddy-current Magnetic Field: Circuit Coupled Problems Using Matrix Analysis Method	WE-PM-2-4 Slots on Ground Fillings of Multi-layer Printed Circuit Board for Suppressing Indirect Crosstalk between Digital Clock Line and RF Signal Line in Mixed Mode Mobile Systems	WE-PM-3-4 The Effect of Transverse El Correlation A
4:00pm		WE-PM-1-5 Equivalent Radiation Source Extraction Method for System Level EMI and RFI Prediction	WE-PM-2-5 Using TWDP to Quantify Channel Performance with Frequency-domain S-parameter Data	WE-PM-3-5 Non-contact Circuits in U
4:30pm		WE-PM-1-6 A Mixed Nodal-mesh Formulation of the PEEC Method Based on Efficient Graph Algorithms	WE-PM-2-6 Link path design on a block-by-block basis	WE-PM-3-6 Defining and Contribution Measurement
5:00pm		WE-PM-1-7 Modeling Experiences with Full-Wave Frequency-Domain Modeling Software		

WEDNESDAY AFTERNOON, 20 AUGUST 2008

ROOM W2-62	ROOM W2-63	SKYLINE ROOM
WE-PM-3 Measurement Techniques 3 <i>Session Chair: Don Heirman, HEIRMAN Consultants</i>	WE-PM-4-SS Special Session: Algorithm and Techniques for Parallel Processing for EMI/EMC <i>Session Chair: Al Ruehli, IBM</i>	WE-PM-5-OF <i>Open Forum 4</i>
CI as a multi usable EMC-Test	WE-PM-4-SS-1 Advanced Parallel Algorithm for the System-Level EMC Modeling of High-Speed Electronic Package	WED-PM-5-OF-1 The Impact of Common Mode Currents on Signal Integrity and EMI in High-Speed Differential Data Links
E and H Fields with Microstrip Lines	WE-PM-4-SS-2 The Discontinuous Galerkin Finite Element Time Domain Method (DGFETD)	WE-PM-5-OF-2 Experimental Study on DC Biasing Impact on Transformer Vibration and Sound
Enclosure Shielding Effectiveness using Frequency Stirring in a Chamber	WE-PM-4-SS-3 Simple Load Balancing in Binary-Tree Based Parallel Multilevel Low-Rank Compression Techniques	WE-PM-5-OF-3 Generation and Measurement of a Reference Field for Round-Robin Comparison Purposes WE-PM-5-OF-4 Prediction of Parasitic Components in an Automotive Environment
EUT Position on Gigahertz Electromagnetic (GTEM) Cell Algorithms	WE-PM-4-SS-4 A Fast and Parallel Stroud-Based Stochastic Collocation Method for Statistical EMI/EMC Analysis	WE-PM-5-OF-5 On Determination of Conducted RF Immunity Test Methodology for Automotive Remote Keyless Entry Receivers
Near-field Mapping of Planar Ultra-wide Frequency Band	WE-PM-4-SS-5 Enhanced Hybrid MPI-OpenMP Parallel Electromagnetic Simulations Based on Low-Rank Compressions	WE-PM-5-OF-6 Investigation on the Shielding Effectiveness of Planar Microstructured Screens WE-PM-5-OF-7 Impact of Thermal Stress on the Characteristics of Conducted Emissions
Assessing the Uncertainty in the Line-Injection Tests of Transfer Impedance	WE-PM-4-SS-6 A New Frequency Domain Waveform Relaxation Algorithm for PEEC Models	WE-PM-5-OF-8 Defining a Measure for the Immunity of Analogue to Digital Converters Exposed to Electric Fields

THURSDAY MORNING & AFTERNOON, 21 AUGUST 2008

8:30am to 12:00pm	ROOM W2-64	ROOM W2-65
	<p>TH-AM-1 Computational EM 4 <i>Session Chair: Alan Roden, The Aerospace Corporation</i></p>	<p>TH-AM-2 Electromagnetic Coupling <i>Session Chair: John Archer</i></p>
8:30am	<p>TH-AM-1-1 Closed-Form Expressions for Determining Approximate PMC Boundaries around an Aperture in a Metal Cavity Wall</p>	<p>TH-AM-2-1 Transient Analysis of Crosstalk Coupling Between High-Speed Carbon Nanotube Interconnects</p>
9:00am	<p>TH-AM-1-2 Efficient Simulation of Narrow Weakly Nonlinear Bandpass System</p>	<p>TH-AM-2-2 Modeling of the Substrate Coupling Path for Direct Power Injection in Integrated Circuits</p>
9:30am	<p>TH-AM-1-3 Fundamental Examination about Cooling Approach for a Heated EM-Wave Absorber under High Power Injection</p>	<p>TH-AM-2-3 An Estimation of the Backdoor Coupling of UWB Pulses on Commercial Wireless USB Adapters</p>
10:00am	Morning Break	
10:30am	<p>TH-AM-1-4 High-resolution Time-Domain Site Attenuation Measurements Using Common Types of EMC Test Antennas: A Numerical Study</p>	<p>TH-AM-2-4 A Study on Electromagnetic Coupling between Transmission Line on Model Chip</p>
11:00am	<p>TH-AM-1-5 HF Model of the DC Motor Impedance (EMC Problematics in the Car Applications)</p>	<p>Last Chance to Visit EMC Expo, Wayne Hall</p>
11:30am	<p>TH-AM-1-6 Time Varying Instruction Current EMC Simulation Improvement</p>	
12:00pm	Awards Luncheon, Riverview Ballroom	
2:30pm to 5:00pm	ROOM W2-64	ROOM W2-65
	<p>TH-PM-1 Computational EM 5 <i>Session Chair: Sam Connor, IBM</i></p>	<p>TH-PM-2 Emissions and Immunity <i>Session Chair: Ed Hare, Amateur Radio Relay League</i></p>
2:30pm	<p>TH-PM-1-1 A Fast Radiated Emission Model for Arbitrary Cable Harness Configurations based on Measurements and Simulations</p>	<p>TH-PM-2-1 Improvement of Dispersion of Radiated Emission Measurement Results by VHF-LISN</p>
3:00pm	<p>TH-PM-1-2 Electromagnetic PCB Pattern Modeling Techniques for RF Hardware Simulation of Mobile Phones</p>	<p>TH-PM-2-2 Assessing the Performance of ZigBee in a Reverberant Environment using a Mode Stirred Chamber</p>
3:30pm	<p>TH-PM-1-3 Radiated Emission of Bent Microstrip Line Using Hertzian Dipole Method</p>	<p>TH-PM-2-3 EMC Characterization for Switching Noise Investigation on Power Transistors</p>
4:00pm	<p>TH-PM-1-4 Prediction of the Common-mode Radiated Emission from the Board to Board Interconnection through Common-mode Antenna Model</p>	<p>TH-PM-2-4 Measured Radiated Field From UWB Signal Over Powerline Channel</p>
4:30pm	<p>TH-PM-1-5 EMC Macro-Modeling of IC Power Current in CMOS Inverter</p>	<p>TH-PM-2-5 Evaluation of Interference between MB-OFDM UWB and Wireless LAN Systems using a GTEM Cell</p>

THURSDAY MORNING & AFTERNOON, 21 AUGUST 2008

ROOM W2-62		ROOM W2-63	
<p align="center">TH-AM-3 Test Facilities and Instrumentation <i>Session Chair: Tom Fagan, Raytheon</i></p>		<p align="center">TH-AM-4-SS Special Session: Impact of External Noise Sources on High Speed Signal Integrity <i>Session Chair: Bruce Archambeault, IBM</i></p>	
TH-AM-3-1	Influence of the Receiving Antenna Pattern on the Site VSWR Validation Procedure above 1 GHz	TH-AM-4-SS-1	Quantifying EM Noise Coupling to Antenna Coax Cable Placed in a Digital Device
TH-AM-3-2	Absorber Loading Study in FOI 36.7 m3 Mode Stirred Reverberation Chamber for Pulsed Power measurements.	TH-AM-4-SS-2	Signal Integrity Testing using Multiple Out-of-Band Sources in a Reverberation Chamber
TH-AM-3-3	Shielding Effectiveness of Flat Samples and Conductive Gaskets: New Measuring Cell for the Frequency Range 1-18 GHz	TH-AM-4-SS-3	The Impact of External RF Energy on High-Speed Differential Signal Quality of Long Cables
TH-AM-3-4	Response of a Magnetic Loop Probe to the Current and Voltage on a Microstrip Line	TH-AM-4-SS-4	Noise Coupling Between Power/Ground Nets Due to Differential Vias Transitions in a Multilayer PCB
TH-AM-3-5	The Repeatability of System Level ESD Test and Relevant ESD Generator Parameters	Last Chance to Visit EMC Expo, Wayne Hall	
TH-AM-3-6	Orthogonal Loops Probe Design and Characterization for Near-Field Measurement		
ROOM W2-62		ROOM W2-63	
<p align="center">TH-PM-3 Shielding <i>Session Chair: Keith Frazier, Ford Motor Company</i></p>		<p align="center">TH-PM-4 Product Safety <i>Session Chair: Richard Georgerian, Intertek</i></p>	
TH-PM-3-1	Fundamental Models for Near Field Shielding	TH-PM-4-1	Effects of Thermoregulatory Mechanisms on the Eye Thermal Elevation Produced by Intense RF Exposures
TH-PM-3-2	EMI Gasket Shielding Effectiveness Evaluation Method Using Transmission Theory	TH-PM-4-2	EMC for the Functional Safety of Automobiles Why EMC Testing is Insufficient and What is Necessary
TH-PM-3-3	Using Conductive Plastic for EMC Cover Shielding	TH-PM-4-3	Assessment of Active Implantable Medical Device Interaction in Hybrid Electric Vehicles
TH-PM-3-4	Shielding Effectiveness with a Twist	TH-PM-4-4	Antenna Performance of Mobile Phone and Corresponding Human Exposure Inside Fully and Partially Enclosed Metallic Elevator
TH-PM-3-5	Shielding Analysis of Enclosure with Aperture irradiated by Plane Wave with arbitrary incident Angle and Polarization Direction		

FRIDAY MORNING, 22 AUGUST 2008

	ROOM W2-67	ROOM W2-65	ROOM W2-64
8:30AM TO 12:00PM	<p align="center">FR-AM-1 EMC and Modern Power Electronic Systems <i>Chair: Dr. Firuz Zare, Queensland University of Technology</i></p>	<p align="center">FR-AM-2 Fundamentals of Signal Integrity <i>Chairs: Prof. Tzong-Lin Wu, National Taiwan University, Taiwan; and Prof. James Drewniak, Missouri University of Science and Technology, USA</i></p>	<p align="center">FR-AM-3 Aerospace Lightning Protections <i>Chair: Fred Heather, JSF JPO EEE Lead</i></p>
	<p>The purpose of this tutorial is to address basic and advanced concepts of EMC in modern power electronic systems, which help EMC experts analyze EMC problems of power electronics used in different applications. Introducing power electronics in details such as transformer and motor design, modulation strategy, and switching losses to EMC experts may open a new research area and help development engineers to find better solutions to minimize sources of EMI noise at the development phase and improve cost, size and performance of the system.</p> <p>FR-AM-1-1 Introduction <i>Firuz Zare, Queensland University of Technology</i></p> <p>FR-AM-1-2 Ideal and Real Switches <i>Firuz Zare, Queensland University of Technology</i></p> <p>FR-AM-1-3 DC-AC Converters <i>Firuz Zare, Queensland University of Technology</i></p> <p>FR-AM-1-4 DC-DC Converters <i>Firuz Zare, Queensland University of Technology</i></p> <p>FR-AM-1-5 Multilevel Converters <i>Firuz Zare, Queensland University of Technology</i></p> <p>FR-AM-1-6 Current Loops <i>Firuz Zare, Queensland University of Technology</i></p>	<p>This tutorial will introduce the audience to the fundamental concepts of signal and power integrity for high-speed digital boards or packages and in particular the topics of High-speed Signal Link Path, SI/PI Modeling and Analysis, Jitter, Power Distribution Networks, Models of Active Devices, and Measurement for SI. The focus will be on the fundamental modeling and design concepts of signal and power integrity (SI and PI) for highspeed circuit systems.</p> <p>FR-AM-2-1 Block-by-Block Link-Path Analysis and Design with Physics-Based Models <i>Jim Drewniak, Missouri University of Science and Technology, USA</i></p> <p>FR-AM-2-2 Jitter <i>David Pommerenke, Missouri University of Science and Technology, USA</i></p> <p>FR-AM-2-3 Measurements for Signal Integrity <i>Vittorio Ricchiuti, Technolabs S.p.A., L'Aquila Italy</i></p> <p>FR-AM-2-4 Power Distribution Networks <i>Tzong-Lin Wu, National Taiwan University, Taiwan</i></p>	<p>This tutorial will cover the area of lightning protection of aerospace vehicles. The tutorial will open with an introduction to lightning attachment to aircraft and expand to address space vehicle lightning charge control. The tutorial will also cover the indirect effects of modeling and testing, complemented by the pitfalls and success of equipment level lightning testing. The tutorial will conclude with a look at the direct effects of lightning to materials.</p> <p>FR-AM-3-1 Aerospace Lightning Protections <i>Fred Heather, JSF JPO EEE Lead</i></p> <p>FR-AM-3-2 Introduction to Aircraft Lightning Attachment <i>Anders Larsson, Swedish Defence Research Agency (FOI), Sweden</i></p> <p>FR-AM-3-3 Lightning Protection for Space Vehicles <i>Robert Scully, NASA, USA</i></p> <p>FR-AM-3-4 Indirect Effect Modeling using TLN <i>Neal Kiley</i></p> <p>FR-AM-3-5 Pitfall and Success of Do-I60 Lightning Testing <i>Andy Plumer, Lightning Technologies</i></p> <p>FR-AM-3-6 Direct Effects to Materials <i>Diane Heidlebaugh, Boeing Company</i></p>
12:00PM TO 1:30PM	Lunch on your own		

FRIDAY MORNING, 22 AUGUST 2008

	ROOM W2-63	ROOM W2-62	ROOM W2-66
ing	<p>FR-AM-4 Basic to Advanced EMI Failure Analysis <i>Chair: Dr. David Pommerenke, Missouri University of Science and Technology, USA</i></p>	<p>FR-AM-5 Automotive EMC Part I <i>Chair: Todd Hubing, Clemson University, USA</i></p>	<p>FR-AM-6 Module Level EMI Measurements and Estimation <i>Chairs: H. R. Hofmann (1) and Hiroshi YAMANE (2)</i></p>
a of light-vehicles. The reduction to craft, and icles and d examine using TLM, d success ting, then ect effects	<p>This tutorial will help EMI engineers better understand and select a variety of methods for analyzing EMI failures in systems. The foundation of the methods will be explained and typical applications shown. The methodologies span from simple, well known methods such as current clamp measurements to complex methods such as near field scanning or correlation analysis and spectrogram analysis for broadband signals and tough cases in which multiple sources and antennas radiate on the same frequency. The novelty of this workshop will lay in the advanced EMI analysis methods, such as correlation analysis, spectrogram methods, and using mode stirred chambers (i.e. metalized tent) for EMI debugging.</p>	<p>This workshop addresses EMC test and design issues of relevance to the automotive industry. It brings automotive EMC engineers from around the world together to provide updates on the many rapid changes in the automotive industry that affect automotive EMC.</p> <p>The first half-day of this workshop will focus on new automotive EMC challenges and design tools and techniques for automotive engineers. This will include talks on the impact of new automotive technologies, new design criteria, and an overview of the latest modeling tools available.</p>	<p>This workshop describes the technical measurement methods for measuring emissions from module products to determine emission levels. Included in the requirements are measurement methods and evaluation of emission levels. These methods measure the applying area for the emission of modules.</p>
s	<p>FR-AM-4-1 Probes for Diagnosing EMC Problems <i>Tom VanDoren, Missouri University of Science and Technology, USA</i></p>	<p>FR-AM-5-1 Where we Stand Today with Automotive EMC Simulation <i>Steven Frei, Dortmund University of Technology</i></p>	<p>FR-AM-6-1 Introduction to VCCI Kit Module EMI Program <i>Akhisa Sakurai, IBM and VCCI</i></p>
g	<p>FR-AM-4-2 Useful Tools and Tricks in EMI and ESD Analysis <i>Doug Smith, D. C. Smith Consultants</i></p>	<p>FR-AM-5-2 Using Component-Level Measurements to Determine System-Level Radiated Emissions <i>Todd Hubing, Clemson University, USA</i></p>	<p>FR-AM-6-2 Magnetic Probe Method <i>Toshiki Shimasaki, NEC Engineering, Ltd.</i></p>
Research	<p>FR-AM-4-3 Advanced EMI Analysis Methods <i>David Pommerenke, Missouri University of Science and Technology, USA</i></p>	<p>FR-AM-5-3 Automotive EMC Expert Software <i>Roman Jobava, EMCos Ltd., Tbilisi Georgia</i></p>	<p>FR-AM-6-3 Trend and Outline of the Estimation for Module Level EMI Measurements <i>Osami Wada, Kyoto University, Japan</i></p>
ehicles	<p>FR-AM-4-4 EMC Case Histories <i>Lee Hill, SILENT</i></p>	<p>FR-AM-5-4 Automotive EMC Measurement Techniques Based on New Technologies and Vehicle Packaging <i>Scott Mee and Sreeniwas Ranganathan, Johnson Controls</i></p>	<p>FR-AM-6-4 The Workbench Faraday Cage <i>Lars Kanfers</i></p> <p>FR-AM-6-5 TEM Method <i>Terry North, Consultant</i></p>
TLM			
ghtning			
s, Inc.			
ny			

FRIDAY AFTERNOON, 22 AUGUST 2008

	ROOM W2-63	ROOM W2-67	ROOM W2-65
<p>1:30PM TO 5:30PM</p>	<p align="center"> FR-PM-1 The European EMC Directive 2004/108/EC: Conformance Requirements <i>Chair: Chris Marshman, York EMC Services Ltd, York UK</i> </p>	<p align="center"> FR-PM-2 The State of Electromagnetic Environments (EME) <i>Chair: Dave Southworth, SPAWAR Systems Center, California</i> </p>	<p align="center"> FR-PM-3 Practical EMI Filter Design <i>Chair: Alexander Gerfer, VLSI Electronics—Midcom Inc.</i> </p>
	<p>This tutorial addresses the conformance requirements placed on manufacturers for CE Marking products to the EMC Directive. Directive 2004/108/EC will have been in force for 12 months by August 2008. This allows the opportunity for a timely review of issues that have arisen and observations on its application to be presented.</p> <p>FR-PM-1-1 The European EMC Directive 2004/108/EC <i>Chris Marshman, York EMC Services Ltd, York UK</i></p> <p>FR-PM-1-2 The European EMC Directive 2004/108/EC: Information Requirements Application to Military Requirements <i>Brian Jones, EMC Consultant</i></p> <p>FR-PM-1-3 The European EMC Directive 2004/108/EC: Harmonised Standards <i>Brian Jones, EMC Consultant</i></p> <p>FR-PM-1-4 The Notified Bodies <i>Chris Marshman, York EMC Services Ltd, York UK</i></p> <p>FR-PM-1-5 The European EMC Directive 2004/108/EC: Fixed Installations <i>Brian Jones, EMC Consultant</i></p> <p>FR-PM-1-6 The European EMC Directive 2004/108/EC: Enforcement <i>Brian Jones, EMC Consultant</i></p> <p>FR-PM-1-7 Summary for Conformity Assessment for Apparatus (CE Marking) <i>Chris Marshman, York EMC Services Ltd, York UK</i></p> <p>FR-PM-1-8 The European EMC Directive 2004/108/EC — Conformance Requirements <i>Chris Marshman and A. C. Marvin, York EMC Services Ltd and University of York, York UK</i></p>	<p>This workshop will discuss the current state of knowledge for electromagnetic environments (EME). With the proliferation of wireless electronics, EME is evolving and expanding into areas previously considered “RF quiet”. Major electromagnetic environments will be discussed as well as soliciting arenas that may not yet be assessed, but play a role in the future. The intent is to involve the audience prior to, during, and after the symposium. The session is soliciting data from participants on their local urban or operational EME. Please send your data to strauss_jeeee@verizon.net. The data will be presented and discussed during this session.</p> <p><u>Topics</u></p> <ul style="list-style-type: none"> - EME Standards - Industrial EME - Military EME - Public common areas EME - Unique stories of EME interference - Urban EME <p><u>Presenters</u></p> <p>Dave Southworth (representing ANSI ASC C63™) and Bernd Jaekel Kimball Williams, Scott Lytle and Dr. Bill Strauss Dave Southworth, Matt Grenis, Fred Heather Keith Armstrong Doug Kramer</p>	<p>The workshop targets a practical approach to design rules for the designer who must accommodate EMI-filtering. Simulation tools and improved simulation models will be reviewed to help select the best filter solution for a given noise problem. A practical filter measurement approach. Different filter topologies will show how filter reaction is on a practical PCB.</p> <p>FR-PM-3-1 Practical EMI Filter Design <i>Dipl. Ing. (FH) Alexander Gerfer and Dipl. Ing. Michael Eckert, Wurth Electronics—Midcom Inc.</i></p>

FRIDAY AFTERNOON, 22 AUGUST 2008

	ROOM W2-64	ROOM W2-62	ROOM W2-66
Design Murth nc.	<p>FR-PM-4 Aircraft EMP Hardening Specifications and Measurement Methods <i>Chair: William D. Prather, Air Force Research Laboratory, Directed Energy Directorate</i></p>	<p>FR-PM-5 Automotive EMC Part 2 <i>Chair: Todd Hubing, Clemson University, USA</i></p>	<p>FR-PM-6 Carbon Nanotube Technology for Next-Generation Nanointerconnects <i>Chair: Prof. Maria Sabrina Sarto</i></p>
practical e designer ters. New simulation p find the oise probem- ent of dify y how the CB-board.	<p>This tutorial will address the approach to writing specifications for electromagnetic shields, especially electromagnetically shielded aircraft which require a different approach than that taken with a ground-based screen room or armored vehicle. The electromagnetic shielding specifications can be written in measurable engineering units, and if this is done correctly, the shield performance may be measured in an unambiguous fashion during design, verification, and subsequent maintenance.</p>	<p>The second half-day of this workshop focuses on automotive EMC test practices. It will address the automotive industry's problems associated with out-dated, OEM-specific EMC test procedures and the challenge of trying to use component-level test results to anticipate system-level EMC problems. <i>(continued below)</i></p>	<p>This tutorial will present and discuss the internationally most advanced "state of the art" in the field of next-generation nano-interconnects based on carbon nanotube technology. The tutorial will introduce the challenges of ITRS-2007 as regards to nanointerconnects, the fundamental concepts concerning carbon nanotubes, and the advanced modeling tools of carbon-nanotube nanointerconnects both in the frequency and in the time-domain.</p>
d Dipl.	<p>FR-PM-4-1 Introduction <i>William D. Prather, Air Force Research Laboratory, Directed Energy Directorate</i></p> <p>FR-PM-4-2 High Altitude EMP Generation <i>William A. Radasky, Metatech Corporation, Goleta, California, USA</i></p> <p>FR-PM-4-3 Coupling to Aircraft & Aircraft Hardening <i>William Prather, Air Force Research Laboratory, Directed Energy Directorate</i></p> <p>FR-PM-4-4 Apertures and Line Penetrations <i>William Prather, Air Force Research Laboratory, Directed Energy Directorate</i></p> <p>FR-PM-4-5 Cable Shield Tester <i>Lothar (Bud) Hoeft, Consultant, Electromagnetic Effects Albuquerque, NM, USA</i></p> <p>FR-PM-4-6 Loop Resistance Tester <i>William Prather, Air Force Research Laboratory, Directed Energy Directorate</i></p> <p>FR-PM-4-7 Single Point Excitation for Hardness Surveillance <i>Lothar (Bud) Hoeft, Consultant, Electromagnetic Effects Albuquerque, NM, USA</i></p> <p>FR-PM-4-8 CW Illumination and CW-to-Pulse Conversion <i>Parviz Parhami</i></p> <p>FR-PM-4-9 EMP Simulator Testing/PCI <i>Kurt Sebacher, Naval Air Systems Command</i></p> <p>FR-PM-4-10 LRU Interface Testing, TPD Testing and Upset Testing with R2SPG <i>Lothar (Bud) Hoeft, Consultant, Electromagnetic Effects Albuquerque, NM, USA</i></p>	<p>FR-AM-5-5 EMC Component and Vehicle Validation Considerations for Hybrid Electric Vehicles <i>Jody J. Nelson, Daimler</i></p> <p>FR-AM-5-6 Overview of Component Level EMC Characteristics for HEV Application <i>Hiroki Funato and Liang Shao, Hitachi America, Ltd. R&D</i></p>	<p>FR-PM-6-1 Introduction to Carbon Nanotube Technology for Next Generation Nanointerconnects <i>Maria Sabrina Sarto, University of Rome, Sapienza Italy</i></p> <p>FR-PM-6-2 <i>A. Naeemi, Georgia Institute of Technology</i></p> <p>FR-PM-6-3 <i>K. Banerjee, UCSB</i></p> <p>FR-PM-6-4 EM Modeling of CNT Interconnects <i>Maria Sabrina Sarto, University of Rome, Sapienza Italy</i></p> <p>FR-PM-6-5 HF Metrology for Characterization of Nano-materials and Nano-devices <i>Atif Imtiaz, Mitch Wallis and Pavel Kabos, NIST Boulder CO, USA</i></p>

THE GLOBAL EMC UNIVERSITY 2008

Monday, 18 August 2008 through

Thursday, 21 August 2008

Nowhere else can one receive this level of EMC education from instructors all over the world in one place at one time! This multi-session course has been designed for individuals with a background in EMC or who have attended the Fundamentals of EMC workshop in previous years.

SCHEDULE

Monday, 18 August 2008

1:30pm to 3:30pm

Conducted Emissions and Power Supply Filters

Professor Mark Steffka, Electrical and Computer Engineering Department University of Michigan, Dearborn, Michigan, and GM Powertrain EMC Group, Milford, Michigan, USA

3:30pm to 5:30pm

Shielding

Professor Christos Christopoulos, School of Electrical and Electronic Engineering, University of Nottingham, Nottingham, United Kingdom

Tuesday, 19 August 2008

8:00am to 12:00pm

Use of PSPICE in Solving EMC Problems

Professor Clayton Paul, School of Engineering Mercer University, Macon, GA, USA

1:30pm to 5:00pm

Overview of Numerical Methods

Professor Todd Hubing, College of Engineering and Science, Clemson University, Clemson, SC, USA

Wednesday, 20 August 2008

8:00am to 10:00am

Transmission Lines: Time-domain and Signal Integrity

Professor Jim Drewniak, Electromagnetic Compatibility Laboratory, Missouri University of Science and Technology, Rolla, MO, USA

10:00am to 12:00pm

Transmission Lines: Frequency-domain and Crosstalk

Professor Marco Leone, Institute for Fundamental Electrical Engineering and EMC, Otto-von-Guericke-Universität, Magdeburg, Germany

Thursday, 21 August 2008

8:00am to 10:00am

Antennas and Radiation EMC Standards

Professor Andy Marvin, Electronics Department, University of York, York, United Kingdom

10:00am to 12:00pm

PCB Layout and System Configuration for EMC

Professor Kye-Yak See, School of Electrical & Electronic Engineering Nanyang Technological University Singapore

CLASS OPEN TO PRE-REGISTERED STUDENTS ONLY.

EMC DEMONSTRATIONS AND EXPERIMENTS

Sponsored by the

IEEE EMC Society Education & Student Activities Committee (ESAC)

TIME: Tuesday, 19 August 2008 through Thursday, 21 August 2008

PLACE: Wayne Hall, COBO Center

CO-CHAIRS/ORGANIZERS: Bruce Archambeault, Andrew Drozd, William Goodwin,
and Edward Wheeler

Now in its 16th consecutive year, **EMC Hardware Experiments** continues to be a highly popular symposium event. The experiments are devoted to demonstrating important EMC concepts focusing on electromagnetic coupling phenomena and effects, EMC measurement and troubleshooting methods. The experiments are partly based upon those documented in the ESAC's *EMC Experiments Manual*, originally compiled by Clayton Paul and Henry Ott. New experiments are added each year and several popular experiments from previous years will be reprised. The hardware experiments continue to focus on innovative concepts and methods that are of interest to the practical EMC engineer. Hands-on participation during the demonstrations is encouraged.

EMC Software Demonstrations highlight fundamental EMC modeling approaches and simulation methods. Various CEM modeling techniques will be demonstrated illustrating their application to simple canonical-type problems in order to show how specific EMC problems can be solved. These include the application of the moment method (MoM), finite difference and finite element techniques, transmission line methods, high-frequency ray tracing, and other approaches. The demonstrations will be conducted using general-purpose codes*. *This year's agenda will include many new demonstrations as well as several popular problems from prior years.

TUESDAY, 19 AUGUST 2008

9:30am to 12:00pm

Measuring Structural Resonances of Cables and Assemblies (hardware demo)

Doug Smith, D.C. Smith Consultants

Test Issues Inherent in EN61000-4-3 Radiated Immunity Testing – Addressing the New Harmonic Requirements and Capital Equipment Upgrade Options (hardware demo)

David Seabury, ETS-Lindgren

Utilization of Circuit Simulation and Electromagnetic FEA Models to Predict Conducted Emissions (computer demo)

Zed Tang, Ansoft Corporation

Utilization of the Finite Element Method in Radiated Emissions and Susceptibility Studies (computer demo)

Matt Commens, Ansoft Corporation

1:30pm to 4:00pm

Noise Figure Demonstration (hardware demo)

Tom Holmes, Agilent Technologies, and Candace Suriano, Suriano Solutions

Chokes in DC-DC Converters, Bypass Capacitors and FM Wireless Microphones (hardware demo)

Keith Hoover, Rose-Hulman Institute of Technology

Modeling Arbitrarily-Shaped Power/Ground Planes Using Cavity Model and Segmentation Technique (computer demo)

Jun Fan, Missouri University of Science and Technology

Improving EMC Test Productivity with Automated EMC Test Software (hardware/computer demo)

Joe Tannehill, ETS-Lindgren, and David Guzman, RFTEK

EMC DEMONSTRATIONS AND EXPERIMENTS

WEDNESDAY, 20 AUGUST 2008

9:30am to 12:00pm

Low Cost Method for Comparison of Radiated Emissions Using a Toolbox (hardware demo)

James Muccioli, Jastech EMC Consultants

PCB-based EMC Issues and Their Solutions (hardware demo)

Bogdan Adamczyk, Grand Valley State University, and Jim Teune, Gentex Corporation

Transmission Line Transient Analysis (computer demo)

Alex Packard and Edward Wheeler, Rose-Hulman Institute of Technology, and James Drewniak, Missouri University of Science and Technology

Time domain Analysis of PCB Problems with the Discontinuous Galerkin Finite Element Time Domain Method (computer demo)

J. Alan Roden, The Aerospace Corporation

1:30pm to 4:00pm

Skin Effect, Impedance, and Resonance of Ground Planes (hardware demo)

Orin Laney, Atwood Research

Magnetic Crosstalk and Enclosure Resonances (hardware demo)

Lee Hill and Randal Vaughn, Silent Solutions

Finite Element Method Applied to Reverberation Chamber Analysis (computer demo)

Charles F. Bunting, Oklahoma State University

Benchmark Study on Resources for Computational Electromagnetics (computer demo)

C. J. Reddy, EM Software & Systems (USA), Inc.

THURSDAY, 21 AUGUST 2008

9:30am to 12:00pm

Insertion Loss (hardware demo)

Vino Pathmanathan, TRW, and Tom Holmes, Agilent Technologies

Modeling Printed Circuit Board Geometries with Full-wave EM Modeling Software (computer demo)

Haixin Ke and Todd Hubing, Clemson University

Use of Computation EM Tools in Training and Career Development (computer demo)

Colin E. Brench, Southwest Research Institute

EMC Student Design Contest

Come and watch as students demonstrate the award-winning entries that they submitted to this year's EMC Student Design Contest!

9:30am to 10:30am

Friedrich Kirk from California State University, Chico will demonstrate his design entitled "EMI Reduction in a Switch Mode Power Supply".

10:30am to 11:30am

Wilfred Ghonsalves and Tian He from California State University, Chico will present the results of their Student EMC Design Competition.

- * Hardware equipment and computer codes used shall not be demonstrated for commercial or promotional purposes. The IEEE EMC Society does not specifically endorse any equipment item or software code used in any of the demonstrations. The sponsor of the demonstrations, the EMC Society Education & Student Activities Committee, reserves the right to cancel any presentation or topic that is deemed to be of a commercial nature at any time prior to or during this session.

EMC SOCIETY TECHNICAL COMMITTEES

What is a technical committee?

The technical committees play an important role in the overall success of the EMC Society by promoting activities in their fields and providing expert knowledge and assistance to generate and review technical papers, organize and operate sessions at symposia, generate and develop standards, and evaluate the “state of the art” in EMC science.

Volunteers are welcomed and encouraged to participate. Below is the current list of officers of each technical committee. Please contact the officer of the technical committee that interests you if you would like to get involved and contribute to the success of the EMC Society.

Technical Committee 1: EMC Management

Chair: Bob Scully (bob.scully@ieee.org)

Vice Chair: Doug Kramer (drkramer@ieee.org)

Secretary: Kimball Williams (k.williams@ieee.org)

Past Chair: Dave Southworth (d.southworth@ieee.org)

This committee is concerned with the development and dissemination of Best Practices and Methodologies for the successful leadership, supervision and guidance of EMC related activities. These Best Practices and Methodologies shall be structured so as to provide assistance to all managers, and engineers. Appropriate and convenient tools shall serve as a foundation to these Best Practices and Methodologies.

Technical Committee 2: EMC Measurements

Chair: Don Heirman (d.heirman@ieee.org)

Vice Chair: Thomas J. Fagan (tjfagan@ieee.org)

Secretary: Clifford Hauser (clifford.hauser@ieee.org)

This committee is concerned with the measurement and instrumentation requirements in EMC standards and procedures and how they are interpreted. It is also concerned with the adequacy of measurement procedures and measurement instrumentation specifications for radiated and conducted emission and susceptibility tests and the rationale for performance limits for these tests.

Technical Committee 3: Electromagnetic Environment

Chair: Don A. Gilliland (dagill@us.ibm.com)

Vice Chair: Graham (Bill) Strauss (straussgw@navair.navy.mil)

Secretary: Ray Siu (ray.siu@sbt.siemens.com)

This committee is concerned with Electromagnetic environment (EME), Development of standards for EME measurement and characterization, natural and man-made sources of electromagnetic environment that comprise this environment, effects of noise (unwanted portions of EME) on systems performance, and effects of international civil and military standards intended to control man-made intentional and unintentional emissions of electromagnetic energy.

Technical Committee 4: Electromagnetic Interference Control

Chair: Bob Scully (bob.scully@ieee.org)

Vice Chair: Dan Modi (dan.modi@alconlabs.com)

Secretary: Kermit Phipps (KPhipps@epri-peac.com)

This committee is concerned with design, analysis, and modeling techniques useful in suppressing interference or eliminating it at its source. Bonding, grounding, shielding, and filtering are within the jurisdiction of this committee. These activities span efforts at the system, subsystem, and unit levels.

Technical Committee 5: High Power Electromagnetics

Chair: Dr. William A. Radasky (wradasky@aol.com)

Vice Chair: Michael K. McInerney (mkmcinerney@ieee.org)

Secretary: William O. Price (william.o.price@boeing.com)

This committee is concerned with the effects and protection methods for electronic equipment and systems for all types of high power electromagnetic environments. These environments include electromagnetic pulse (EMP), intentional EMI environments (e.g. high power microwaves and ultra wideband), lightning electromagnetic currents and fields, and electrostatic discharge. Interactions with aircraft and other mobile systems are included.

Technical Committee 6: Spectrum Management

Chair: Larry Cohen (lcohen@ieee.org)

Vice Chair: Karen Dyberg (kdyberg@ieee.org)

Secretary: Clifford Hauser (clifford.hauser@ieee.org)

Past Chair: Thomas J. Fagan (tjfagan@ieee.org)

This committee is concerned with frequency coordination, management procedures for efficient spectrum use, band occupancy and congestion, federal regulations and their adequacy.

Technical Committee 7: Nonsinusoidal Fields

Chair: Dr. Frank Sabath (frank.sabath@ieee.org)

Vice Chair: Michael K. McInerney (mkmcinerney@ieee.org)

Past Chair: Dr. William J. Croisant (w.croisant@ieee.org)

This committee is concerned with the application of electromagnetic signals with large relative bandwidth, commonly referred to as nonsinusoidal waves, delineation of the differences between time-domain and frequency-domain principles, analytical and numerical treatments of the Maxwell postulates directly in time-domain, conceptualization, design, fabrication and testing of materials and devices for ultra-wide bandwidth systems.

Technical Committee 8: Electromagnetic Product Safety

Chair: Richard Georgerian (richardg@ieee.org)

Vice Chair: Dan Modi (Dan.Modi@alconLabs.com)

Secretary: Jim Bacher (j.bacher@ieee.org)

Treasurer: Mark Montrose (mmontros@ix.netcom.com)

To provide a professional forum for Product Safety professionals, both to develop their own skills, and to provide Product Safety outreach to engineers, students, and others.

Technical Committee 9: Computational Electromagnetics

Chair: Dr. Jun Fan (jun.fan@ieee.org)

Vice Chair: Dr. Chuck Bunting (reverb@okstate.edu)

Secretary: Dr. Alan Roden (Alan.Roden@aero.org)

Past Chair: Dr. Bruce Archambeault (barch@us.ibm.com)

This committee is concerned with broad aspects of Applied Computational Electromagnetic techniques that can be used to model electro-magnetic interaction phenomena in circuits, devices, and systems. The primary focus is with the identification of the modeling methods that can be applied to interference (EMC) phenomena, their validation and delineating the practical limits of their applicability. Included are low and high frequency spectral-domain techniques and time-domain methods.

Technical Committee 10: Signal Integrity

Chair: Prof. Antonio Orlandi (orlandi@ing.univaq.it)

Vice Chair: Prof. Giulio Antonini (antonini@ing.univaq.it)

Secretary: Dr. Xiaoning Ye (xiaoning.ye@intel.com)

This committee is concerned with the design, analysis, simulation, modeling and measurement techniques useful in maintaining the quality of electrical signals. These activities encompass all aspects of signal integrity from the integrated circuit level to the system level.

Technical Committee 11: Nanotechnology

Co-Chair: Dr. Chris Holloway (holloway@boulder.nist.gov)

Co-Chair: Dr. Sabrina Sarto (mariasabrina.sarto@uniroma1.it)

This committee is concerned with broad aspects of Nanotechnology.

COMMITTEE MEETINGS AND RELATED INDUSTRY MEETINGS

Friday, 15 August 2008

ANSI C63.4 Workshop	7:00am to 5:00pm	Marriott Hotel	Nicolet B
ANSI C63.4 Workshop Lunch	12:00pm to 1:00pm	Marriott Hotel	Nicolet A

Saturday, 16 August 2008

ANSI C63.4 & Measurement Uncertainty Workshops	7:00am to 5:00pm	Marriott Hotel	Nicolet B
EMC Society Executive Committee Meeting	6:00pm to 9:00pm	Marriott Hotel	Monet

Sunday, 17 August 2008

EMC Society Board of Directors Meeting	9:00am to 5:00pm	Marriott Hotel	Joliet
NVLAP Laboratory & Assessor Workshop	9:00am to 6:00pm	Marriott Hotel	LaSalle
Joint Task Force on TEM Waveguides	10:30am to 6:00pm	Marriott Hotel	Renoir
299.1 Working Group (Part 1 of 2)	5:30pm to 8:00pm	Marriott Hotel	Monet
ITI TC5	7:00pm to 10:00pm	Marriott Hotel	Joliet

Monday, 18 August 2008

Technical Advisory Committee Meeting #1	7:00am to 9:00am	Convention Center	O2-35/36
SAE International AE-4 Electromagnetic Compatibility Committee	7:00am to 12:00pm	Convention Center	O2-37
Standards Development Committee (SDCom) Meeting (Part 1 of 2)	8:00am to 10:45am	Convention Center	O2-43
Standards Education & Training Committee (SETCcm) Meeting	10:45am to 11:30am	Convention Center	O2-43
Standards Advisory & Coordination Committee (SACCom) Meeting	11:30am to 12:00pm	Convention Center	O2-43
Representative Advisory Committee / Standards Advisory and Coordination Committee (RAC/SACCom) Annual Meeting	12:00pm to 2:00pm	Convention Center	O2-43
TC-6 Spectrum Management Committee Meeting	12:00pm to 1:30pm	Convention Center	W2-61
ACIL USCEL Meeting	1:00pm to 4:00pm	Convention Center	O2-35/36
SAE J1752 IC Task Force	1:30pm to 4:00pm	Marriott Hotel	Monet
University Grant Committee Meeting	4:00pm to 6:00pm	Convention Center	O2-39
US TAG to CISPR/A	4:00pm to 5:30pm	Marriott Hotel	Monet
Use of Radar Absorbing Materials (RAM) to Solve EMI Problems (M-A-17161)	6:00pm to 7:30pm	Convention Center	O2-38
Joint Task Force on Reverberation Testing Meeting	6:00pm to 9:00pm	Convention Center	W2-61

Tuesday, 19 August 2008

Standards Working Group P1642	7:00am to 8:30am	Convention Center	O2-39
Education & Student Activities Committee (ESAC) Meeting	7:00am to 9:00am	Convention Center	O2-35/36
TC-1 EMC Management Committee Meeting	7:00am to 9:00am	Convention Center	W2-61
TC-7 Nonsinusoidal Fields Committee Meeting	7:30am to 8:30am	Convention Center	O2-38
TC-2 EMC Measurements Committee Meeting	8:00am to 9:00am	Convention Center	O2-40

7/31/2008

COMMITTEE MEETINGS AND RELATED INDUSTRY MEETINGS

Tuesday, 19 August 2008 continued			
Chapter Chair Training	10:00am to 12:00pm	Convention Center	O2-38
Chapter Chair Luncheon	12:00pm to 2:00pm	Convention Center	M2-30
TC-9 Computational Electromagnetics Committee Meeting	12:00pm to 1:00pm	Convention Center	M2-29
G46 EMC Subcommittee Meeting	12:00pm to 1:30pm	Convention Center	O2-35/36
Standards Working Group P1309	2:00pm to 4:00pm	Convention Center	O2-38
Wednesday, 20 August 2008			
TC-8 Electromagnetic Product Safety Annual Meeting	7:00am to 8:00am	Convention Center	O2-37
Standards Development Committee (SDCom) Meeting (Part 2 of 2)	7:00am to 8:30am	Convention Center	O2-38
Broad Spectrum Forum sponsored by Intertek	7:00am to 9:00am	Marriott Hotel	LaSalle
PAR-1688 Working Group Meeting	8:00am to 12:00pm	Convention Center	W2-61
Agilent Technologies VIP Luncheon	11:00am to 2:00pm	Marriott Hotel	Cadillac
Amateur Radio Luncheon (B.Y.O.)	12:00pm to 1:30pm	Convention Center	M2-30
TC-5 High Power Electromagnetics Committee Meeting	12:00pm to 1:30pm	Convention Center	O2-43
TC-10 Signal Integrity Annual Meeting	12:00pm to 1:30pm	Convention Center	W2-61
TC-3 Electromagnetic Environments Committee Meeting	12:00pm to 2:00pm	Convention Center	O2-38
TC-4 Electromagnetic Interference Control Committee Meeting	12:00pm to 2:00pm	Convention Center	O2-35/36
Thursday, 21 August 2008			
Technical Advisory Committee Meeting #2	7:00am to 9:00am	Convention Center	O2-35/36
Exhibitor Breakfast	8:00am to 9:00am	Convention Center	O2-33
FCC Radio Amateur License Exams	9:00am to 12:00pm	Convention Center	W2-67
CISPR D/A JTF Chamber Characterization	9:00am to 5:00pm	Convention Center	O2-37
NOISE Control for Real-World PCB Design Sponsored by NEC Informatel Systems, Ltd.	3:30pm to 6:30pm	Marriott Hotel	Cadillac
2008 EMC Symposium Wrap Up Meeting	4:00pm to 6:00pm	Convention Center	M2-29
299.1 Working Group (Part 2 of 2)	5:30pm to 8:00pm	Convention Center	O2-37
EMC Society Board of Directors Meeting	6:00pm to 9:00pm	Marriott Hotel	Joliet
Friday, 22 August 2008			
iNARTE EMC Certification Examinations	8:00am to 5:00pm	Marriott Hotel	Cadillac
TC-11 Nanotechnology Committee Meeting	9:00am to 11:00am	Convention Center	O2-38

SOCIAL ACTIVITIES

WOODWARD DREAM CRUISE

**16 miles of Classic Cars
Saturday, 16 August 2008**

Don't miss out on the opportunity to visit the world's largest classic car cruise. Round trip bus transportation will depart from the Marriott every 90 minutes from 9:00am to 8:00pm. More details available at www.woodwarddreamcruise.com

WELCOME RECEPTION

**GMnext Showroom,
Renaissance Center
Tuesday Evening, 19 August 2008**

The Symposium Steering Committee invites attendees to join old friends and make new acquaintances during an evening of refreshment. This event has proven to be very popular and is an excellent way to meet and network with others from the EMC community.



A special thank you to General Motors Corporation for their generous donation of the GMnext Showroom for this event.

GALA BANQUET

**Renaissance Ballroom, Detroit Marriott
at the Renaissance Center
Wednesday Evening, 20 August 2008**

Join your fellow attendees and their companions for an unforgettable evening!

AWARDS LUNCHEON

**Riverview Ballroom,
COBO Center
Thursday Afternoon, 21 August 2008**

Please join us as contributors to the IEEE EMC Society are honored and the 2008 Best Paper Award winner is announced.

COMPANION AND YOUTH PROGRAMS

EMC 2008 Companion Suite

As a fully paid registered EMC 2008 Companion, your registration packet should include a color coded name badge and daily breakfast vouchers that will allow you access to the suite and entitles you to receipt of a companion gift bag. EMC 2008 Registered Companions are welcome to present the breakfast vouchers to enjoy an extended complimentary continental breakfast to start each day. The Suite will be open Monday through Friday from 7:30 a.m. until 11:00 a.m.

Youth Program

Calling all young engineers! Get ready for an alternative energy experience. At the EMC 2008 Children's Workshop on Tuesday, August 19th, and Wednesday, August 20th, the cars are going solar — maybe even hybrid. All kits will be prepared individually with everything you will need to build your project.

On Thursday, August 21st, we will again be visiting

selected booths on the exhibit floor where they will explain in layman's terms what the conference is really all about and we will see the neatest and newest gadgets out there.

Registration for this event is included with Junior Companion Registrations. Registration on site during the Symposium is subject to space availability.

Workshop I	Tuesday, 19 August 2008 9:00am to 10:30am Room M2-29 (second floor)
Workshop II	Wednesday, 20 August 2008 9:00am to 10:30am Room M2-29 (second floor)
Exhibit Hall Tour	Thursday, 21 August 2008 9:00am to 11:00am Meet in Wayne Atrium

GUEST TOURS

The IEEE EMC 2008 Symposium is pleased to offer the following tours during this year's event. Pre-registration and pre-payment are required. Registration on site during the Symposium is subject to space availability. Tour prices are based on a minimum number of participants and tours may be cancelled if this minimum has not been met.

MONDAY, 18 AUGUST 2008

Uniquely Detroit: Art and Architecture **10:00 a.m. to 3:30 p.m. \$62 per person**

Escape from the ordinary and experience the nostalgia of the golden age of the auto barons. This visit to the Eleanor and Edsel Ford home on Michigan's fabled and exclusive "Gold Coast" will captivate you with its art treasures, antiques and memorabilia. This Cotswold style home was designed by Albert Kahn and is located on 62 beautifully landscaped acres on the western shore of Lake St. Clair. (www.fordhouse.org) Following our wonderful tour and lunch at the Eleanor and Edsel Ford Home we will arrive at Pewabic Pottery in Detroit. Pewabic Pottery is one of Detroit's best-kept secrets. It was founded in 1903 by Mary Chase Perry at the time of the Arts and Crafts Movement, and remains the oldest art pottery in continuous operation in the United States. It is still a renowned ceramics learning center, museum and gallery. Works of local artists are offered for sale in their gallery. (www.pewabic.com)

TUESDAY, 19 AUGUST 2008

Downtown In Motown: **Tour Of Detroit The Motor City** **9:30 a.m. to 12:30 p.m. \$30 per person**

From its humble beginnings as Fort Pontchartrain on the narrowest part of the Detroit River, to its role of international leadership in the automotive world, this fascinating tour shows where Detroit has been and where it is heading in the 21st century. Enjoy the narration and commentary by our high-energy knowledgeable guide, as you learn about Detroit. See all civic areas, Cultural areas of Detroit with stop at Motown Museum, home of Barry Gordy and the 50's Motown Sound, in the New Center Area, for a guided tour. (www.motownmuseum.com)

THURSDAY, 21 AUGUST 2008

Cruise On The Detroit River **12:30 p.m. to 3:30 p.m. \$27per person**

Your guide will meet the group at the hotel to walk over to the boat dock at nearby Hart Plaza. Enjoy a delightful afternoon on the Detroit River with a two-hour, fully-narrated sightseeing cruise aboard the Diamond Jack riverboat. Take pleasure in seeing spectacular views of Detroit and Windsor while sharing one of the busiest international waterways with ships of up to 1000 feet from around the world. Shorewatch and Shipwatch! Includes snacks aboard ship. (www.diamondjack.com)

FRIDAY, 22 AUGUST 2008

Greenfield Village OR Henry Ford Museum **9:30 a.m. to 2:30 p.m. \$42 per person**

Visit either one of these world famous museums that trace America's history for the last 300 years. Built by Henry Ford I, this is Detroit's number one tourist attraction. Among the 100 plus historic buildings in Greenfield Village, you can visit Thomas Edison's laboratory, Menlo Park, where the electric light bulb was born, and see the bicycle shop where the Wright Brothers created the first airplane. If you choose to visit Henry Ford Museum, you could see Buckminster Fuller's futuristic house made chiefly of aluminum. It is said Henry Ford wanted to collect one of everything ever manufactured in nineteenth and twentieth century America. Your visit to the air-conditioned 12 full acres of Americana collection will dazzle you. The displays are replete with priceless automobiles from presidential limousines to early tin lizzies, and the Halls of Technology tell us the unparalleled story of American Industrial Progress! (www.thehenryford.com)

Ford Rouge Factory Tour **12:30 p.m. to 5:30 p.m. \$40 per person**

See why Detroit is called the Motor City. This spectacular attraction in Dearborn is a celebration of the innovation of manufacturing in America – where history and technology merge. Twenty-five years ago, tours of the famous Ford Rouge Plant were discontinued. When production of the new Ford F-150 Pickup began in 2004, a new era of Rouge tours began. Go behind the scenes inside the world's largest automotive complex. EXPERIENCE two state-of-the art theaters, which chronicle both the history and future of auto manufacturing in awe-inspiring, multi-sensory film experiences. SEE the 10-acre environmentally inspired "living roof" – the world's largest – on top of the final assembly building. An 80 foot high elevated walkway will take your group above a world-class assembly line. DISCOVER how Ford F-150 trucks are built. No prolonged walking required. Tour is handicap accessible. Eat lunch before departing for tour.

Tours include round trip transportation on deluxe highway coaches (except for the boat cruise), an Action Tours guide on each coach, admissions to all attractions, all taxes and gratuities, and meals where indicated.

All tours (except the Detroit River Cruise) depart promptly from the Detroit Marriott Renaissance Center/Lobby Entrance.

The Detroit River Cruise departs from the dock southwest of the Renaissance Center. Group will depart promptly from the Detroit Marriott Renaissance Center/Lobby Entrance for the 10-15 minute walk to the boat dock at Hart Plaza.

Bottled water is included in the following tours: Uniquely Detroit, Greenfield Village/Henry Ford Museum

GENERAL INFORMATION

Getting Around

COBO Center is about a 10-minute walk from the Marriott Detroit along the newly completed Riverwalk.

Shuttle bus service will be provided between the Marriott Detroit at the Renaissance Center and COBO Center from 6:30am through 6:30pm, Monday, 18 August, through Friday, 22 August. Shuttle busses will depart from the Marriott at 6:30am each day and at regular intervals throughout the day (approximately every 20 minutes).

The Detroit PeopleMover provides monorail service around downtown Detroit, including stops at Renaissance Center and COBO Center. The routine maintenance on the PeopleMover is expected to be completed and service will resume at 6:30am on Monday, August 18th.

PeopleMover Schedule

Monday-Thursday 6:30 AM - Midnight

Friday 6:30 AM - 2 AM

Saturday 9 AM - 2 AM

Sunday Noon - Midnight

Registration Hours

The Symposium registration desk will be located in the Wayne Atrium in COBO Center.

Sunday	17 August	2:00pm to 6:00pm
Monday	18 August	7:00am to 5:00pm
Tuesday	19 August	7:00am to 5:00pm
Wednesday	20 August	7:00am to 5:00pm
Thursday	21 August	7:00am to 5:00pm
Friday	22 August	7:00am to 2:00pm

Speaker Breakfast

A Speaker Breakfast will be held for each day's presenters and session chairs from 7:00am to 8:15am Monday through Friday in Room O2-44 at COBO Center. **All presenters and session chairs are required to attend the speaker breakfast on the day of their presentation** to ensure a seamless transition of speakers, correct pronunciation of presenter names, correct bio information is relayed, and receive coaching on the question and answer period, thus resulting in a professional, well-organized session.

Speaker Ready Room

Room O2-44 at COBO Center will be open Monday through Friday from 7:00am to 5:00pm for presenters to prepare and confirm last-minute details on presentations and to gain familiarity with A/V equipment. The room will be equipped with A/V equipment used in technical sessions.

Professional Development Hours

The 2008 IEEE International EMC Symposium will issue Professional Development Hours (PDHs) for the various programs presented during the symposium. It will be the responsibility of the individuals using the PDHs to document and maintain that information for their own use and records. The 2008 symposium committee will not keep records of attendance at presentations. 10 Professional Development Hours (PDHs) = 1 Continuing Education Unit (CEU)

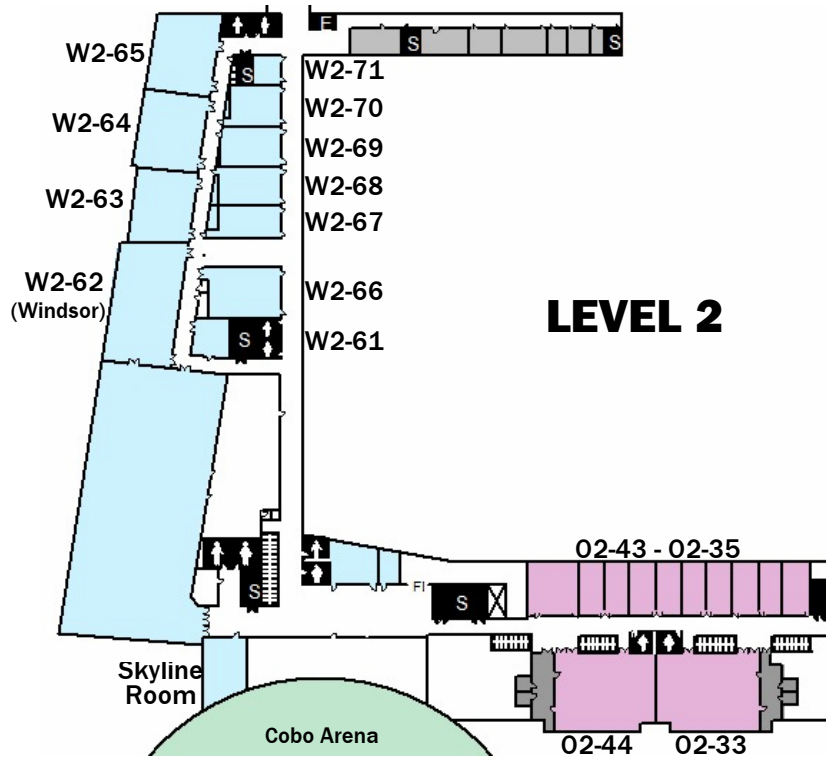
Internet Café / Wireless Access

Complimentary wired Internet access is available at the Internet Café stations in the Exhibit Hall at COBO Center. In addition, complimentary wireless Internet access will also be available throughout the Exhibit Hall. *Sponsored by Interference Technology.*

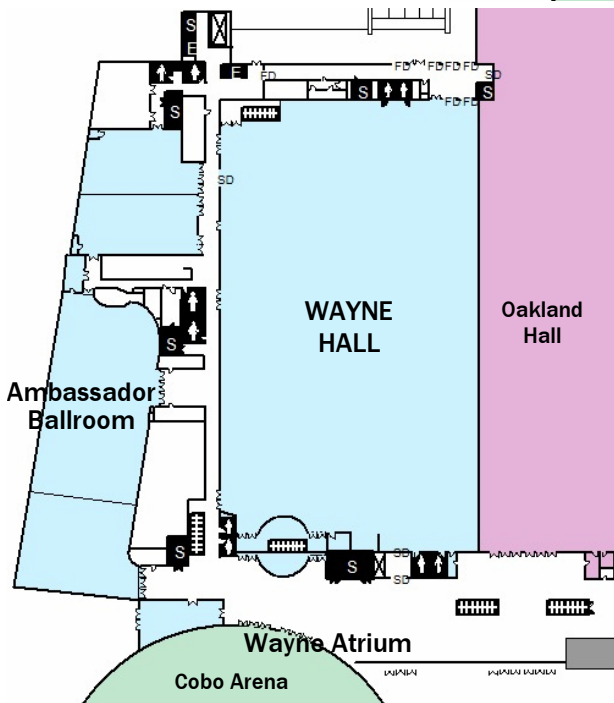
Message Center Information

There will be a message center and information desk located near symposium registration in Wayne Atrium at COBO Center. To leave a message, call COBO Center at +1 313 877 8777 and ask to be transferred to the IEEE EMC Symposium Registration Desk.

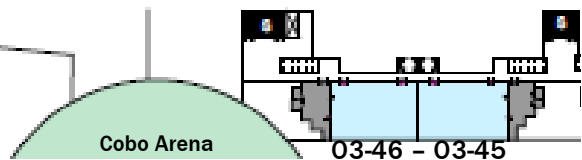
COBO CENTER MAP



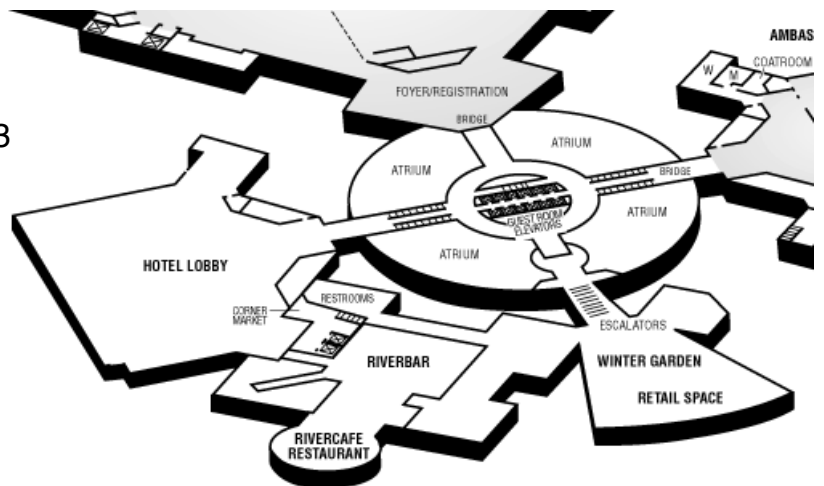
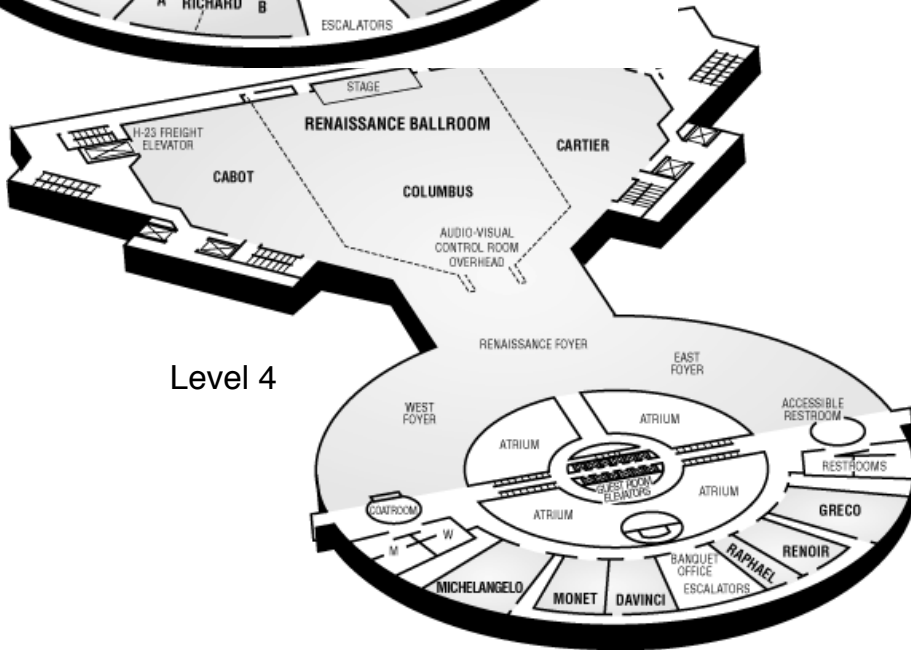
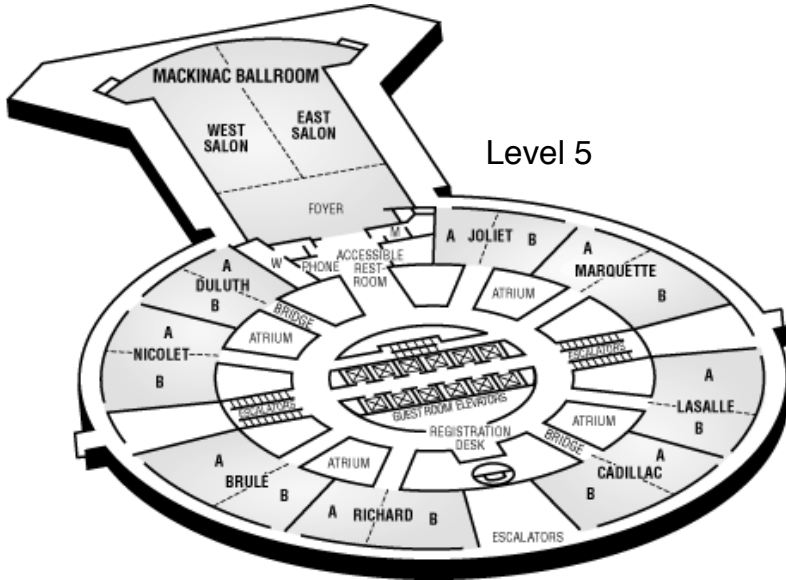
LEVEL 1



LEVEL 3

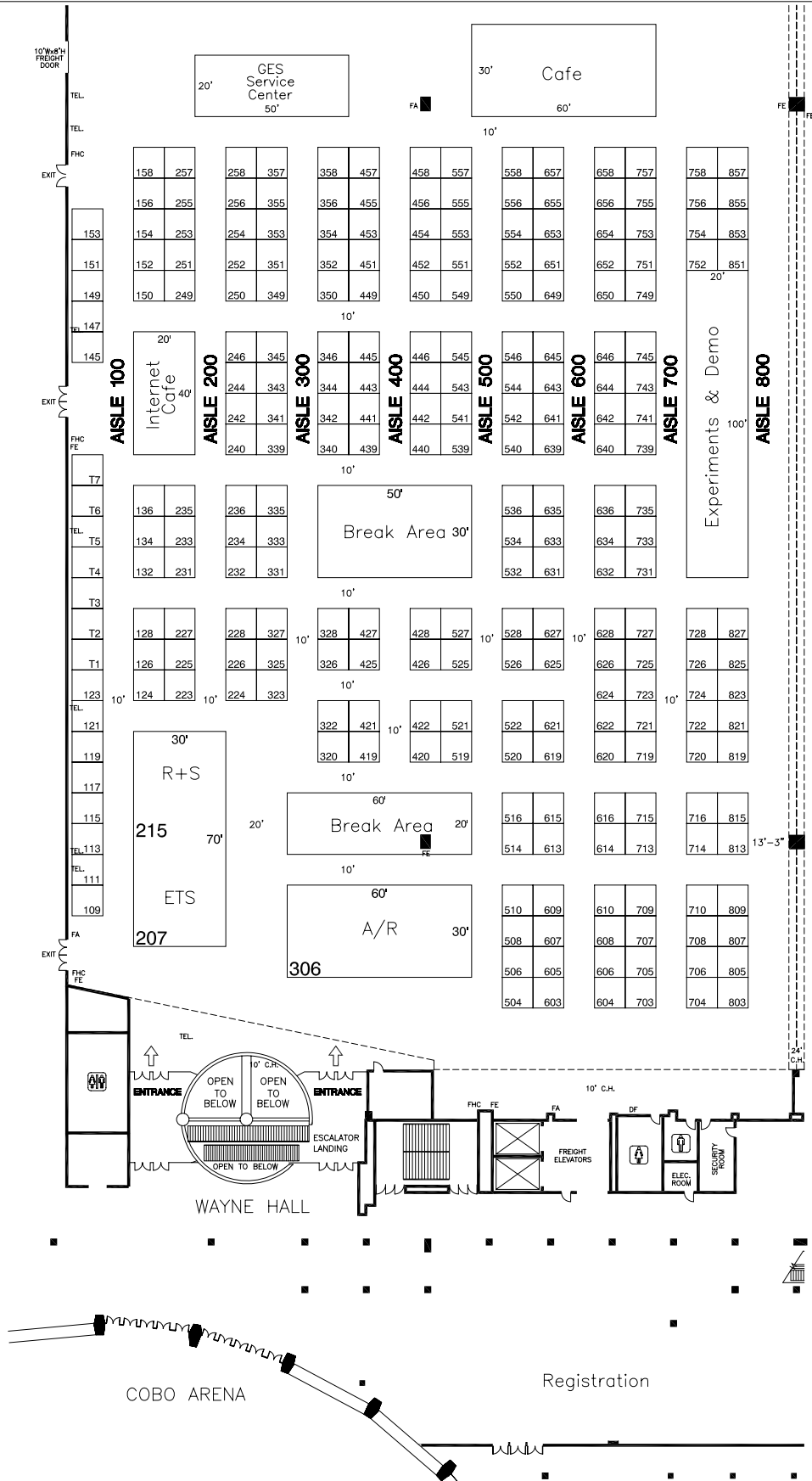


MARRIOTT MAP



MARRIOTT MAP

EXHIBIT HALL FLOOR PLAN



EXHIBITS

You are cordially invited to spend time with over 200 EMI/EMC companies. Each company will be exhibiting the latest products and services in EMI/EMC community. The products and services will range from EMC modeling software to complete Test Systems. All exhibitors will have their booths staffed with technical experts and filled with the latest equipment.

No matter what industry you are in, the design cycle for your product has been shortened and your EMC problems are pushing up in frequency. The exhibitors will have products, software, services, and test equipment to help you meet your difficult EMC design requirements. You will have access to the latest EMC/EMI tools and experts to explain how they can help you all under one roof.

Please do not miss this unique gathering of EMC technology and use this opportunity to get the exhibitors to service your needs.

EXHIBIT HOURS

Tuesday	19 August	9:30am – 5:00pm
Wednesday	20 August	9:30am – 5:00pm
Thursday	21 August	9:30am – 1:00pm

EXHIBITOR LIST

(as of 21 July 2008)

Company name	Booth #	Company name	Booth #
2009 IEEE EMC Symposium	115,117	Communications & Power Industries	128
2Comu	553	Conec Corp.	632
3M	603,605,607	Conesys, Inc.	745
A.H. Systems	323,325,327	Conformity Magazine	625,627
Advanced Test Equipment Rentals	709	Connor Manufacturing Services	541
Aeroflex	646	CST of America, Inc.	639
Agilent Technologies	326,328	Cuming Lehman Chambers	426,428
Alion Science & Technology	250	Curtis Industries	546
A2LA/American Assoc. for Lab Accreditation	124	D.L.S. Electronic Systems, Inc.	721
Amber Precision	252	Dayton T Brown Inc	631
American TCB	235	Delphi Steering EMC Lab	706
Amplifier Research	306 island	Detectus	450
Andro Computationals Solutions	231-233	Dexter Magnetic Technologies, Inc.	228
ANSI-Accredited Standards Committee C63	113	Doo Sung Industrial Co., Ltd.	707
Ansoft	134,136	Dynamic Sciences International, Inc.	223,225
Antenna Research Assoc. (ARA)	528	EE - Evaluation Engineering	704
Applied Physical Electronics	349	Electro-Magnetic Applications, Inc.	626
Applied Simulation Technology	635	Elite Electronic Engineering, Inc.	234-236
Apriel Laboratories	739	Elliott Laboratories	344
Arc Technologies, Inc.	634	EM Software & Systems-SA (Pty) Ltd.	246
Boeing Company	452	EMC Solutions Ltd	441
Bose Corporation	651	EMCoS Ltd.	649
Braden Shielding Systems	554	EMI-tec GMBH	540
California Instruments	622	EMS-Plus LLC	545
CAP Wireless	249	EMSCAN Corp.	339,341
Captor Corporation	719	Equipment Management Technology	752
China Electrotechnical Society	716	ETS-Lindgren	207 island
Chomerics Div. Parker Hannifin	705	Fair-Rite Products	331,333
CKC Laboratories, Inc.	534	Fischer Custom Communications Inc	514,516,613,615

EXHIBITOR LIST

(as of 21 July 2008)

Company name	Booth #	Company name	Booth #
Global Test Equipment	454	Physware	723
Haefely EMC	609	Pioneer Automotive Technologies, Inc.	351
Hi Tech Services, Inc.	725	PPM Ltd.	727
HV Technologies	620	Premix OY	715
IBM	641	Raymond EMC Enclosures Ltd.	741
IEEE EMC Society	109,111	Retlif Testing Laboratories	449
IEEE PSES Society	T5	RF Exposure Lab, LLC	343
IEEE Southeast Michigan Section	147	Rohde & Schwarz	215 island
IFI - Instruments for Industry	604,606	Sabritec	653
iNarte, Inc.	624	Safety & EMC Magazine	T6
Ingenium Testing, LLC	244	Schlegel Electronic Materials	532
Institute for Telecommunications Sciences	(N720	Schurter, Inc.	731
Intermark (USA) Inc.	440,442	Seven Mountains Scientific Inc	T3
International Certification Services	542	Shen Zhen HFC Shielding Product Co. Ltd.	251
International Compliance Laboratories	642	Siemic, Inc.	T7
Interpower	445	Sigrity Inc.	636
Intertek	644	Simberian, Inc.	T1
Isodyne Inc.	633	Simlab Software GMBH	640
Inntex Div.- TexE srl	722	Southwest Research Institute	616
Interference Technology/ITEM Publications	508,510	Spectrum Control, Inc.	539
Jacobs Technology	443	Spira Manufacturing	232
Kikusui America, Inc.	650,652,749,751	Sunol Sciences Corp.	520,522,619,621
Laird Technologies	724	SVAD-White Sands Missile Range	713
Lambda Americas	714	Taiyo Yuden (USA), Inc.	439
LeCroy Corporation	743	TDK Corporation	320,322,419,421
Liberty Labs, Inc.	425-427	Tech-Etch, Inc.	628
LS Research	150	Techmaster Electronics, Inc.	352
MAJR Products Corp.	346	Telogy	710
Metex Corp.	733	TennMax Inc.	703
Methode Development Company	119	TESEQ, Inc.	420,422,519,521
Michigan Scientific Corp.	350	Test & Measurement World	
Micro-Coax	555	Thermo Fisher Scientific	121,123
Milmega Ltd	444,446	Transient Specialists, Inc.	643
Motor City Radio Club	T4	TUV Rheinland of N.A.	227
MuRata Electronics, Inc.	224,226	TUV SUD America, Inc.	335
National Technical Systems (NTS)	342	U.S. Navy	242
NAVAIR	240	Underwriters Laboratories	504,506
NEC Informatec Systems, Ltd.	726,728	Universal Shielding Corp.	543
NEC/Tokin America	536	US Army Aberdeen Test Center	552
Nemko USA	544	V Technical Textiles/Shieldex	T2
Nexio	551	Vanguard Products Corp.	608
NIST	126	Vishay Intertechnology, Inc.	526
Noise Laboratory Co. Ltd.	340	WaveZero	708
Northwest EMC	610	Webcom Communications	
NVLAP (National Voluntary Lab Accreditation)	645	Wireless Communication Research Center	451
Oak-Mitsui Technologies	549	Wurth Electronics Midcom, Inc.	132
Ophir RF, Inc.	614	X2Y Attenuators, LLC	735
Panashield, Inc.	525,527	York EMC Services Ltd.	550
Pearson Electronics Inc	345		

EXHIBITOR PROFILES

2009 IEEE International Symposium on EMC 115;117

Austin, TX
David Staggs, Chairman
Email: info@emc2009.org
Website: www.emc2009.org

The Live Music Capital of the World™, Austin, Texas is known for its cool college town vibe and sophisticated, yet unpretentious atmosphere. The city is also home to a vibrant high hi-tech community and our own enthusiastic and growing EMC chapter.

The symposium will be held August 17 – 21 at the Austin Convention Center, across from the street from the host hotel, the newly constructed Hilton Hotel. Both are located in downtown Austin near Sixth Street, where the entertainment venues, funky boutiques, casual coffee shops, night-time hot spots, and art galleries abound.

Visit our booth (115 - 117) at the 2008 IEEE EMC Symposium in Detroit for an info pak. Check our website throughout the year for the latest information for registration, housing, call for papers, technical sessions, workshops, events and entertainment. Join us in '09 for a symposium that's "EMC Austin Style!"

3M Electrical Markets Division 603;605;607

A130-4N-36
6801 River Place Blvd.
Austin, TX 78726 USA
+1 800 676-8381
+1 800 828 9329 (Fax)
Website: 3M.com/emc
Manufacturer

3M continues to expand its line of EMC products available globally. Count on 3M innovation to help control EMI susceptibility and help meet EMC certification standards around the world. Choose from 3M EMI/RFI shielding tapes, sheets and films; absorbing materials; braided shielding sleeves; conductive materials; and antistatic and high-temperature tape.

3M Electronic Solutions Division 603;605;607

A130-3N-52
6801 River Place Blvd.
Austin, TX 78726 USA
+1 800 328 1368
+1 800 858 9136 (Fax)
Website: www.3m.com/electronics
Manufacturer

3M offers a wide array of solutions to EMC problems, including OEM tapes, EMC and EMI-shielding products for insulating wire harnesses, shielding against electromagnetic interference, protecting PCBs and electronic devices or insulating electrical components. 3M Electronic Solutions Division offers innovative solutions for connecting PCBs and equipment, such as the robust, shielded 3M brand Mini Delta Ribbon System (MDR) System; shielded cables, such as flat and round jacketed shielded cables and 3M brand pleated foil covered cable (PFC); and shielded cable assemblies, such as 3M brand MDR LVDS cable assemblies. Other products include 3M brand embedded capacitor materials which may lower radiated EMI when used as power and ground layers in a multilayer PCB; and static control products which provide PCBs and equipment protection from electrostatic discharge (ESD) during assembly and test in the workstation, and during shipping and storage.

2Comu 553

Wen Yu
106 Fairfield Dr:
State College, PA 16801 USA
+1 814 441 9403
Email: wenyu@2comu.com
Website: www.2comu.com
Manufacturer

3M Electronics Markets Materials Div 603;605;607

3M Center; Bldg. 224-3N-11
St. Paul, MN 55144 USA
+1 651 737 1783
+1 651 737 1931 (Fax)
Email: cavannelli@mmm.com
Website: www.3M.com/electronics
Manufacturer

3M offers a broad range of electrically conductive tapes and adhesives that provide the mechanical and electrical performance needed to attach EMI/RFI shields and gaskets to electronic devices. 3M Electrically Conductive Tapes and Adhesives have a multitude of uses in electronic design. Our global network of technical support centers can help implement 3M solutions into your operation.

A.H. Systems, Inc. 323;325;327

Lori Ann Cohen
9710 Cozycroft Ave
Chatsworth, CA 91311 USA
+1 818 998 0223
Email: sales@AHSystems.com
Website: AHSystems.com
Manufacturer

A.H. Systems manufactures a complete line of affordable, reliable, individually calibrated EMC Test Antennas and Current Probes that satisfy FCC, MIL-STD, VDE, IEC and SAE testing standards. Delivering high quality products at competitive prices with immediate shipment plus prompt technical support for the entire product line are goals we strive to achieve at A.H. Systems. We provide rental programs for our equipment and offer Recalibration Services for all our antennas and probes, including others manufactured worldwide. We take pride in providing a fast turn around schedule to help minimize any down time the customer may experience during testing.

Advanced Test Equipment Rentals 709

Angela Cummings
10401 Roselle Street
San Diego, CA 92121 USA
+1 800 404 2832
+1 858 558 6570 (Fax)
Email: acummings@atecorp.com
Website: www.atecorp.com
Reseller/Rental Company

Advanced Test Equipment Corporation (ATEC), a private San Diego-based company founded in 1981, has proven its commitment to providing quality equipment and support by meeting our customer's test, measurement, inspection and environmental equipment requirements. An extensive inventory, custom solutions, flexible rental terms, expedient delivery and quality customer support set the corporation apart as a one-stop solution for all test, measurement and inspection needs. ATEC is ISO-9001 certified, HUB-Zone certified and 17025 compliant, with test and measurement equipment specific to the following industries: Aerospace and Defense, Aeronautical, Automotive, Cable, Telecomm and Wireless, Electrical Contractors and Engineers, and Test & Measurement Laboratories. For more information or to request a quote, call (858) 558-6500 or visit www.atecorp.com.

Aeroflex 646

Amy Lawrence
10200 W. York St.
Wichita, KS 67215 USA
+1 316 522 4981
+1 316 524 2623
Email: info-test@aeroflex.com
Website: www.aeroflex.com
Manufacturer

Aeroflex is a multi-faceted high technology company that designs, develops, manufactures and markets a diverse range of microelectronic and test and measurement products. Featured at 2008 IEEE EMC are Aeroflex's 341x Series Signal Generators, 3280 Series Spectrum Analyzers and RF PXI modules.

Agilent Technologies 326;328

5301 Stevens Creek Blvd.
Santa Clara, CA 95051 USA
+1 800 829 4444
Website: www.agilent.com
Manufacturer

Agilent Technologies (NYSE:A) is the world's premier measurement company and a technology leader in communications, electronics, life sciences and chemical analysis. The company's 19,000 employees serve customers in more than 110 countries. Agilent provides a full line of test tools used in EMC labs worldwide from handheld instruments to bench top systems and integrated solutions – helping you meet your immunity and emissions testing requirements for pre-compliance through full CISPR compliance.

Alion Science & Technology 250

Rohit Vohra
20 Clipper Rd.
West Conshohocken, PA 19428 USA
+1 610 825 1960
+1 610 825 1684 (Fax)
Email: emc@alionscience.com
Website: rb.alionscience.com
Testing and Certifications

Alion's R&B Laboratory is an independent test facility providing sophisticated EMC consulting, engineering, and testing services to both government and industry customers. Our accreditations include American Association for Laboratory Accreditation (A2LA) Automotive, EMC Laboratory Recognition Program (AEMCLRP) and NIST's National Voluntary Laboratory Accreditation Program (NVLAP), including ISO 17025 requirements.

Amber Precision Instruments, Inc. 252

Jin Min
3333 Bowers Ave., Ste. 175
Santa Clara, CA 95054 USA
+1 408 887 7258
+1 408 496 5740 (Fax)
Email: jinmin@amberpi.com
Website: www.amberpi.com
Manufacturers

EXHIBITOR PROFILES

American Association for Laboratory Accreditation (A2LA) 124

Bethany Hackett, Senior Accreditation Officer
5301 Buckeystown Pike, Ste. 350
Frederick, MD 21704 USA
+1 301 644 3227
+1 301 662 2974 (Fax)
Email: bhackett@A2LA.org
Website: www.A2LA.org

Testing/Calibration/Product Certification/
Reference Material Producers/Inspection
Bodies/Proficiency Testing Providers

A2LA is a private, non-profit membership organization, established in 1978. Its primary mission is to provide a comprehensive laboratory accreditation programs for various organizations. Over 1900 laboratories have been accredited in 13 fields of testing and calibration. Laboratories are accredited to ISO/IEC 17025 and field-specific requirements developed with government and industry. A2LA also offers programs for accreditation of inspection bodies (ISO/IEC 17020), proficiency testing providers (ILAC G13, ISO/IEC Guide 43), reference material producers (ISO/IEC Guide 34), and bodies operating product certification systems (ISO/IEC Guide 65). A2LA is recognized by the National Institute for Standards and Technology (NIST) as competent to accredit testing laboratories to meet the technical requirements for acceptance by European Union Member State Governments under the EMC Annex of the U.S. – EU Mutual Recognition Agreement (MRA) and is an authorized body under the provisions of Phase 1 (testing) and Phase 2 (certification) of the Asia Pacific Economic Cooperation (APEC) MRA

American TCB 235

William Raff
6731 Whittier Avenue
McLean, VA 22101 USA
+1 703 847 4700
+1 703 847 6888 (Fax)
Email: info@atcb.com
Website: http://www.atcb.com

Testing/Certification

New Offices in Shanghai and the UK. American TCB is a premier Certification Body providing access to North American and International Markets. Approved to accept and approve devices for the US, Canada and Europe, we provide fast and expert Certification of wireless products for quick market access—usually in a matter of days—providing a tremendous advantage for reduced time-to-market. We certify the most challenging state-of-the-art products, from 802.11 devices to remote control to licensed products and cellular technologies. Look for us at www.ATCB.com. Offices in the US, Taipei, Taiwan, Shenzhen and Beijing provide access for US and Asian manufacturers. Training and engineering services for wireless technologies.

ANDRO Computational Solutions LLC 231-233

Andrew L Drozd
Beeches Technical Campus
Bldg 2, Suite 1
7902 Turin Road
Rome, NY 13440-2067 USA
+1 315 334 1163
+1 315 334 1397 (Fax)
Email: androcs@androcs.com
Website: http://www.androcs.com

Computational Electromagnetics Research & Software Development

ANDRO Computational Solutions, LLC develops expert system based software products for computational electromagnetics (CEM) applications. In operation since 1994, the company's technical focus is on researching, developing and applying expert computer tools to model and simulate complex EMC and E3 problems for Government and commercial customers.

ANSI-Accredited Standards Committee C63™ 113

Dan Hoolihan
32515 Nottingham Court –Box 367
Lindstrom, MN 55045 USA
+1 651 213 0966
+1 651 213 0977 (Fax)
Email: danhoolihanemc@aol.com
Website: http://www.c63.org

The American National Standards Institute (ANSI)-Accredited Standards Committee C63 specializes in standards development for Electromagnetic Compatibility (EMC); a unique subfield of the larger electrical engineering domain. The committee is primarily made up of technical volunteers with some professional administrative staff being supplied by its Secretariat, the Institute of Electrical and Electronics Engineers (IEEE).

Ansoft Corporation 134;136

225 West Station Square Drive, STE 200
Pittsburgh, PA 15219 USA
+1 412-261-3200
+1 412-471-9427 (fax)
Email: info@ansoft.com
Website: www.ansoft.com

Manufacturers

Ansoft is the leading developer of electromagnetic field simulation software used by electrical engineers to design high-performance electronic products. Ansoft focuses on improving physical design by leveraging advanced electromagnetic-field simulators dynamically linked to powerful circuit and system simulation allowing engineers to eliminate physical prototypes, maximize product performance and reduce time to market. This innovative solution is ideal for predicting radiated fields and EMI and performing signal- and power-integrity analysis of mobile communication and Internet-access devices, broadband networking components and systems, IC's, PCB's and electromechanical systems.

ARA TECHNOLOGIES 528

a division of ANTENNA RESEARCH ASSOCIATES

12201 Indian Creek Court
Beltsville, MD 20705
+1 631 724 4619
Email: rjaniec@ara-inc.com
Website: www.aratech-inc.com

Manufacturer

ARA Technologies offers over 40 years of experience in the development of state of the art EMC products. A full range of antennas from Khz to GHz designed to meet your demanding requirements of today. Additional EMC products are: Turntables, masts, Receivers, Amplifiers, CDN, LISN, etc. Please visit our web site for a complete listing.

AR RF/Microwave Instrumentation 306 island

160 School House Road
Souderton, PA 18964 USA
+1 215 723 8181
Email: info@ar-worldwide.com
Website: http://www.ar-worldwide.com

Manufacturer

AR RF/Microwave Instrumentation is a manufacturer and distributor of high power broadband amplifiers from dc-45GHz, 1-50,000 watts that are well suited for radiated and conducted immunity testing as well as equally suitable for general laboratory use. Available are a full line of complimentary test accessories including antennas, directional couplers, field monitoring equipment, power meters, signal generators, EMI receivers, EMC test software, and precompliance EMC test systems. We also offer several RF conducted immunity generators and an automotive conducted immunity generator.

Applied Physical Electronics, L.C. 349

Richard Schreib
P.O. Box 341149
Austin, TX 78734 USA
+1 512 264-1804
+1 512 264 1784 (Fax)
Email: rschreib@apelc.com
Website: www.apelc.com

Manufacturer

APELC offers an affordable test platform that meets all of the MIL-STD 461 E/F requirements for RS-105 testing in an extremely portable, rugged and easy to operate package. The system is straight forward and intuitive in its usage and can be set up for disassembled in less than an hour.

EXHIBITOR PROFILES

Applied Simulation Technology 635

Fred Balistreri
2025 Gateway Place, Suite 318
San Jose, CA 95110 USA
+1 408 436 9070
+1 408 436 9078 (Fax)
Email: fred@apsimtech.com
Website: <http://www.apsimtech.com>

EMI Software

Applied Simulation Technology is a leading manufacturer of Electromagnetic simulation and modeling software. The software predicts EMI from PCB and IC packaging structures. Radiated emissions for both differential and common mode sources are predicted. Non-linear device model for both Digital and Analog designs are used. Color coded maps of high frequency currents, impedance and voltage distributions point out problematic areas in the layout visually.

Aprel Laboratories 739

Judy Jones
17 Bentley Ave.
Nepean (Ottawa) Ontario K2E 6T7 CANADA
+1 613 820 2730
+1 613 820 4161 (Fax)
Email: jjones@aprel.com
Website: www.aprel.com

Testing/Certification

Since 1981 APREL Laboratories has supported clients in numerous industries with engineering, consulting, and compliance solutions. We offer automated test equipment for SAR, HAC, OTA and EMC in line with international standards or customized to specific needs. We also provide probes, antennas, positioners, data acquisition and custom software.

ARC Technologies, Inc. 634

11 Chestnut St.
Amesbury, MA 01913 USA
+1 978-388-2993
+1 978-388-6866 (Fax)
Website: www.arc-tech.com

Manufacturer

ARC Technologies is a leading manufacturer of solutions for interference control, including a broad range of absorber products and composites. ARC has launched several additions to its Wave-X line of absorbers for control EMI, RFI and SAR. A pioneer in ultra-thin absorber sheets, ARC has added miniaturized chip caps as well as rigid and flexible molded thermoplastic absorbers. The thin, new cable-integrated absorber is extruded over USB and other cables, beneath the insulation, providing significant levels of attenuation and eliminating the need for ferrites and other EMC countermeasures. ARC products are distributed worldwide.

Boeing Company 452

Phillip Kester
Little Mountain Test Facility
12000 W. 12th St.
Ogden, UT 84404 USA
+1 801 315 2398
Email: phillip.l.kester@boeing.com
Website: www.boeing.com

Manufacturer

Bose Corporation 651

Chastity Harmon
100 The Mountain Rd. MS 4A1
Framingham, MA 01701 USA
+1 508 766 7325
+1 508 766 8348 (Fax)
Email: chastity_harmon@bose.com
Website: www.bose.com

Manufacturer

Bose Corporation is a research company that develops breakthrough technologies and products to bring greater enjoyment to people's lives. Our products range from home and professional entertainment, automotive systems, and aviation and military applications. Please visit us at www.bose.com/careers to learn more about us and job opportunities.

Braden Shielding 554

Katie Daniel
9268 Broken Arrow Expressway
Tulsa, OK 74145 USA
+1 918 624 2888
+1 918 624 7886 (Fax)
Email: kdaniel@bradenshielding.com
Website: www.bradenshielding.com

Manufacturer

California Instruments 622

Gerald R. Holland
9689 Towne Centre Drive
San Diego, CA 92121-1964 USA
+1 858 677 9040
+1 858 677 0940 (Fax)
Email: sales@calinst.com
Website: <http://www.california-instruments.com>

Manufacturer

Offering precision, manual and programmable AC power sources: 100V to 270kVA, single and multi-phase. Models include harmonic waveform generation & analysis for compliance testing, dedicated IEC AC test systems w/software, and portable frequency conversion products. Programmable DC power supplies: output power ranges from 5KW to 90KW or parallel for higher power applications.

CAP Wireless, Inc. 249

Scott Behan
3435 Grande Vista Dr.
Newbury Park, CA 91320 USA
+1 805-499-1166
Email: scott.behan@capwireless.com
Website: www.capwireless.com

Manufacturers

CAP Wireless will be showcasing the Giga-tronics GT-1000A, a superior broadband power amplifier that incorporates CAP's patented Spatium spatial combining technology, which delivers outstanding performance (+40dBm leveled power) and value for EMI/EMC test, semiconductor evaluation, load pull, antenna range, and microwave laboratory applications. Excellent pulse performance and modulated signal fidelity also make these amplifiers ideal for defense EW and radar testing.

Captor Corporation 719

Scott Timms
5040 South County Road 25A
Tipp City, OH 45371 USA
+1 937 667 8484
+1 937 667 5133 (Fax)
Email: stimms@captorcorp.com
Website: <http://www.captorcorp.com>

Manufacturer

Innovative EMI/RFI filters, from custom engineering through production. Quick turnaround, even on problem solving prototypes. In-house engineering, production, and testing facilities yield unsurpassed quality. Our products include EMI/EMC filters, signal line filters, power line filters, single line and multi-circuit filters, power entry modules, PCB mount filters, and high current feed-thru capacitors.

China Electrotechnical Society 716

Mr. Wei Feng
No. 46, Sanhihe Road, P.O. Box 2133
Beijing 100823 CHINA
+8610 68595355
+8610 68511242 (Fax)
Email: weifengces@yahoo.com.cn
Website: www.ces.org.cn

Government Agency

China Electrotechnical Society (CES) is the largest electrical and electronics society in China and have over 50,000 personal members and more than 1500 corporation members. Every year, CES will host the largest and most influential EMC exhibition and forums/conference in China. EMC 2008 Exhibition and Conference will be held on June 9-11, 2009 in Beijing, China.

Chomerics 705

Craig Lazinsky
77 Dragon Court
Woburn, MA 01888 USA
+1 781 935 4850
+1 781 933 4318 (Fax)
Email: chomailbox@parker.com
Website: www.parker.com/chomerics

Manufacturer/Testing/Certification

Chomerics, Division of Parker Hannifin Corporation is a leading solutions provider of electrically and thermally conductive materials. Chomerics offers a wide range of EMI shielding and thermal management materials, compliance and safety testing support services to global electronics companies. Since 1961, Chomerics has been a leader in the development of electrically conductive elastomers for EMI gaskets in telecommunications and electronics applications.

CKC Laboratories, Inc. 534

Todd Robinson
5046 Sierra Pines Drive
Mariposa, CA 95338 USA
+1 800 500 4362 X 207
+1 866 779 9776 (Fax)
Email: todd.robinson@ckc.com
Website: <http://www.ckc.com>

Testing/Certification

Outstanding Service. Unparalleled Quality. Global Acceptance. EMC/EMI testing for automotive components. Full MIL-STD-C/D/E and DO-160-D/E with RS to 200 V/m and MS/MB lightning. Accredited EMC, wireless and safety testing for BSMI, FCC, CE mark, UL, CSA, ACA, VCCI and more. Certification body for FCC (TCB), Canada (CB) and Europe (CAB).

EXHIBITOR PROFILES

Communications & Power Industries

Tom Sertic
45 River Drive
Georgetown Ontario L7G 2J4 CANADA
+1 905 702 2228
+1 905 877 5327 (Fax)
Email: tom.sertic@cmp.cpil.com
Website: www.cpil.com

Manufacturer

CPI, formerly VARIAN EDG manufacturers traveling wave tubes and a complete line of satellite communications and instrumentation amplifiers available in octave and multi-octave bandwidths. TWT amplifiers are available covering the 1 to 40 GHz frequency range in power levels from 20 to 250 Watts. Higher powered and/or higher frequency systems (up to 95 GHz) are also available

Conec (American Conec Corp.)

Fred Kozlof
343 Technology Drive #1101
Garner, NC 27529 USA
+1 919 460 8800
+1 919 460 0141 (Fax)
Email: fkozlof@conec.com
Website: www.conec.com

Manufacturer

CONEC supplies connectors, featuring EMI filtered D-sub with L, C, LC, or Pi filters, Filtered Combo D's with power contacts, water sealed versions, shielded RJ45 with Magnetics built-in, EMI shielded hoods, RF connectors, fiber optic, DIN 41612/17, and numerous computer I/O connectors. Featuring NEW "ATCA" and Compact PCI connectors.

Conesys, Inc.

Rex Aymond
2280 208th St.
Torrance, CA 90501 USA
+1 310 618 3737
+1 310 618 3738 (Fax)
Email: rexa@conesys.com
Website: www.conesys.com

Manufacturer

Conesys is an ISO 9001 and S9100 certified vertically integrated designer and manufacturer of connectors and interconnect solutions, including EMI filter and TVS protection circular and rectangular connectors. Conesys Divisions include Aero-Electric Connector; J-Tech, Conesys Europe, Aero Industrial Products- and for the EMC world, EMP Connectors and Jerrik, Inc.

Conformity Magazine

Lorie Nichols
531 King Street, Suite 6
Littleton, MA 01460
USA
+1 978 486 0888
+1 978 486 0752 (Fax)
Email: lnichols@conformity.com
Website: www.conformity.com

Publisher

Conformity offers in-depth coverage of worldwide regulatory compliance issues for manufacturers of electronic products. Monthly technical features focus on designing and testing products to comply with domestic and international requirements. Major topics include EMC, Product Safety, Telecommunications, ESD, and NEBS.

Connor Manufacturing Services

Coco Niu
16233 NE Cameron Blvd.
Portland, OR 97230 USA
+1 503 262 5168
+1 503 256 0246
Website: www.connorms.com

Manufacturer

Connor is a worldwide leader providing customized solutions to your precision metal stamping, wire forms, springs and integrated assembly needs. Connor provides the engineering support and industry expertise you need for the Electronics, Semiconductor, and Heavy Truck markets. We serve these markets with wholly owned factories located in the United States, China, Singapore and Malaysia.

CST of America, Inc.

10 Laurel Ave., Ste. 300
Wellesley, MA 02481 USA
+1 781 416-2782
+1 781 416-4001 (fax)
Email: info@us.cst.com
Website: www.cst.com

Manufacturers

CST develops and markets software for the simulation of electromagnetic fields in all frequency bands. Its success is based on the implementation of unique, leading edge technology in a user-friendly interface. Furthermore, CST's "complete technology" complements its market and technology leading time domain solver; thus offering unparalleled accuracy and versatility for all applications. CST's customers operate in industries as diverse as telecommunications, defense, automotive electronics, and medical equipment, and include market leaders such as IBM, Intel, Mitsubishi, Samsung and Siemens. Timely, local support is provided through CST's direct sales and technical support forces. Together with its highly qualified distributors and representatives, CST's supports its EM products in over 30 countries.

Cuming-Lehman Chambers, Inc.

Steve Barnes
5800 Cumberland Way
Chambersburg, PA 17202 USA
+1 717 263-4101
+1 717 263-4102 (fax)
Email: sales@cuminglehman.com
Website: www.cuminglehman.com

Industrial

CLCI is a wholly owned subsidiary of Cuming Microwave, Inc., specializing in the design and construction of anechoic chambers and host facilities "tailor made" to fit your performance needs and personal preferences. Our highly skilled project managers provide CLCI with the capacity to be the total turnkey solution for all of your testing needs. Products and Services - EMC as well as high frequency anechoic chambers, host facilities, shielded rooms, doors and door repairs, filters, and microwave absorbers. Our parent company Cuming Microwave, Inc. manufactures a full line of RF absorbers from 10MHz-150GHz, low dielectric and artificial dielectric material as well as a full line of specialty absorbers.

Curtis Industries

Don Reynolds
2400 S. 43rd St.
Milwaukee, WI 53219 USA
+1 414 649-4200
+1 414 649-4279 (fax)
Email: sales@curtisind.com
Website: www.curtisind.com

Manufacturers

Curtis Industries is a manufacturer of EMI/RFI Power line filters. Curtis offers a wide variety of standard AC, DC, Power Entry, Medical, and 3 Phase EMI/RFI filters. In addition to standard filters, Curtis offers engineering services and screen room test facilities to design custom filters to meet almost all requirements.

Dayton T. Brown, Inc.

Haim Gurevich
1175 Church Street
Bohemia, NY 11716 USA
+1 631 244 6203
+1 631 589 3648 (Fax)
Email: haimg@dtb.com
Website: http://www.dtb.com

Testing/Certification

Dayton T. Brown, Inc. is an A2LA/NVLA accredited independent engineering and testing lab, able to assist your Networking and Telecommunications product development needs by either tailoring a unique test protocol for you or by testing your products to standardized regimens, such as NEBS. DTB offers environmental, vibration and EMI/EMC testing to a host of international standards, including commercial and military requirements. We also provide engineering analysis to our customers for both physical and electrical protection characteristics of telecommunications products that will be under test. Tap into our experience, flexibility, reduced time-to-test and low set-up costs, to satisfy your most demanding test objectives.

Delphi Steering EMC Lab

Luke Comstock/Kristy Rider
915 S. Niagara
Saginaw, MI 48602 USA
+1 989 797 0172/ +1 989 797 0302
+1 989 790 2867 (Fax)
Email: luke.comstock@delphi.com/
kristy.L.Rider@delphi.com

Testing/Certification

We offer both vehicle and component level EMC testing at our secure state-of-the-art facility in Saginaw, MI. Compliant with ISO17025, A2LA accredited with AEMCLRP recognition in progress. As a support facility for design and build controllers, we provide both validation and development services.

Detectus

Neill Harlen
45 Voyager Court N.
Toronto, Ontario M9W 4Y2 CANADA
+1 416 674 8970
+1 416 674 8986 (Fax)
Email: neillh@interfaxsystems.com
Website: http://www.interfaxsystems.com

Manufacturer

EMC scanning systems: Measuring system with which the designer can measure intensity and the location of a radiation source at a component level. This unit uniquely provides movement in the XYZ axis with a range of 600X400X200 mm to measure more than just flat boards.

EXHIBITOR PROFILES

Dexter Magnetic Technologies 228

Courtney M. Stone
1050 Morse Avenue
Elk Grove Village, IL 60007 USA
+1 800 775 3829
+1 877 221 5052
Email: info@dexteromag.com
Website:
http://www.dexteromag.com/soft-magnetics.aspx
Industrial Distributor

Dexter Magnetic Technologies is a global distributor of specialized electronic products including ferrite cores, amorphous cores, powder cores, thermistors, bobbins & mounting hardware. From prototype to production quantities with 24 hour turnaround, count on us to deliver components from Fair-Rite, EPCOS, Magnetics, Miles Platts, Ferronics, Toshiba & TDK.

Doo Sung Industrial Co., Ltd. 707

Kavin Lee
#703-7, Bonoh-Dong, Sangrok-Gu
Ansan-City KOREA
+82 31 310 7114
+82 31 415 0434 (Fax)
Email: kavin@dsic21.com &
overseal@dsic21.com
Website: www.dsic21.com
Manufacturer

D.L.S. Electronic Systems 721

Jack Black
1250 Peterson Drive
Wheeling, IL 60025 USA
+1 847 537 6400
+1 847 537 6488 (Fax)
Email: jblack@dlsemc.com
Website: http://www.dlsemc.com

Testing/Certification

D.L.S. provides global EMC and Product Safety compliance testing and consulting for commercial, industrial, military and avionic industries. D.L.S. is NVLAP certified, a CAB for EMC and R&TTE Testing for the EU, as well as offering testing to Lighting, EMC, and Environmental testing to RTCA DO-160, and MIL STD 461A-E. D.L.S. also tests to FCC, EU, CE, VCCI, IC, BSMI and other world wide EMC Specifications. D.L.S. also performs safety testing, including environmental to UL, CSA, CE, LVD, MDD, TUV, GS, IEC/EN specifications and participates in the CB program through our partner lab affiliations. D.L.S. is a NARTE certified organization pursuant to NAVAIR 2450.2 and is a certified testing facility for NRTL and Canadian standards with CSA.

Dynamic Sciences 223;225

International, Inc.
Oren Shiri
6130 Variel Avenue
Woodland Hills, CA 91367 USA
+1 818 226 6262
+1 818 226 6247 (Fax)
Email: market@dynamicssciences.com
Website: www.dynamicssciences.com
Manufacturer

Dynamic Sciences International, Inc. originated in 1972. Serving our customers for over 35 years in design and manufacturing. Our product lines include EMI, TEMPEST test receivers and systems, surveillance equipment and a wide range of antennas. Today DSII meets the demands of our customers excelling in both government and commercial markets. DSII produces compliant hardware and software test equipment that meet the requirements for CISPR, MIL-STD and automotive testing. DSII corporate offices are located in Woodland Hills, CA just 30 miles north of Los Angeles. With global sales representatives and distributors networks and services

EE - Evaluation Engineering 704

Paul Milo
2500 Tamiami Trail North
Nokomis, FL 34275 USA
+1 941 966 9521
+1 941 966 2590
Email: pmilo@nelsonpub.com
Website: www.evaluationengineering.com

Publisher

Evaluation Engineering is the pioneering magazine serving engineers and managers responsible for test and total product quality in the design, development, manufacturing, and service of electronic products and systems. Evaluation Engineering is geared toward buyers and specifiers of test and measurement instruments, automated test equipment, environmental test equipment, communications test instruments, and related products.

Electro Magnetic 626

Applications Inc.
Cindy Johnson
7655 W. Mississippi Ave., Ste. 300
Lakewood, CO 80226 USA
+1 303 980 0070
+1 303 980 0836 (Fax)
Email: cindy@emaden.com
Website: www.electromagneticapplications.com

Research & Development and Software

EMA was incorporated in 1977, and is a leader in electromagnetic effects research and development including lightning,HIRF, EMP,EMC and static electricity. EMA also produces two commercially available EM simulation software packages, EMA3D, and MHARNESS. These packages can be used to simulate radiated and conducted effects on entire systems, such as aircraft, rockets, and land vehicles.

Elite Electronic 234;236

Engineering, Inc.
Steve Laya
1516 Centre Circle
Downers Grove, IL 60515 USA
+1 630 495 9770 X 119
+1 630 495 9785 (Fax)
Email: sglaya@elitetest.com
Website: www.elitetest.com

Testing/Certification

Elite Electronic Engineering is an EMC & environmental stress test laboratory with expertise in Automotive Component & Whole Vehicle SMC, Military and Commercial Aviation, and FCC & CE mark testing/certification.

Elite Capabilities include:

- * Approved lab for all automotive OEMs, including Chrysler, Ford and GM, Toyota, Nissan, Honda, Mercedes, BMW, Volkswagen and others.
- * High Powered RF Immunity Testing up to 3,000 V/m
- * TCC, Canadian & EU Certification Services
- * Combined EMC & Environmental Stress Testing

Elliott Laboratories 344

Tom Wetzel
684 West Maude Avenue
Sunnyvale, CA 94085-3518 USA
+1 408 245 7800
+1 408 245 3499 (Fax)
Email: info@elliottlabs.com
Website: www.elliottlabs.com

Testing/Certification

Elliott Laboratories is now a division of NTS! Based in the heart of Silicon Valley, Elliott Laboratories is a world-class product compliance laboratory providing a full range of services, including Electromagnetic Compatibility (EMC), Product Safety, Wireless and Telecom testing and Consulting. With Elliott's 25 years of experience servicing the needs of product designers and manufacturers, our clients save time and money by achieving their compliance requirements quickly and efficiently, enabling them to bring products to market without costly delays.

EM Software & Systems 246

C.J. Reddy
Langley Research Park
144 Research Drive
Hampton, VA 23666 USA
+1 866 419 FEKO
+1 757 282 5897 (Fax)
Email: cjreddy@emssusa.com
Website: www.feko.info

Manufacturer

EM Software & Systems develops the comprehensive EM analysis code, FEKO, and offers consultancy services in electromagnetic engineering. An extensive implementation of the Method of Moments and Multi Level Fast Multipole Method allows the analysis of: EMC, Antenna Design and Placement, Dielectric bodies (SAR for RADIIAZ), radiation susceptibility of cable harness in real-world problems.

EMC Solutions Ltd. 441

David Hobbs
Unit 6, Century Park, Starley Way
Solihull, West Midlands B37 7HF UK
+1 44 121 782 2705/3122
+1 44 121 782 2706 (Fax)
Email: david@emcsolutionsltd.com
Website: emcsolutionsltd.com

Manufacturer

One of Europe's leading manufacturers of military TEMPEST and EMI/RFI filters and power supplies. Custom, COTS and MOTS equipment to Def Stan 59-411 and Mil Stan 461E. Single and three phase from 1 amp up to 5000 amps in both AC and DC formats, designed and manufactured to meet all major military directives and standards.

EXHIBITOR PROFILES

EMCoS Ltd.

Andro Radchenko
Pekin Str. 27
Tbilisi 0160 GEORGIA
+995 32 389091
+995 32 389082 (Fax)
Email: Info#@emcos.com
Website: <http://www.emcos.com>

EMC Simulation software & consultation services

EMCoS develops and distributes specialized software and provides consultation services for numerical simulation of large systems EMC problems and antenna design.

The product EMC Studio combines a very user-friendly interface with a large range of sophisticated calculation methods for EMC. Conductive and non-conductive structures can be treated with special field solvers. Solvers for nonlinear circuits or complex cable systems are integrated and can be linked to field solvers by sophisticated hybrid methods. Numerous supported CAD formats make data handling very easy.

A second EMC product is the EMCoS Expert System program EMESA, which gives to user very flexible methods to apply automatically EMC rules to electrical and geometrical data.

EMCoS customers are for example leading automotive manufacturers and suppliers like Audi, Daimler, Renault or Volkswagen. They solve even very complex EMC problems fast, convenient, and with high accuracy.

EMI-tec GmbH

Robert Kahl
Motzener Str. 17
Berlin, 12277 GERMANY
+49 3072394920
+49 3072394919 (Fax)
Email: info@emi-tec.de
Website: www.emi-tec.de

Manufacturer

With EMI-tec on the safe side at the EMI Shielding -electrically conductive foils, coatings and transparent shielding for displays
-electrically conductive gaskets (punched, profile and form products) as well as electrically conductive adhesives
-high technology "FORM-IN-PLACE-GASKET" Micro-Sil
-know how and complete solution from one source

EMSCAN

#1, 1715-27 Avenue N.E.
Calgary, Alberta T2E-7E1 CANADA
+1 403 291 0313
+1 403 250 8786 (Fax)
Email: emscan-assist@emscan.com
Website: emscan.com

Manufacturer

Emscan is the leading supplier of automated electromagnetic scanners for immediate visualization of near field current flows on PCBs due to radiated emissions or conducted or radiated susceptibility. Emscan provides diagnostics that increase design productivity, reduce costs and decrease time to market.

649 EMS-PLUS LLC

Bruce Archambeault
167 Coachmans Cove. Rd.
Four Oaks, NC 27524 USA
+1 919 486 0120
Email: brucearch@aol.com
Website: www.ems-plus.com

Manufacturers

EMS-PLUS is a vendor for software to be used by EMC engineers. EZ-FDTD is a simple to use Finite-Difference Time-Domain (FDTD) fullwave EMC simulation program. Also, EZ-PowerPlane is an easy-to-use simulation program for power plane analysis on printed circuit boards.

EMT – Equipment Management Technology

Paul Levasseur
1525 Pama Lane
Las Vegas, NV 89119
+1 702 459 1700
+1 702 459 6700 (fax)
Email: pual@emt1.com
Website: www.EMT1.com

Reseller; Distributor; Testing/Certification

EMT is your complete source for the rental, leasing and sale of electronic test equipment from manufacturers such as: Agilent, Anritsu, Boonton, Dranetz, Fluke, IFl, Keithley, LeCroy, Rohde & Schwarz, SynthesSys Research, Tektronix and more. All products are inspected by our state-of-the-art (S)/IEC17025:2005 accredited Cal Lab to 50 GHz/

ETS-Lindgren

1301 Arrow Point Drive
Cedar Park, TX 78613 USA
+1 512 531 6400
+1 512 531 6500 (Fax)
Email: info@ets-lindgren.com
Website: <http://www.ets-lindgren.com>

Manufacturer

ETS-Lindgren is the proven world leader for components and systems that measure, shield and control electromagnetic energy. We provide solutions for EMI/RFI/EMF test and measurement applications as well as medical, industrial and governmental RF shielding requirements. Our product line ranges from simple bench-top diagnostic tools to fully integrated turnkey facilities.

ETS Lindgren is also the new home of TILE! Software sales and support.

ETS-Lindgren has more than 75 years of combined company experience and expertise. We were formed by joining a number of leading companies that pioneered many of today's widely accepted products and practices in our industry. Not surprisingly, ETS-Lindgren continues to maintain its reputation as a leader and innovator today.

545

Fair-Rite Products Corp. 331;333

Paul Zdanowicz
One Commercial Row
Walkill, NY 12589 USA
+1 845 895 2055
+1 845 895 2629 (Fax)
+1 888 324 7748 (Toll Free)
Email: ferrites@fair-rite.com
Website: www.fair-rite.com

Manufacturer

Fair-Rite Products Corp. manufactures a comprehensive line of ferrite components in a wide range of materials and geometries for EMI Suppression, Power Applications, and Antenna/RFID Applications. Fair-Rite is the first US soft ferrite manufacturer to receive ISO/TS 16949:2002 certification. We place the highest value on quality, engineering, and service and are dedicated to continual improvement. In addition to our standard product offering, Fair-Rite can provide custom designs and shapes to meet your specific requirements. We have an experienced team of engineers to assist you with new design and technical support. Please visit www.fair-rite.com to view our new online catalog and find contact information for customer service, applications engineers, local sales representatives, and local distributors.

752

Fischer Custom Communications, Inc. 514,516,613, 615

David Fischer
20603 Earl Street
Torrance, CA 90503 USA
+1 310 303 3300
+1 310 371 6268 (Fax)
Email: sales@fischercc.com
Website: <http://www.fischercc.com>

Manufacturer

Fischer Custom Communications, Inc. designs, develops and manufactures immunity and emission test accessories: current probes, injection probes, absorbing clamps, LISN's, CDN's, TEM cells, EN 6000-4-8 systems & Helmholtz coils, transient generators, Injection Clamps, and tools for conducted emission testing of telecom equipment: T-LISN's, non-contact voltage probes, ferrite decouplers, PLC T-LISN's and Surge CDN's for high speed, 100 Base T and 1000 Base T, communication systems.

Global Test Equipment 454

Mike Longo
1424 Centre circle
Downers Grove, IL 60515 USA
+1 630 678 0400
+1 630 678 -0404 (Fax)
Email: Michael@4gte.com
Website: 4gte.com

Resellers

Haefely EMC

Ryan Bares
1650 Route 22
PO Box 414
Brewster, NY 10509 USA
+1 845 279 3644 x262
+1 845 279 2467
Email: rbares@hiptronics.com
Website: <http://www.haefelyemc.com>

Manufacturer

Haefely EMC Test provides high quality precision test instruments for ESD, EFT, Surge and AC power line quality. From simple standalone testers and handheld ESD guns, to fully software-automated EMC test suites, to powerhouse surge applications like Bellcore GR1089 and UL1449, every product we build reflects our 100 year history of quality and customer service.

540

339;341

609

EXHIBITOR PROFILES

Hi-Tech Services, Inc.

725

Henry Osgood
6155' Glacier Pl.
Ferndale, WA 98248 USA
+1 360 312 8086
+1 360 312 8022 (Fax)
Email: ozzie@hitech.com or Mike@hitechrf.com
Website: www.hitechrf.com

Services of Hi-Tech Services, Inc include shielded enclosures, EMC, Antenna and Acoustic chambers. Relocate, repair, modify any make or model chamber. New or used test rooms, solid wall and screen-rooms. No project too big or too small. Testing services. Please view our website for an extensive list of reference projects worldwide.

HV TECHNOLOGIES, Inc.

620

Tom Revesz
8515 Rixlew Lane
Manassas, VA 20109 USA
+1 703 365 2330
+1 703 365 2331 (Fax)
Email: revesz@hvtechnologies.com
Website: www.hvtechnologies.com

Distributor

The staff of HV TECHNOLOGIES, Inc. (HVT), in partnership with EMC-Partner and Montena EMC, is focused on providing our clients with top quality, full compliance transient test instruments at the most competitive prices. Our staff has been supporting the EMC testing community by designing, producing, and distributing the best in high voltage transient test instruments for over two decades. When using out products, customers experience the most reliable transient test instruments with the cleanest waveforms, most accurate phase angle synchronization, and repeatable wave shapes available. This has been possible through innovative product design and the deployment of unique leading-edge technologies.

IBM

641

Represented by Moss Bay EDA
Gene Garat
23889 NE 112th Circle #2
Redmond, WA 98053 USA
+1 206 779 5345
Email: sales@mossbayeda.com
Website: www.mossbaeda.com

Manufacturer

IBM offers software to proofread PCB design files for EMC and SI/PI design rules. Save time and your eyes, let IBM's experience work for you. Over 200 man years of IBM's EMC and Signal Integrity/Power Integrity expertise are incorporated into two easy-to-use design rule checkers. They quickly check the PCB design against a suite of EMC and SI/PI rules. Both reduce human error and relieve the tedium of lengthy visual inspections. EMSAT and EMSAT-SI read all popular board layout files and allow selection of any EMC or SI/PI rules to activate. Violations may be viewed graphically in Allegro and EMSAT-UV, or as an HTML document.

IEEE EMC Society

109;111

Colin Brench
12931 Paint Brush
Helotes, TX 78023 USA
+1 210 522 2359
Email: colin.brench@ieee.org
Website: www.emcs.org

The IEEE EMC Society strives for the enhancement of electromagnetic compatibility through the generation of engineering standards, measurement techniques and test procedures, measuring instruments, equipment and systems characteristics, improved techniques and components, education in EMC and studies of the origins of interference.

IEEE Product Safety Engineering Society

445 Hoes Lane
Piscataway, NJ 08855 USA
+1 732 981 0060
+1 732 981 1721 (Fax)
Email: admin-pses@ieee.org
Website: www.ieee-pses.org

IEEE Society

The IEEE Product Safety Engineering Society addresses safety engineering for equipment and devices used in the scientific, engineering, industrial, commercial and residential arenas. It will allow engineers and other technical professionals an opportunity to discuss and disseminate technical information, to enhance professional skills, and to provide outreach to engineers, students and others with an interest in the field

IEEE Southeast Michigan Section

147

Dr. Randy C. Stevenson
University of Michigan
Dearborn, MI USA
+1 313 583 6434
Email: chrismi@umd.umich.edu
Website: ieee-sem.org

IEEE Section

The SE Michigan Section of the IEEE sponsors technical and professional programs. It provides each member with the opportunity to participate and learn about the new technologies, and network with peers in the electrical, electronics, and computer engineering profession.

On Saturday, November 8, 2008, The SE Michigan Section will hold its Fall Conference: "Great Lakes Green Energy Symposium." We expect a diverse set of speakers, from government and industry, as well as exhibits on emerging energy technologies that will highlight the green energy development in the Great Lakes Region.

We will be exhibiting brochures on new membership, the benefits of IEEE membership, information on the different chapters under the SE Michigan Section, and information about our fall 2008 conference.

iNARTE, Inc.

624

Brian Lawrence
840 Queen Street
New Bern, NC 28560 USA
+1 800 89 NARTE/ +1 252 672 0200
+1 252 672 0111 (Fax)
Email: inarte@narte.org
Website: www.narte.org

Certification

iNarte, a non-profit organization, offers Certification Programs to validate the credentials of professional Engineers and Technicians in EMC/EMI disciplines. The purpose of iNARTE EMC Certification is to foster technical excellence in EMC engineering. Our programs establish competency criteria for EMC/EMI work. Our Certification benefits the individual practitioner and the entire EMC community by establishing a standard of excellence and recognition for those that achieve it.

Ingenium Testing, LLC

244

Jim Blaha
3761 South Central Avenue
Rockford, IL 61102 USA
+1 815 315 9250
+1 815 489 9561 (Fax)
Email: jim.blaha@ingeniumtesting.com
Carl.cacciatore@ingeniumtesting.com
Website: www.ingeniumtesting.com

Testing/Certification

Ingenium Testing LLC is a new facility that has quickly become one of North America's premier testing locations with expansive facilities, comprehensive state-of-the-art test equipment and fully automated testing chambers. Through our Leading Technology, Customized Business Solutions and Engineering Consultations we help you get your products to market more effectively.

INNTEX Div. - TexE srl

722

Riccardo Marchesi
Via Rocca Tedalda, 25
50136 Firenze, ITALY
+39 055 6503766
+39 055 6503706 (Fax)
Email: marchesi@inntex.com
Website: www.inntex.com

INNTEX main business is the development and production of innovative technical textiles. INNTEX was created by a team of researchers with over 10 years experience in textiles. Our research covers the following areas: textiles for high frequency shielding, low frequency magnetic shielding, conductive fabrics. Cooperation with technical partners is our key to create innovative products.

Instruments for Industry

604;606

Michael Yantz/Catherine Schlie
903 South Second Street
Ronkonkoma, NY 11779 USA
+1 631 467 8400 X105
+1 631 467 8558 (Fax)
Email: myantz@aol.com/cschie@ifi.com
Website: www.ifi.com

Manufacturer

IFI provides over 50 years of global support custom designing, developing and manufacturing Amplifiers ranging DC-40 GHz CW & Pulse. We offer TWT, Solid State and Tetrode tube amplifiers, as well as Antennas, E-Field sensors, TEM Cells and Coax/Waveguide accessories. Customers can purchase complete solutions for their testing requirements from a single source. IFI manufacturers single amplifier solutions for 10KHz-3.0GHz & 0.8-18.0GHz in addition to fully customized products for indoor/outdoor programs. Applications include EMC, Automotive, Military EW/ECM, Communications, Wireless, Biological and Educational. The company utilizes a global support network to service customers. This is why IFI is "The Power of Choice!"

EXHIBITOR PROFILES

Institute for Telecommunication Services

Dr. Robert Johnk
325 Broadway
Boulder, CO 80305 USA
+1 303 497 3737
+1 303 497 7302 (Fax)
Email: bjohnk@its.blrdoc.gov
Website: www.its.blrdoc.gov

Government Agency

The Institute for Telecommunications Sciences (ITS) is the research and engineering laboratory of the National Telecommunications and Information Administration (NTIA). ITS supports such NTIA telecommunications objectives as promotion of advanced telecommunications and information infrastructure development in the United States, enhancement of domestic competitiveness, improvement of foreign trade opportunities for U.S. telecommunications firms, and facilitation of more efficient use of the radio spectrum.

Intermark (USA), Inc. / A Kitagawa Company

Masaharu Hatakeyama
1310 Tully Road, Ste 117
San Jose, CA 95122 USA
+1 408 971 2055
+1 408 971 6033 (Fax)
Email: sales@intermark-usa.com
Website: www.intermark-usa.com

Manufacturer

"Intermark (USA) Inc (A Kitagawa Company) offers a wide variety of EMI solutions products such as EMI Absorbers, EMI Gaskets, EMI Tapes, EMI Ferrites, cable shielding materials as well as thermal pads and Shock/Vibration absorbers. New products such as EMI Window Shielding Film, Conductive Shrink Tube and SMT Grounding Contacts are also available. Other product line includes a wide selection of plastic fasteners and hardware for the electronic equipments. Intermark (USA) Inc. is committed to support customers. Visit our booth and get more information on the products!"

International Certification Services, Inc.

Duane R Bagdons / Gayla Burns
1100 Falcon Avenue
Glencoe, MN 55336-3363 USA
+1 320 864 4444
+1 320 864 6611 (Fax)
Email: duane@icsi-us.com/gayla@icsi-us.com
Website: www.icsi-us.com

Testing/Certification

International Certification Services, Inc. is an EMC Test Lab providing worldwide certification on all kinds of products for EMC, FCC and CE. ICSI offers pre-scans, design reviews, seminars and solutions to EMI problems. We do Emission, Immunity, Safety and Environmental testing. We want to do everything possible to help you achieve your EMC mark of quality for your products and ensure your competitive advantage. With ICSI the entrance into the European's market becomes more rapid and more economical than ever before.

ICSI has a large off-site team for testing if equipment is too large to move. We are committed to providing advice on applicable standards and on required tests. We work diligently to solve problems until a product is compliant.

720 International Compliance Laboratories

Ron Zimmerman
1057 Tullar Court
Neenah, WI 54956 USA
+1 920 720 5555
+1 920 720 5556 (Fax)
Email: rzimmerman@icl-us.com
Website: www.icl-us.com

Testing/Certification

International Compliance Laboratories is a fully equipped, A2LA accredited, EMC testing facility in northeast Wisconsin. We offer flexible scheduling, consulting, EMC problem solving, and compliance project management.

ICL's Engineering staff has over 25 years experience resolving product and board level EMC issues. With ICL you can "Relax... we've got it covered."

Interpower Corp.

Judy Nunnikhoven
100 Interpower Ave.
PO Box 115
Oskaloosa, IA 52577 USA
+1 800 622 2290
+1 800 645 5360 (Fax)
Email: sales@interpower.com
Website: www.interpower.com

Manufacturer

Power system components with international safety agency approvals featuring Interpower(tm) international and North American cords, cordsets, power entry modules, accessory power strips, and power distribution units. Other products include harmonized cable; strain reliefs; international plugs, sockets and socket strips; IEC 60320 power inlets, accessory outlets; high power connector and assemblies.

Intertek

Hope Mascott
70 Codman Hill Rd.
Boxborough, MA 01719 USA
+1 800 WORLDLAB
+978 264 9403 (Fax)
Email: icenter@intertek.com
Website: www.intertek-etlsemko.com/emc

Testing/Certification

Intertek is a global leader in testing, inspection and certification services, which operates in over 322 laboratories and 566 offices in 110 countries throughout the world. Intertek provides Global Market Access through its local services, including EMC testing, calibration, product safety testing, certification and performance testing for clients in such industries as appliances, HVAC, components, industrial, medical, telecommunications, lighting, automotive, semiconductor, retail, building products, telecom, wireless, electronics, and cabling products.

Isodyne Inc.

Jason Pedruzzi/Lynn Reilly
7620 E Osie
Wichita, KS 67207 USA
+1 316 682 5634
+1 316 682 4126
Email: jpedruzzi@isodyneinc.com
Website: www.isodyneinc.com

Manufacturer

Tool free EMI/RFI shielding connector accessories for all shield harnesses and custom applications.

Interference Technology/ ITEM Publications

Bob Poust
1000 Germantown Pike, F-2
Plymouth Meeting, PA 19462 USA
+1 484 688 0300
+1 484 688 0303
Email: bpoust@interferencetechnology.com
Website: www.interferencetechnology.com

Publisher

ITEM Publications produces Interference Technology publications and media – the only directory and design guide to focus exclusively on the EMC industry and the acknowledged leader in this field. Interference Technology is published in print three times a year, in English. Our online presence includes the Interference Technology website, the weekly Interference Technology eNews, and the Interference Technology eGuides. . We also publish in China and Japan

Jacobs Technology

Allen Ardinger/Robert Nelson
3300 General Motors Rd
MC-483-340-145
Milford, MI 48380
+1 248-408-9742/+1 248-830-8319
+1 248-676-1135 (Fax)
Email: Allen.Ardinger@jacobs.com /
Robert.Nelson2@jacobs.com
Website:

<http://www.jacobs technology.com/automotive.shtml>

Testing/Certification

Jacobs is a premier test service provider operating a state-of-the-art automotive EMC test facilities in a confidential and secure test environment. Our 10 meter anechoic chamber is equipped with a 2 axel dynamometer/turntable that can handle vehicles weights up to 30,000 lbs. Test capabilities include Radiated Immunity testing from 100 kHz to 9.5 GHz and Radiated Emissions testing from 100 kHz to 2 GHz. Jacobs can also offer ESD and other various electrical system tests.

Signal monitoring and vehicle communication is accomplished through fiber optic transmitters and receivers. We can also exercise the vehicles subsystems, during test operation, with our ABS/Traction Control simulator; pneumatic actuators and fiber optic control systems.

Jacobs test services are accredited to ISO/IEC 17025:1999 by A2LA. In addition we have been approved by VCA to perform 2004/104/EC and 97/24/EC testing. We are competitively priced and willing to take on new challenges. We have short lead times and can often provide test dates on short notice. If you need access to a start-of-the-art test facility, that's available when you need it, please contact us.

Kikusui America, Inc.

Kaz Iwamoto
1744 Rollins Road
Burlingame, CA 94010 USA
+1 800 KIKUSUI
+1 650 259 5904 (Fax)
Email: Kikusui@kikusui.us
Website: www.kikusui.us

Manufacturer

Kikusui provides a wide variety of Electronic Measurement Instruments and Power Supplies with innovative features. New E-Load, PLZ-U Series, operate with 0V input. EMC test systems come with application software and features one of which enables you to create complex power supply voltage variation patterns. Comply with ISO 7637-2 standard.

EXHIBITOR PROFILES

Laird Technologies

Ellie Rovai
16401 Swingley Ridge Rd., Ste. 700
St. Louis, MO 63017 USA
+1 636 898 6208
+1 636 898 6100 (Fax)
Email: ellie.rovai@lairdtech.com
Website: www.lairdtech.com

Manufacturers

Laird Technologies is a global manufacturer of electromagnetic interference (EMI) shielding thermal management products, mechanical actuation systems, signal integrity components, wireless antennal solutions, radio frequency (RF) modules and systems for advanced applications across all market segments of the electronics industry.

Lambda Americas

John Breickner
405 Essex Rd.
Neptune, NJ 07753
+1 732 922 9300
+1 732 922 1441 (Fax)
Email: john.breickner@lambda.com
Website: www.lambda-hp.com

Manufacturers

Genesys™ programmable AC/DC power: 750W to 15kW, Outputs 7.5 to 600VDC, current to 1000A. Worldwide Inputs. RS-232/485 Standard. Advanced Parallel Operation – four like units in parallel to 60kW. Common family controls. Now with LXI-C LAN interface option. Flexible, reliable power for critical test and communications systems.

Le Croy Corporation

Hilary Lustig
700 Chestnut Ridge Road
Chestnut Ridge, NY 10977 USA
+1 800 553 2769
+1 845 578 5985 (Fax)
Email: hilary.lustig@lecroy.com
Website: www.lecroy.com

Manufacturer

LeCroy Corporation is a worldwide leader in serial data test solutions, creating advanced instruments that drive product innovation by quickly measuring, analyzing, and verifying complex electronic signals. The Company offers high-performance oscilloscopes, serial data analyzers, and global communications protocol test solutions used by design engineers in the computer and semiconductor, data storage device, automotive and industrial, and military and aerospace markets. LeCroy's 40-year heritage of technical innovation is the foundation for its recognized leadership in "WaveShape Analysis"—capturing, viewing, and measuring the high-speed signals that drive today's information and communications technologies. LeCroy is headquartered in Chestnut Ridge, New York. Company information is available at <http://www.lecroy.com>.

724

Liberty Labs, Inc./ World Cal, Inc

Mike Howard
1346 Yellowwood Road/2012 High Street
Kimballton, IA 51543/Elk Horn, IA 51531 USA
+1 712 773 2199/ 712 764 2197
+1 712 773 2299/ 712 764 2195 (Fax)
Email: mhoward@liberty-labs.com/
info@world-cal.com
Website: www.liberty-labs.com/
www.world-cal.com

Calibration

Between Liberty Labs, Inc. (A2LA Accredited) and World Cal, Inc. (A2LA Accredited) we can meet your calibration requirements from antennas and accessories to test instrumentation. We strive for prompt turnarounds and quality service.

Liberty Labs, Inc. is also a US Distributor of Austrian Research Centers & Schwarzbeck products. Please check out our website for more details.

LS Research

Thomas T. Smith
W66N220 Commerce Court
Cedarburg, WI 53012 USA
+1 262 421 4986
+1 262 364 2649 (Fax)
Email: sales@lsr.com
Website: www.LSR.com

Testing/Certification

LS Research LLC is a unique company with the capability to take your idea from the early stages of concept to market and any stage in between. LS Research's core competency is in wireless design, consulting, CAD layout and EMC/RF Certification for FCC, Industry Canada, CE and other countries.

MAJR Products Corp.

Terry O'Laughlin
17540 State Highway 198
Saegertown, PA 16433 USA
+1 814 763 3211
+1 814 763 2952 (Fax)
Email: sales@majr.com
Website: <http://www.majr.com>

Manufacturer

MAJR Products is a manufacturer of a wide variety of EMI/RFI gasketing and shielding products and materials across numerous industries. Products include air filters and ventilation panels, metallized fabric gaskets, multi-con and wire mesh gaskets, connector gaskets, extruded metal filled elastomers, knitted wire mesh, EMI windows, board level shields, thermal materials, customized part per client specifications and EMC engineering consulting.

425;427

Metex Corporation

Steve Mullenix / John Soltis
970 New Durham Road
Edison, NJ 08818 USA
+1 732 287-0800
+1 732 287-8546 (Fax)
Email:
jsoltis@metexcorp.com/
smullenix@metexcorp.com
Website: www.metexcorp.com

Manufacturer

Metex is a 40 year old manufacturer of EMI/EMP/ESD Shielding materials. Our strength is in technology and experience in military and commercial applications. Our products include: knitted wire mesh gasketing, conductive elastomers, conductive adhesives and compounds, fabric over foam gasketing, fingerstock products, foil tapes, shielded air vents and shielded windows. Our materials have been designed and used in numerous applications that require performance, integrity, survivability and maintainability of communications equipment, radars, aircraft, missiles, spacecraft, computers, fire control systems and industrial electronics.

Methode Development Company

Emil Millas
7401 West Wilson Ave.
Chicago, IL 60706 USA
+1 708 867 6777
+1 708 867 3149 (Fax)
Email: info@methode.com
Website: www.methode.com

Manufacturer

Methode Development Company's EMC shrinkMate connectors are a 2:1 shrink tube providing a conductive, circumferential connection between the connector and cable, making it significantly lighter than braided shielding, and eliminating the need for soldering. shrinkMate passes A.I.G.S. Vacuum Stability Requirements for polymeric material for spacecraft applications for mass loss and collected volatile condensable materials. MDC also manufactures polymer thick film inks for various flexible and ridged shielding applications, and SFP EMI cages in press fit, solderable, with and without lightpipes, belly-to-belly mounting and various port cage configurations.

Michigan Scientific Corp.

Paul Morand
321 East Huron Street
Milford, MI 48381 USA
+1 248 685 3939
+1 248 684 5406 (Fax)
Email: mscinfo@michsci.com
Website: www.michsci.com

Manufacturer

Michigan Scientific Corporation is a developer and manufacturer of EMI/RFI compatible Fiber-Optic signal links that have earned a reputation for superior stability and immunity that is required when F-O Links are used in Reverb (ISO/IEC 61000-4-21) and BCI (ISO/IEC 11452-4). This reputation is especially true when seeking certification for component and full-scale vehicle EMC testing from the American Association for Laboratory Accreditation (A2LA) or the Automotive EMC Laboratory Recognition Program (AEMCLRP).

On display are F-O Links for Stimulus, Control and Monitoring of Analog, Digital, Audio, Linear Position and Light (visible through IR).

The newest addition is a FO-HBST/FO-HBSR that forms a versatile Analog Signal (DC-1MHz) Fiber-Optic TX/RX pair for transmitting wide bandwidth electrical signals over fiber-optic cables to/from remote sources in high electromagnetic fields or anechoic chambers to/from monitoring equipment in low field areas.

733

EXHIBITOR PROFILES

Microwave Journal

Barbara Walsh
685 Canton Street
Norwood, MA 02062 USA
+1 781 769 9750 x 2025
+1 781 769 9884 (Fax)
Email: bwalsh@mwjournal.com
Website: www.mwjournal.com

Publisher

The Technology Voice of the Wireless World; featuring the latest in technical information, special reports, new product information and news. For more than 45 years, Microwave Journal has maintained an editorial balance between theory, practical uses, applications and news with our technical coverage of the RF, microwave, and wireless industries. Visit us at www.mwjournal.com.

Micro-Coax

555

Ashley Weidow
206 Jones Blvd.
Pottstown, PA 19464 USA
+1 610 495 4398
+1 610 495 6656 (Fax)
Email: aeweidow@micro-coax.com
Website: www.micro-coax.com

Manufacturer

Milmega Limited

444;446

Pat Moore
Ryde Business Park, Nicholson Road
Ryde, Isle of Wight PO33 1BQ United Kingdom
+44 (0) 1983 618004
+44 (0) 1983 811521 (Fax)
Email: sales@milmega.co.uk
Website: www.milmega.co.uk

Manufacturer

MILMEGA, the premier European Designer and Manufacturer of high power amplifiers and systems will be exhibiting their amplifier solutions for IEC 61000-4-3 and automotive EMC test applications.

Developed around a unique upgradeable topology, allowing upgrades in power and frequency, all microwave amplifiers are backed with a full 5-year warranty.

Motor City Radio Club

T4

P.O. Box 337
Wyandotte, MI 48192-3837
www.W8MRM.org

The MOTOR CITY RADIO CLUB was founded in 1932 and is affiliated with the American Radio Relay League (ARRL) and is a ARRL Special Service Club providing top-notch special events, breakfasts, fox hunts and exams. Along with great community support and participation Anyone who has an interest in radio theory, radio propagation, construction, practical communications, the Morse code, transmitter hunting, DX'ing or competitive contesting is welcome! The club's monthly meetings are the usually the 1st Friday at Westfield Center, 2700 Westfield Road in Trenton, Michigan.

Or on the web at: W8MRM.ORG

Murata Electronics Inc.

224;226

Nicole Rosenfeld
2200 Lake Park Drive
Smyrna, GA 30080 USA
+1 770 436 1300
+1 770 805 3192 (Fax)
Email: nrosenfeld@murata.com
Website: www.murata.com/emc/index
Design Tools: www.murata.com/designlib/

Manufacturer

Murata is the world-leading Innovator in Electronics on the forefront of the design, manufacture and sale of ceramic-based passive electronic components and modules, currently supplying advanced EMI filtering technology to the top electronics manufacturers. These products include Chip Ferrite Beads, Three Terminal Capacitors, Common Mode Choke Coils and AC Line Filters. Murata has been able to downsize surface mount EMI filters while providing improved features such as increased current capacity and high frequency characteristics, critical to maintaining Federal Communications Commission (FCC) compliance. www.murata.com/emc/index.

National Technical Systems

342

Nia Carignan
24007 Ventura Boulevard, #200
Calabasas, CA 91302 USA
+1 800 270 2516
+1 818 591 0899
Email: info@ntscorp.com
Website: ntscorp.com

Testing/Certification

NTS is now the largest independent provider of EMC services in North America! Our newest team members at Elliott Laboratories give NTS 8 locations to provide you with world-class product compliance services. Our state-of-the-art labs offer EMC, Product Safety, Wireless and Telecommunications engineering and compliance testing. Our expert engineers and test technicians take the time and put forth the effort to understand your business, your needs and your goals and combine this knowledge with our own compliance and testing expertise to help you create successful products.

NAVAIR Patuxent River

240

Kurt Sebacher
NAWCAD
Bld 144 Suite 3B
48202 Standley Road Unit 5
Patuxent River, MD 20670-1910 USA
+1 301 342 1664
+1 301 342 6982 (Fax)
Email: Kurt.Sebacher@navy.mil

The Naval Air Warfare Center Aircraft Division is the leading edge of E3 RDT&E Facilities and Expertise for Naval Air System Command at Patuxent River Maryland. There are over 15 specialized facilities located at a single site with runways and complete aircraft support. These capabilities provide T&E of aircraft, weapons, and support systems to man made and natural electromagnetic effects. The capabilities are available to military and civil sector both nationally and internationally.

NEC Informatec

726;728

Systems, Ltd.

Shibakoen First Building, 8-2, Shiba 3-chome,
Minato-ku, Tokyo 105-0014, Japan
+81 3 5440 1386
+81 3 5440 1343 (Fax)
Email: sales@emistream.jp.nec.com
Website: www.emistream.com

Manufacturer

NEC Informatec Systems, Ltd. (NIS) is an industry leader offering EMC suppression technology based on real world experience. As a member of Missouri University of Science and Technology's EMC Consortium, NIS is jointly researching PCB level EMI issues.

EMISStream is an EMI suppression tool that offers design rule check and power plane resonance analysis. By eliminating possible EMI issues at the initial design stage, you can improve efficiency, significantly decrease time and cost spent on evaluation process, and enable rapid time-to-market. Additionally, EMISStream now interfaces with CST's electromagnetic simulator, CST MICROWAVE STUDIO.

PIStream is a power integrity design tool for PCB which helps meet your target impedance by adding/moving capacitors, changing capacitance values, changing plane shapes, and power/ground plane distances. Graphic-based PIStream is easy to use and offers speedy analysis.

NEC/TOKIN America Inc.

536

Hebberly Ahatlan
2460 North First Street, Suite 220
San Jose, CA 95131 USA
+1 408 324-1790
Email: hahatlan@nec-tokin.com
Website: <http://www.nec-tokin.com/english/>

Manufacturer

NEC TOKIN sells EMI Suppression Products, Power Inductors, Super-Capacitors, Line Filters, and Mechatronics devices, such as Gyros and Piezoelectric Actuators. We offer flexible-thin ferrites capable of solving EMI issues that no other technology can. They are efficient, cost-effective and space saving. Stop by and we will introduce you to this new technology and we will cover several techniques to solve common and tough EMI issues using NEC Tokin's Flex Suppressor™ material.

Nemko

544

Horace Lam
303 River Road
Ottawa, Ontario
Canada K1V 1H2
Tel: +1 613 737 9680
Email: Canada@Nemko.com
URL: www.nemko.com

Compliance Testing & Product Certification

Nemko provides worldwide market access to manufacturers seeking regulatory approvals and have established pathways for quick approvals. Nemko provides wireless (including TCB and CAB certification), EMC, electrical and laser safety regulatory testing and approvals for domestic and international markets including CE Mark, UL, CSA, FCC, BSMI VCCI, IRAM and GOST. Test sites are also in Dallas, TX and San Diego, CA.

EXHIBITOR PROFILES

Nexio SAS

Louise Pass
46 Avenue du General de Croutte
Toulouse 31100 FRANCE
+33 05 61 44 02 47
+33 05 61 44 05 67 (Fax)
Email: sales@nexio.fr
Website: www.nexio.fr

Manufacturers

With over 10 years experience as an editor of EMC software and with more than 400 end users, NEXIO can truly say that EMC is our thing! Developed and supported in-house by specialists, our modular BAT-EMC software is the all-in-one solution for EMC test houses and recognized laboratories around the world. Offering our recently launched technical support web portal and now integrating a complete range of "EASY-Monitoring" tools for EUT analysis, we look forward to discussing what BAT can do for you.

NIST

Electromagnetics Division
Michael H. Kelley
325 Broadway, MS 818
Boulder, CO 80305-3328 USA
+1 303-497-4736
+1 303-497 3122 (fax)
email: mkelley@nist.gov
website: boulder.nist.gov/div818/

Government Agency

The Electromagnetics Division is entrusted by NIST to develop and disseminate measurement technology for characterization of the electromagnetic properties of components, devices, material, systems and environments throughout the radio spectrum. Specific programs focus on magnetic information storage, microwave technology, wireless systems, characterization of materials, electromagnetic fields and electro-magnetic compatibility.

National Voluntary Laboratory Accreditation Program (NVLAP)

Kurt B. Fischer
100 Bureau Drive, Stop 2140
Gaithersburg, MD 20899 USA
+1 301 975 6061
+1 301 926 2884 (Fax)
Website: http://www.nist.gov/nvlap

Testing/Calibration

NVLAP is an internationally recognized accreditation body comprised of laboratory accreditation programs (LAP); each LAP includes specific calibration and/or test standards and related methods and protocols assembled to satisfy the unique needs for accreditation in a field of testing and calibration. Ask about the benefits of the new joint LAP for interested EMC testing and RF/Microwave Electromagnetics Calibration laboratories. Visit us to discuss standards and technology related to EMC, Telecommunications, and Radio as well as accreditation to VCCI standards.

551

Noise Laboratory Co., Ltd.

Toshi Mukai
Suite 700, 11 East 44th St.
New York, NY 10017 USA
+1 212 682 4610 x 14
+1 212 286 8426 (Fax)
E-mail: toshi.mukai@sca-shinyei.com
Website: www.noiseken.com

Pulsed EMI specialist Noiseken is proud to announce the launch of two new ESD simulators. Features are 30kV output meeting and far exceeding the IEC61000-4-2 requirements, easily changeable capacitor and resistor networks and light weight discharge gun. The ESS-2000AX is the successor of the best-selling ESS-2000 programmable ESD simulator. With the basic capabilities maintained, the ESS-2000AX offers more ease of use through its renewed user-interface. Also exhibited is an automotive transient generator for ISO7632 testing.

Northwest EMC

Jerry Page
41 Tesla
Irvine, CA 92618 USA
+1 949 861 8918
+1 949 861 8923 (Fax)
Email: jpage@nwemc.com
Website: http://www.nwemc.com

Testing/Certification

Northwest EMC is an EMC and EMI Test facility with locations in California, Oregon and Washington state. We provide access to testing laboratories on an hourly basis, as well as complete testing, reporting and certification services. State-of-the-art equipment, highly automated test methodology and a skilled professional staff enable us to maximize your testing dollars.

During the EMC Testing process you can count of consultation and support tailored to your specific needs as a part of our service package. NW EMC offers complete accreditation packages including the necessary report data in electronic PDF, CD ROM or hardcopy paper format. Our Customer Service department is ready, willing and able to help you throughout the compliance process.

Oak-Mitsui Technologies

John Andreasakis & Bob Carter
80 First St.
Hoosick Falls, NY 12090 USA
+1 518 686 4961
+1 518 686 8080 (Fax)
Email: j.andreasakis@oakmitsui.com or
Robert.carter@oakmitsui.com
Website: oakmitsui.com

Manufacturers

Oak-Mitsui Technologies, part of a \$6 Billion global company, develops and manufactures advanced technology ultra thin laminates for Embedded Capacitance and Resistance, in current and next generation PCBs, modules, and package substrates. FaradFlex[®]. Oak-Mitsui Technologies market leading family of ultra thin laminate materials has properties that eliminate EMI, reduces the requirement for surface mount passives, and reduces the design form factor.

340

Ophir RF, Inc.

Lori Broniak
5300 Beethoven St.
Los Angeles, CA 90066 USA
+1 310 306 5556
+1 310 821 7413 (Fax)
Email: lbroniak@ophirrf.com
Website: www.ophirrf.com

Manufacturer

Dig Our Gigs – At OPHIR RF, we don't think you should pay for extra bandwidth you don't need. We are proud to provide our customers with the most efficient choices for EMC/EMI/RFI testing. Along with the multi-application broadband 0.8-4.2 GHz, you can select from 0.7-3.0GHz, 0.8-2.0GHz, 0.8-2.5GHz, 1.0-3.0GHz, and 2.0-4.0GHz. Contact us and we'll help you choose the best OPHIR RF amplifier for your application.

Panashield, Inc.

Peggy Girard
185 West Norwalk Road #R
Norwalk, CT 06850-4312 USA
+1 203 866 5888
+1 203 866 6162 (Fax)
Email: girard@panashield.com
Website: www.panashield.com

Manufacturer

Panashield designs, supplies, installs and certifies the following: RF Shielded Enclosures; EMC Chambers, Compact, 3meter, 5meter, 10meter; Military 461E and DO160 Avionics Test Chambers; Free Space Simulation Chambers; Reverberation Chambers; CISPR 25 Chambers for Automotive Testing; P3 RF Sliding Doors; Turnkey Services; Facility Relocations; Upgrades to existing facilities.

Pearson Electronics, Inc.

Jeff Reed
4009 Transport Street
Palo Alto, CA 94303 USA
+1 650 494 6444
+1 650 494 6716 (Fax)
Email: jeffreed@pearsonelectronics.com
Website: www.pearsonelectroncs.com

Manufacturer; Testing/Certification

Pearson Electronics is the original and leading manufacturer of Precision Wide Band Current Probes used for EMI measurements. Pearson Current Probes measure current as low as 80 micro-amps and frequencies as high as 250 MHz. The typical bandwidth is 1 Hz to 20 MHz and the accuracy is 1%, or better, across the midband. Pearson Current Probes measure transients, harmonics, pulse, sine-wave and other complex current wave shapes. We maintain a wide variety of clamp-on and toroid current probes in stock and available for immediate delivery.

Physware

Bala Vishwanath
411 108th Ave. N.E. Ste. 1980
Bellevue, WA 98004 USA
+1 425 458 0597
+1 425 818 9558 (Fax)
Email: bala@physware.com
Website: physware.com

Software Development

614

525;527

610

126

345

549

723

EXHIBITOR PROFILES

Pioneer Automotive Technologies, Inc. – EMC Lab

Mark Condon
100 S. Pioneer Blvd.
Springboro, OH 45066 USA
+1 937 746 6600
+1 937 746 6828 (Fax)
Email: mark.condon@pioneer-usa.com
Website: www.pioneeremc.com

Testing/Certification

Pioneer-Emc Lab opened in 2005 to support development and testing our new products. In 2006, our lab started EMC testing for companies outside Pioneer. We specialize in automotive EMC testing and FCC testing of consumer electronics. Our lab is independent within Pioneer which assures impartial and confidential interaction with our customers.

PPM (Pulse Power & Measurement) Ltd.

Phil Surman
65 Shrivensham Hundred Business Park
Watchfield Swindon SN6 8T4 United Kingdom
+44 1793 784389
+44 1793 784391 (Fax)
Email: sales@ppm.co.uk
Website: ppm.co.uk

Manufacturer

PPM is the leading supplier of fiber optic link systems into the EMC test market around the world. The point2point and Sentinel Fiber Optic Link ranges provide a means of conveying RF signals in the presence of intense electrical fields. The point2point system offers a data link which is as easy to use as an electrical cable, but with the inherent advantages of optical fiber i.e. low loss; immunity to interference; non-conductivity; low mass and small size. Point2point products offer bandwidths from high accuracy DC to more than 3GHz. The Sentinel II Intelligent Fiber Optic Link product range allows the user to remotely select inputs, link gain, pre-amplifier; calibrate signal, etc. It offers additional shielding for higher field operation.

Premix OY

Muovitie 4
05201 Rajamaki, FINLAND
+1 358 9 8780 4332
+1 358 9 8780 4400 (Fax)
Email: info@premixgroup.com
Website: www.premixgroup.com

Manufacturer

Premix – Innovative Material Solutions for Electronics Industry PRESEAL® TPE unique thermoplastic elastomers for EMI gaskets and injection molding pieces. PRE-PERM plastics with high dielectric constant and low loss factor for antennas. PRETHERM thermally conductive plastics PRE-BOARD recyclable plastic for FR4 replacement and 3D circuit boards, also for flexible circuit boards.

Raymond EMC Enclosures Ltd. 741

R. Tyler Ratzlaff
5185 Dolman Ridge Rd.
Gloucester, ONT K1C 7G4 CANADA
+1 613 841 1663 X330
+1 613 841 0456 (Fax)
Email: tratzlaff@raymondemc.ca
Website: www.raymondemc.ca

Manufacturer

351 Retlif Testing Laboratories 449

Richard Reitz
795 Marconi Avenue
Ronkonkoma, NY 11779 USA
+1 631 737-1500
+1 631 737-1497 (fax)
Email: rreitz@retlif.com sales@retlif.com
Website: www.retlif.com

Testing/Certification

Retlif has been one of the world's leading independent strategic compliance and engineering organizations since 1978. Retlif provides Electromagnetic interference (EMI) and Environmental Simulation (ES) services, from compliance testing to engineering services, including program management, consulting and training. Industries served include aerospace, automotive, aviation, consumer electronics, healthcare, homeland security, maritime, military and rail.

Retlif maintains laboratories in Ronkonkoma, NY, Goffstown, NH and Harleysville, PA

RF Exposure Lab, LLC 343

Jay Moulton
2867 Progress Place, Ste. 4D
Escondido, CA 92029 USA
+1 760 737 3131
+1 760 737 9131 (Fax)
Email: info@rfexposurelab.com
Website: www.rfexposurelab.com

Testing/Certification

RF Exposure Lab, LLC is an independent, privately owned SAR Testing Lab. We are A2LA Accredited and have significant expertise in SAR Testing from both an industry and a laboratory environment. We provide SAR testing for companies and other test laboratories. We are located in Southern California.

Rohde & Schwarz 215 island

Achim Gerstner
8661A Robert Fulton Drive
Columbia, MD 21046 USA
888-TESTRSA
410-910-7801 (Fax)
Email: info@rsa.rohde-schwarz.com
website: www.rohde-schwarz.com/usa

Manufacturer

Rohde & Schwarz is a leading manufacturer of EMC, communication, signal analysis and signal generation equipment. We cover all EMC requirements in Automotive, Military and Commercial sectors. Established 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries including an accredited ISO 17025 calibration lab. It has approximately 7200 employees and achieved net revenue of \$ 1.9 billion in fiscal year 2006/2007. You trust our EMI test receivers; in addition we lead the world in turnkey EMI and EMS test systems. We also offer EM Test's line of transient EMC equipment in the USA and Canada. You can count on us for expert support committed to all your EMC applications.

Sabritec 653

Shannon Durr
17550 Gillette Ave.
Irvine, CA 92614 USA
+1 949 250 1244
+1 949 250 1009 (Fax)
Email: sdurr@sabritec.com
Website: www.sabritec.com

Manufacturer

Sabritec specializes in the design and manufacture of filter connectors including MIL-DTL-38999, MIL-DTL-83723, MIL-C-26482, MIL-DTL-83527, ARINC 404, ARINC 600, MIL-DTL-24308, MIL-DTL-83513, and Combo D-Sub connectors. ESD protection, composite filter connectors, and RoHS compliant solderless connectors are available. Sabritec also manufactures High Speed Copper, Fiber Optic, Coax and Triax connectors.

Safety and EMC Magazine T6

Editorial Office

No. 1 Andigmen Dongdajie
Beijing 100007 CHINA
+1 8610 84029073
+1 8610 84029174 (Fax)
Email: xiehong@cesi.ac.cn
Website: www.semc.cesi.cn

Publication

SAFETY & EMC is a periodical issued by Chinese Electronic Standardization Institute. Its Chinese edition is published as bimonthly since 1989 and the English edition is published annually. Our faithful readers are more than 500,000. The English edition will be published in April 2009 again. Welcome your contribution!

Shen Zhen HFC Shielding Products Co., Ltd 251

Lily Zhao
C bldg, 3rd Industrial Park, Feng Huang
Shen Zhen 518103 CHINA
+86 755 27306187
+86 755 27306260 (Fax)
Email: emigasket.com
Website: www.emigasket.com

Schlegel Electronic Materials, Inc. 532

806 Linden Avenue
Suite 100 (14625)
P.O. Box 20310
Rochester, NY 14602-0310
Tel: +1 585-643-2000
Fax: +1 585-427-7216
Website: www.SchlegelEMI.com

Manufacturer

Schlegel EMI offers a full range of EMI shielding products, including our industry leading fabric over foam gaskets and a wide variety of Z-axis conductive foams for complex I/O backplane gasket applications. Other products include BeCu fingerstock, conductive and oriented wire elastomer products, conductive fabric tapes, environmental gaskets and more.

EXHIBITOR PROFILES

Schurter, Inc.

Cora Umlauf
447 Aviation Blvd.
Santa Rosa, CA 95403 USA
+1 800 848 2600
+1 707 636 3000
+1 707 636 3033 (Fax)
Email: info@schurterinc.com
Website: www.schurterinc.com

Manufacturers

The Schurter Group of companies is an internationally recognized manufacturer and supplier of electronic components for high-tech and industrial equipment. Schurter offers single and three phase EMC block filters and filtered power entry modules at various current ratings and mounting styles that comply to IEC 60601 medical and 60950 telecom standards.

Seven Mountains Scientific Inc. T3

Tom & Jo Chesworth
PO Box 650
Boalsburg, PA 16827 USA
+1 814 466 6559
+1 814 466 2777 (Fax)
Email: jo@7ms.com

Publisher

In its 36th year of service to the EMC community, Electromagnetic News Report (ENR), published by Seven Mountains Scientific Inc., is the oldest commercial publication in the EMC field. A paid-subscription bimonthly magazine, it is read by about 1,000 senior EMC engineers, managers, purchasing and marketing executives, and testing lab personnel worldwide. Print and online versions available. Technical articles welcome and we pay you to write them!

Shen Zhen HFC Shielding Product Co. Ltd 251

Lily Zhao
C Bldg. 3rd Industrial Park, Feng Huang,
Fu Yung Town Bao-An District
Shen Zhen 518103 CHINA
+86 755 27306187
+86 755 27306260 (Fax)
Email: emigasket.com
Website: www.emigasket.com

Manufacturers EMI Gaskets

Shieldex-US T2

V Technical Textiles Inc.
4502 Route 31
Palmyra, NY 14522
USA
+1 315 597 1674
+1 315 597 6687 *Fax)
Email: shieldex2@rochester.rr.com
Website: www.shieldextrading.net

Manufacturer

Shieldex-US excels in conductive textile plating for shielding applications worldwide. Metallized fabrics, fillers and yarns are the most important components for fabric-over-foam gaskets, tapes, deployable shielding tents, pouches and wall covering. For 2008, Shieldex is pleased to introduce 90db shielding tents and it's recognized converters of custom material. Shieldex-US offers Ready-To-Fabricate gasket skins in carbon-coated Silver, Tin/Cooper and Nickel/Copper.

731 Siemic Laboratories

Leslie Bai
2206 Ringwood Avenue
San Jose, CA 95131 USA
+1 408 526-1188
+1 408 526-1088 (Fax)
Email: Leslie.Bai@siemic.com
Website: www.siemic.com

Testing/Certification

SIEMIC is ANSI Accredited TCB per ISO Guide 65 for review and grant Product certifications on behalf of FCC. SIEMIC is also NVLAP accredited third party compliance testing facility per ISO 17025 for Compliance Testing. In addition, SIEMIC is also CAB (Conformity Assessment Body) for European CE Mark, Taiwan BSMI and NCC, Korea MIC, Japan VCCI and RF Certifications, Singapore iDA, Hong Kong OFTA, Mexico NOM, etc. providing clients with truly One-Stop Shop for Compliance Testing and Global Certifications, covering over 80 countries, more than 200 types of approvals.

Sigrity, Inc. 636

Leslie Landers
4675 Stevens Creek Blvd. Suite #130
Santa Clara, CA 95051 USA
+1 408 260 9344
+1 408 260 9342 (Fax)
Email: leslie@sigrity.com
Website: www.sigrity.com

Manufacturer

Sigrity offers advanced software solutions for package physical design and for analyzing power integrity, signal integrity and EMC in chips, packages and printed circuit boards. Over 170 companies utilize Sigrity products as part of design flows from Sigrity, Cadence, Mentor Graphics, Altium, Zuken and AutoCAD. Products include:

OptimizePI - Automated board and IC package decap optimization that considers both target impedance and cost for 20-50% decap savings with equal or better performance.

PowerDC - Efficient IR drop and DRC sign-off solution.
XtractIM - Fast IC package RLC extraction for IBIS and SPICE models with a broadband model extraction to maximize analytically assured accuracy.

PowerSI - Advanced full wave signal and power integrity analysis including S-parameter extraction and visualization of spatial relationships.

Broadband SPICE - Automated conversion that synthesizes SPICE compatible circuits from N-port network parameters to bridge the time and frequency domains.

SPEED2000 - Groundbreaking solution for time domain electromagnetic simulation of an entire IC package or printed circuit board for comprehensive SI / PI / EMC analysis.

CoDesign Studio & XcitePI - Unique environment for simultaneous simulation of complete chips and the entire package to identify multi-domain power integrity issues.

OrbitIO Planner - Vertically aware IO planning and connectivity solution that enables trade-offs of gate to board level connectivity.

Unified Package Designer (UPD) - Versatile eDriven IC package physical design environment supporting a broad range of package types.

T 7 Simberian, Inc.

Yuriy Shlepnev
2326 E. Denny Way
Seattle, WA 98122 USA
+1 206 726 1098
+1 206 726 1098 (Fax)
Email: shlepnev@simberian.com
Website: www.simberian.com

Manufacturer

Simberian, Inc. is a developer of leading edge electromagnetic software for electronic design automation. Simberian's first released product, Simbear 2007 is easy-to-use, efficient and cost-effective electromagnetic solver for analysis of communication links at 10 Gb/s and beyond. Accuracy of the solver is ensured through use of advanced algorithms and 3D full-wave analysis.

Simlab Software GmbH 640

Florian Glaser
Kruenerstrasse 51
Munich D-81373 GERMANY
+49 89 760 00 90
+49 89 760 00 99 (Fax)
Email: glaser@simlab.de
Website: www.simlab-emc.com.

Manufacturer

SimLab provides you with efficient and user-friendly simulation and rule checking capabilities to analyze various kinds of EMC/EMI and signal integrity effects, e.g. ground bounce, crosstalk, and radiation. Our software products, e.g. PCBMod, EMBAordCheck, CableMod and RadiaSim with their state-of-the-art methods (PEEC & BEM) and robust algorithms, were developed in close co-operation with our customers and partners in industry.

Southwest Research Institute 616

Eric Dornes
6220 Culebra Road
San Antonio, TX 78238-5166 USA
+1 210 522 3330
+1 210 522 4827 (Fax)
Email: eric.dornes@swri.org
Website: www.emcswri.org

Testing/Certification

Southwest Research Institute® is a one-stop shop for global electromagnetic compatibility services and is A2LA certified to ISO/IEC 17025. In addition to basic services, SwRI® can provide shielding effectiveness evaluations, telecom-specific testing, and real-time non-conformance issue solving. Facilities include a 30-meter open area test site with an environmentally-controlled underground vault, seven shielded enclosures of various sizes up to 20' X 30' X 12', and two anechoic chambers (3 meter and 14 meter). All facilities are located on a single 1,200 acre campus and are available for your use over a wide range of other testing and research services.

EXHIBITOR PROFILES

Spectrum Control, Inc.

Kerri Fabin
8061 Avonia Road
Fairview, PA 16415 USA
+1 814 474 0355
+1 814 474 3110 (Fax)
Email: fabin@spectrumcontrol.com
Website: www.spectrumcontrol.com

Manufacturer

Spectrum Control, an ISO 9001 and QS 9000 certified company, designs, manufactures and markets a broad line of EMI/RFI filters and power components, microwave components and power management systems. The Spectrum Control Signal & Power Integrity Products Group produces EMI/RFI components and filtered power components including discrete surface mount filters, resin sealed and hermetically sealed EMI filters, EMI filtered arrays, EMI filtered connectors, ESD/EFT protected connectors, filtered datacom connectors, gaskets and shielding, single line filters, filtered terminal blocks, power entry modules, power line filters, military/aerospace multi-section filters and commercial custom assemblies.

Spectrum Microwave is a wholly owned subsidiary of Spectrum Control, Inc and produces a wide range of microwave components and systems. The Integrated Microwave Systems Group provides switchable filter banks, low noise amplifiers, local oscillator multipliers, microwave synthesizers, and integrated assemblies. The Filter and Antenna Products Group offers a complete line of patch antenna elements, resonators, duplexers, bandpass filters, lumped element filters, cavity filters, suspended substrates, tubular filters, and BTS filters. The company's Frequency Control Components Group provides a wide range of amplifiers, mixers, voltage controlled oscillators (VCOs) and dielectric resonator oscillators (DROs).

The Power Management Systems Group produces AC and DC power distribution systems and remote management systems. Products include off-the-shelf SMART start products as well as customized products or systems designed to suit specific user requirements. DC power circuit breaker panels and power outlet strips are also offered.

Spira Manufacturing Corporation

George Kunkel, Michael Kunkel
12721 Saticoy Street South
North Hollywood, CA 91605 USA
+1 818 764 8222
+1 818 764 9880 (Fax)
Email: sales@spira-emi.com
Website: www.spira-emi.com

Manufacturer

Spira is ISO-9001 and AS9100 certified, offering the finest and most reliable EMI/RFI shielding gaskets and honeycomb filters in the market since 1978. The company was founded by one of the leading EMI design engineers in the industry. Spira's commitment is to provide quality-engineered products, on-time delivery, superior customer service and technical support. The patented spiral gaskets are easy to use and offer extremely low compression set, long life, and excellent shielding properties. The aluminum honeycomb filters use a patented process that yields shielding consistent with brass honeycomb material at aluminum prices. New products include an EMI/Environmental Connector-seal gasket, shielded Honeycomb Fan Filter and RoHS versions of all gaskets.

539

Sunol Sciences Corp.

Dale Gutherie/Roger Winkler/Stu Kron
1051 Serpentine Lane, Ste. 100
Pleasanton, CA 94566
+1 925 485 9260
+1 925 485 9325 (Fax)
Email: emc@sunolsciences.com
Website: www.sunolsciences.com

Manufacturer

Sunol Sciences manufactures positioners and antennas for EMC testing and antenna measurements. A broad range of standard and custom products includes heavy-duty metal and portable turntables, antenna positioners and masts, broad-band antennas, reverberation chamber tuners, and positioners for wireless testing.

Survivability, Vulnerability & Assessment Directorate (SVAD)

Janet Danneman
Bldg. 21225
White Sands Missile Range, NM 88002 USA
+1 505 678 6307
+1 505 678 3999 (Fax)
Email: Janet.danneman@us.army.mil
Website: www.wsmr.army.mil

Government Agency

The Survivability, Vulnerability and Assessment Directorate offers the entire spectrum of Electromagnetic Environmental Effects (E3) Test Capabilities that include:
MIL-STD 461A-F E3 subsystem testing (10kHz-43GHz)
MIL-STD 464A E3 system testing (10kHz-43GHz)-Average and Peak Field capabilities
MIL-STD 2169B High Amplitude Electromagnetic Pulse Testing
HERO, HERF and HERP testing
Near Strike Lightning testing
Helicopter and Personnel Electrostatic Discharge Testing
Ultra-Wide Band (UWB) testing
ADS-37A Testing Average and Peak Fields
Complete Environmental testing to include Climatic & Dynamic test facilities
Pulsed Laser Vulnerability and High Power Microwave testing

Taiyo Yuden (U.S.A.), Inc.

Yaeko Minamikawa
1930 N. Thoreau Drive, Ste. 190
Schaumburg, IL 60173 USA
+1 847 925 0888
+1 847 925 0899 (Fax)
Email: sales@t-yuden.com
Website: www.t-yuden.com

Manufacturer

Taiyo Yuden (U.S.A.), Inc. is the North American subsidiary of Taiyo Yuden Co., Ltd., a \$1.6 billion multinational manufacturer of surface mount and leaded passive components (capacitors, inductors, ferrite beads and others), wireless modules, high frequency antennas, and recordable digital media. Visit Taiyo Yuden on the web at www.t-yuden.com.

520;522;619;621

TDK Corporation

1101 Cypress Creek Road
Cedar Park, TX 78613
Phone: 512-258-9478
Fax: 512-258-0740
Email: EMCsolutions@tdkca.com
Website: www.TDK.com

TDK Corporation offers a single vendor solution for all of your EMC needs. As your Total EMC Solutions provider, we can offer support on a board level with electronic components, as well as the design, manufacture and installation of integrated test systems, chambers, automated software, state of the art antennas, and unmatched absorber technology. TDK can also help with regulatory testing and certification to help bring your product to market. Contact TDK for more information about your Total EMC Solutions at EMCsolutions@tdkca.com.

Tech-Etch, Inc.

Bruce McAllister
45 Aldrin Road
Plymouth, MA 02360 USA
+1 508 747 0300
+1 508 746 9639 (Fax)
Email: bmcallister@tech-etch.com
Website: http://www.tech-etch.com

Manufacturer

A global leader in shielding technology, Tech-Etch, Inc. manufactures a complete line of standard and custom EMI/RFI shielding products. Our new product introductions have paced shielding industry innovation for over 40 years. An exceptional free sample program and responsive engineering department for application assistance assure the optimal solution for your shielding requirements.

Techmaster Electronics, Inc.

Michael Lynch
2453 Cades Way C
Vista, CA 92081 USA
+1 760 536 0227
+1 760 536 0234 (Fax)
Email: mlynch@techmasterelectronics.com
Website: www.techmasterelectronics.com

Telogy

Terry Williams
3200 Whipple Rd.
Union City, CA 94582 USA
+1 800 835 6494
+1 510 675 1655 (Fax)
Email: twilliams@telogyllc.com
Website: www.telogyllc.com

Industrial Distributors

Telogy is a leading provider of test and measurement equipment rentals. The company has superior pricing and availability to meet customers' rental needs. Renting is ideal for companies that need additional equipment on short notice or for short periods of time. Get a quote today at www.telogyllc.com or call 1-800-835-6494.

628

352

710

EXHIBITOR PROFILES

TennMax America, Inc.

703

Jeff Davis
14413 NW 10th Ave. Ste. A 103
Vancouver, WA 98685 USA
+1 360 567 0707 (US)
+1 360 567 0706 (Fax)
Email: jeff@tennmaxusa.com
Website: http://www.tennmaxusa.com

Manufacturer

TennMax America is a leading supplier of EMI and Thermal products and services. TennMax America has developed a complete portfolio of solutions for your EMI/RFI problems. Our product line includes Physical Vapor Deposition, Conductive Foam Gaskets, Mold in Place and Form in Place Gaskets. TennMax America can meet all your shielding needs.

TESEQ, Inc. 420;422;519;521 (formerly Schaffner EMC, Inc.)

Maryjane G. Salvador
52 Mayfield Avenue
Edison, NJ 08837 USA
+1 732 417 0501
+1 732 417 0511 (Fax)
Email: maryjane.salvador@teseq.com
Website: www.tesequsa.com

Manufacturer

Teseq, Inc. was formerly known as Schaffner Test Systems, until a management buyout was finalized in November 2006. The company provides EMC instrumentation and test Systems for radiated and conducted interference in automotive, consumer electronics, telecommunications, medical, aerospace and defense industries. It has approximately 130 employees and has been accredited to perform calibration services according to ISO 17025 at its Edison, NJ laboratory. Teseq is the only pulsed immunity manufacturer in North America with an accredited calibration lab.

Test & Measurement World

Russ Pratt, Group Publisher
225 Wyman Street
Waltham, MA 02451 USA
+1 781 734-8000
+1 781 734-8070 (Fax)
Email: rpratt@reedbusiness.com
Website: www.tmw.com

Publisher

Test & Measurement World is the best-read magazine covering quality in the electronics industry. Written for engineers and engineering managers, Test & Measurement World includes in-depth technical articles and product information. To sign up for one of our industry e-mail newsletter or to subscribe to magazine go to www.tmw.com

Thermo Fisher Scientific 121;123

Kara Burnham
One Lowell Research Center
Lowell, MA 01852 USA
+1 978 275 0800
+1 978 275 0850 (fax)
Email: kara.burnham@thermofisher.com
Website: www.thermo.com/esd

Manufacturer

Thermo Fisher Scientific's Lowell facility is the pioneer and global leader in EMC test technology and offers a family of testers to meet the broad range of test requirements and budgets of organizations worldwide. Standards addresses include IEC and IEEE as well as industry standards such as UL, Telcordia for telecom, RCTA for avionics, and others.

Transient Specialists, Inc.

643

Laura Pitrak
7704 S. Grant Street
Burr Ridge, IL 60527 USA
+1 630 887 0329
+1 630 887 0349 (Fax)
Email: laura@transientspecialists.com
Website: transientspecialists.com

EMC Test Equipment Rentals

Surge, EFT and ESD Simulators for compliance testing to IEC, UL, Military and Telecom standards. We carry Solar Electronics equipment for testing to DO 160 and mil std 461, Keytek equipment for surge to 10kv and EFT to 8kv. Technical support available.

TÜV Rheinland®

227

Dana Craig
12 Commerce Road
Newtown, CT 06470 USA
+1 TUV-Rheinland (US)
+1 203 426-0888 (International)
+1 203 426-4009 (Fax)
Email: info@tuv.com
Website: www.us.tuv.com

Testing/Certification

TÜV Rheinland® is a leading provider of international testing & certification services including expertise in product assessment, electrical, telecommunications and EMC safety testing. For exporting to the EU, we offer CE Marking to ensure market access and acceptance in the European Union. Our expert services help companies sell their products and services around the world.

TÜV SÜD America Inc.

335

Doug Hughes
47523 Clipper Street
Plymouth, MI 48170 USA
+1 734-455-4841
+1 734-455-6590 (Fax)
E-mail: info@tuvam.com
Website: www.TUVamerica.com

Testing/Certification

TÜV SÜD America offers EMC testing and certification services for the aerospace, commercial and automotive industries. Our NVLAP, A2LA and AEMCLRP-accredited laboratories can perform testing to EN, MIL-STD-461, RTCA/DO-160, GM, Ford, Honda Nissan, Toyota, Hyundai, Fiat and many other test specifications. Additionally we provide HIRF, environmental, mechanical and electrical safety testing and certification services.

US Army Aberdeen Test Center 552

ATC Business,
TEDT-AT-CSM
400 Collieran Rd.
APG, MD 21005-5059 USA
+1 410 278 4639
+1 410 278 3909 (Fax)
Email: APGR-ATC-Business@conus.army.mil
Website: www.atc.army.mil

Testing and Certification Government Agency

The US Army Aberdeen Test Center is a diverse Department of Defense (DoD) Major Range and Test Facility Base with the mission to assure our nation's armed forces weapons and equipment will perform properly, safely and reliably in the field.

US Navy

242

Kurt Sebacher
NAWCAD
Building 144. Ste. 3B
48202 Standley Road, Unit 5
Patuxent River, MD 20670-1910 USA
+1 301 342 1664
+1 301 342 6982 (Fax)
Email: Kurt.Sebacher@navy.mil

Government Agency

Illustrates the awareness of the Navy's need for control of Electromagnetic Environmental Effects to support our fleet. Provides a broad picture of different Navy Programs requiring Electromagnetic Compatibility across all systems and subsystems to achieve air, ground and sea superiority.

Underwriters

504;506

Laboratories Inc.

Wyatt Brannan
12 Laboratory Drive
P.O. Box 13995
Research Triangle Park, NC 27709-3995 USA
+1 919 549 1738
+1 919 547 6429 (Fax)
Email: EMC@us.ul.com
Website: http://www.ul.com/hitech/emc

Testing/Certification

UL's international network of EMC facilities provides unmatched accuracy, speed and repeatability with global acceptance. Our World Class labs are industry renowned, with accreditations from regulatory agencies and governments throughout the world. When a UL company tests your product for EMC compliance, you can be confident it will be accepted.

Universal Shielding Corp.

543

Michael Newmann
20 West Jeffryn Blvd.
Deer Park, NY 11729 USA
+1 631 667 7900
+1 631 667 7912 (Fax)
Email: usc4shield@aol.com
Website: www.universalshielding.com

Manufacturer

USC designs, manufactures, installs, and certifies pre-fabricated shielded enclosures for customers throughout the world. The enclosures meet Tempest and Hemp specifications of IEEE-299, NSA-94-106, NSA-65-5, NSA-65-6 and MIL-STD-285. The doors are of the Recess Contact Mechanism (RCM) and can be utilized for tempest, acoustic and weather resistant applications. The doors provide 100 dB of attenuation at 20 GHz. We provide a complete turn-key installation of anechoic rooms, as well as screen enclosures and shielded cabinets.

Vanguard Products Corp.

608

Mark Hansen
87 Newtown Road
Danbury, CT 06810 USA
+1 203 744 7265
+1 203 798 2351 (Fax)
Email: info@vanguardproducts.com
Website: www.vanguardproducts.com

Manufacturer

Vanguard specializes in the molding and extrusion of EMI/RFI shielding gaskets and materials with our Vanshield® and Ultra-Vanshield® Dual Elastomer EMI/RFI shielding gaskets. Materials include silicone, EPDM, nitrile, neoprene, fluorosilicone, and fluorocarbon elastomers. Standard as well as custom gaskets are available.

EXHIBITOR PROFILES

Vishay Intertechnology, Inc. 526

Doug Lillie
1505 East Hwy 50
PO Box 180
Yankton, SD 57078 USA
+1 605 665 9301
+1 605 665 1627 (Fax)
Email: magnetics@vishay.com
Website: www.vishay.com

Manufacturer

Vishay is one of the world's largest manufacturers of discrete semiconductors (diodes, rectifiers, transistors, optoelectronics, and selected ICs) and passive electronic components (resistors, capacitors, inductors, sensors and transducers). Vishay components are found in a very broad range of end products and used in a variety of applications, including EMI filtering and RF suppression. www.vishay.com.

Wave Zero 708

Scott Aaron
425 Lakeside Drive
Sunnyvale, CA 94085 USA
+1 408 830 5100
+1 408 745 6584 (Fax)
Email: moreinfo@wavezero.com
Website: www.wavezero.com

Manufacturers

WaveZero is a leading provider of EMI, RFI and ESD shielding solutions. WaveZero's patented, customized Form/Met shielding solutions accommodate a wide variety of configurations. WaveZero's new Fence and Lid shield has a snap-on, snap-off top allowing easy access to components. WaveZero's DeepCoat vacuum metallization process provides greater shielding effectiveness and durability when compared to standard EMC painting methods. WaveZero's shielding solutions are environmentally friendly, complying with RoHS and WEEE guidelines.

Webcom Communications

Karen Poulson
7355 East Orchard Rd., Ste 100
Greenwood Village, CO 80111 USA
+1 720 528 3770 x106
+1 702 528 3525 (Fax)
Email: Karen@infoweb.com
Website: www.infowebcom.com

Publisher

Webcom Communications Corp. is a publishing and information services company serving advanced technology industries worldwide through its magazines, events, directories, buyers guides, market reports data products and related marketing services. Magazines include: Antenna Systems & Technology, for buyers and specifies of antennas and related components, systems, materials and accessories in all wireless communications markets; Magnetics Business & Technology for professionals involved in magnetic technologies and magnetic effects in their products, applications and services, and for professionals in the magnetics industry; and Equipment Protection, a product and service news tabloid edited for OEM design engineers and product development professionals of electrical, electronic, commercial, medical, consumer and industrial products and equipment; and for managers and integrators of highly sensitive equipment who utilize equipment protection technologies and testing.

Wireless Communication Research Center 451

Dr. Peter Leung
City University of Hong Kong, Tat Chee Ave
Hong Kong
+ 2788 7757
+ 2788 7791 (Fax)
Email eeswl@cityu.edu.hk

University Research Center

Würth Electronics Midcom, Inc. 132

121 Airport Drive
PO Box 1330
Watertown, SD 57201 USA
+1 605 886 4385
+1 605 886 4486 (Fax)
Email: midcom@we-online.com
Website: <http://www.we-online.com>

Manufacturer

Würth Electronics EMC & Inductive Solutions is the fastest growing member of the Würth Group. Highlighted by the acquisition of Midcom, the past year was one of excitement and change for Würth Electronics. The coming together of these two companies has greatly expanded our product offering, manufacturing capabilities, technical expertise and customer support network, while providing a firm foundation for future development and growth. Our products reach from the patented STAR-TEC snap-ferrite, SMD-ferrite beads, common mode and line chokes, LAN-transformers, tiny power chokes, to the unique technical reference book "Trilogy of Inductors". All our products are PHS compliant.

X2Y Attenuators, LLC 735

David Anthony
Business Development Manager
2730B West 21st Street
Erie, PA 16506 USA
+1 814 835 8180
+1 814 835 9047 (Fax)
Email: x2y@x2y.com
Website: <http://www.x2y.com>

Passive Component Technology

X2Y Attenuators, LLC is an Intellectual Property Company that develops advanced passive component solutions for the electronics industry.

Ultra-low inductance X2Y® capacitors are used for EMI filtering to lower conducted and radiated emissions in products that need to meet EMC Compliance, and for IC power bypass applications. In both application uses, a single X2Y replaces multiple passive components to improve circuit performance and lower costs. For a list of X2Y manufacturers and distributors visit <http://www.x2y.com/mfgs.htm>

York EMC Services Ltd. 550

David Heaton
University of York, Heslington
York, YO10 5DD United Kingdom
+44 1904 434440
+44 1904 434434 (Fax)
Email: enquiry@yorkemc.co.uk
Website: www.yorkemc.co.uk

Testing/Manufacturer/ Training/Consultancy

- EMC Test Equipment – Reference noise sources for test system characterization and verification, filter characterization, and shielding effectiveness measurements.
- EMC Consultancy: EMC management and strategy, risk assessment and hazard analysis, design, technical documentation and assessment.
- EMC Training: A wide range of courses and workshops relating to EMC, electromagnetics, and communications. Also bespoke courses delivered in-house.
- EMC Testing: Accredited laboratories in England and Scotland. UKAS accreditation for a wide range of European and International standards, FCC listed, VCCI registered.

ADVERTISERS

2009 IEEE EMC Symposium

Alion Science & Technology

Ansoft Corporation

Applied Physical Electronics, L.C.

AR Worldwide

Bose Corporation

Conformity Magazine

Cuming Lehman Chambers

Curtis Industries

Dayton T. Brown Inc.

Elite Electronic Engineering

ENR

ETS Lindgren

Evaluation Engineering

Fair-Rite Products Corp.

Fischer Custom Communications Inc.

HV Technologies

iNarte, Inc.

Instruments for Industry

ITEM Publications

iVIDEO

Kikusui America, Inc.

Le Croy Corporation

Liberty Labs, Inc.

Mesago Messe Frankfurt

Microwave Journal

Milmega Ltd.

NEC Informatec Systems, Ltd.

Pearson Electronics Inc.

Rohde & Schwarz

Safety & EMC Magazine

Schurter, Inc.

Spira Manufacturing

Telogy

TESEQ, Inc.

Test & Measurement World

Thermo Fisher Scientific

Transient Specialists, Inc.

Webcom Communications

White Sands Missile Range



2009 IEEE International Symposium on Electromagnetic Compatibility

August 17 – 21, Convention Center
Austin, Texas USA



CALL FOR PAPERS www.emc2009.org

EMC 2009 COMMITTEE

Chairman

David Staggs
d.staggs@ieee.org

Vice Chair

Richard Worley
richard_worley@dell.com

Secretary

Michael Royer
mike.royer@foxconn.com

Treasurer

Patrick Webb
patrick.webb@ni.com

Technical Program

Dr. Robert Flake
flake@ece.utexas.edu

Dr. Michael Foegelle
michael.foegelle@ets-lindgren.com

Dr. Bruce Archambeault
barch@us.ibm.com

Special/Invited Sessions

Ross Carlton
ross.carlton@ni.com

Workshops/Tutorials

Bob Scully
robert.c.scully@nasa.gov

John Maas
john.maas@ieee.org

Demonstrations/Experiments

Michael Vrbnac
vrnacm@swbell.net

Colin Brench
colin.brench@ieee.org

Publications/Marketing

Glen Watkins
glen.watkins@ets-lindgren.com

Exhibits

Mark Prchlik
mark@prchlik.com

Stephen Mullenix
smullenix@austin.rr.com

Arrangements

Rhonda Erickson
rhonda.erickson@ets-lindgren.com

Social Activities

Dale Stone
dale.stone@ets-lindgren.com

Companion Program

Barbara Staggs
bsue5246@aol.com

Registration

Bronwyn Brench
brench.ieee@yahoo.com

Website

Philip Stolle
philip.stolle@ets-lindgren.com

Information for Authors

Join your colleagues in Austin where you can share your insight, ask questions, learn from the experts/innovators and see new products at the 2009 IEEE International Symposium on Electromagnetic Compatibility. Your published paper will be seen by thousands in the EMC community and across the wide array of disciplines that look to the IEEE EMC Society for technical guidance.

Paper Topics of Interest

The IEEE EMC Society seeks original, unpublished papers covering all aspects of EMC, including technology areas such as: Regulations, Broadcast, Military, Wireless, Power Transmission, and Networking. Topics include and are not limited to the following technical areas:

TC-1 EMC Management

- EMC Personnel Accreditation
- Laboratory Accreditation
- EMC Education
- EMC Legal Issues

TC-2 EMC Measurements

- Test Instrumentation
- Measurement Techniques
- Emissions and Immunity
- Standards and Regulations
- Test Facilities

TC-3 EM Environment

- EM Signal Environment
- Atmospheric Noise
- Man-Made Noise

TC-4 EM Interference

- Shielding, Gasketing & Filtering
- Cables and Connectors

- Coupling
- System EMC Analysis
- Grounding
- PCB Issues

TC-5 High Power Electronics

- ESD
- EMP & Lightning
- Transients
- Power Transmission

TC-6 Spectrum Management

- Spectrum Management
- Spectrum Monitoring

TC-7 Nonsinusoidal Fields

- Ultrawideband EMC
- Impulse Radar
- Time Domain Modeling

TC-8 Electromagnetic

- Product Safety
- EMC & Functional Safety

- Biological Effects
- Radiation Hazards
- Environmental Safety

TC-9 Computational Electromagnetics

- Computer Modeling
- Model Validation
- Statistical Analysis

TC-10 Signal Integrity

- Packaging
- Model Parameter Determination
- Device Modeling
- Crosstalk

TC-11 Nanotechnology

- Nanomaterials
- Nanostructures
- Carbon Nanotubes
- Nanofibers
- Smart Materials

Author Submission Schedule

- **Preliminary Full Paper Manuscript:** November 1, 2008 - January 8, 2009 (late papers will not be accepted)
- **Acceptance Notification:** March 7, 2009
- **Final Paper and Workshop/Tutorial Material Due:** May 1, 2009

Paper Formats

- **Traditional Oral presentation:** Presentation for those interested in presenting to large groups with limited potential for interactions with attendees. Six-page paper maximum, 20 minute presentation.
- **Open Forum:** Presentation for those interested in direct interaction with individuals or small groups.



2009 IEEE International Symposium on Electromagnetic Compatibility

August 17 – 21, Convention Center
Austin, Texas USA



CALL FOR PAPERS www.emc2009.org

Student Paper Contest

Graduate and undergraduate authors are eligible for the Best Student Paper contest. The student must be the primary author and should submit an entry form for the contest when submitting the preliminary manuscript. Entry forms are available at www.emcs.org. The professor should attach a note to the entry form to certify that the paper is primarily the work of his/her student(s). A Student Design Contest is also being held. Obtain the design kit, rules, and award details from the website: www.emcs.org.

Guidelines for Authors & Submittal Procedures (updated)

Prospective authors must submit electronically**.

- **A Preliminary Manuscript (5500 words approximately) with up to 6 pages filled with diagrams, figures or charts (hand drawn illustrations accepted).**
- **Presentation format (traditional oral or open forum).**

See www.emc2009.org web site for instructions on paper submission. Only PDF files will be accepted. Sorry, POSTAL or FAX submission will NOT be accepted.

** Preliminary Manuscripts and Final papers are to be submitted through a website after 1 November 2008. Check back with the symposium web site (www.emc2009.org) for updates on the paper submission process.

During the electronic submission process a unique author code is created for tracking purposes. Submissions are reviewed anonymously by the EMC Society Technical Committees so please do not include author names or affiliations on the Preliminary Manuscript. Failure to do so may result in rejection.

Paper Acceptance Procedures & Criteria

Paper acceptance will be based on the following criteria:

- **Importance of Topic:** Does it have direct significance to the EMC community?
- **Technical Sophistication and Depth:** Does it present information that is a significant contribution, advancement, application or refinement of the state of the art? Does it expose the reader to a higher knowledge level than currently available from other sources? Is it clear that the work has been substantially completed or is the submission an interim report of progress on a long term project?
- **Readability, Clarity and Presentation:** Is the value of the submission clearly defined? Is the material written in clear and concise English, with topics presented in an organized and logical manner?
- **Novelty and Originality:** Does it propose a new and unique concept or expand on an existing premise from a unique point of view? Does it present new information on an EMC issue that is still in developmental stage?
- **Camera-Ready Paper:** Authors of accepted Preliminary Manuscripts will receive instructions for preparing the final, camera ready paper for the symposium record (not to exceed 6 pages including the title, author(s), abstract, results and figures/diagrams).
- **Paper Presenter:** All papers must be presented at the Symposium by the authors or their designated presenters. Authors must be pre-registered for the 2009 EMC Symposium prior to submitting their final paper.

For Additional information

Three Dimensions Conference Management Services • Mary Ellen Vegter at mevegter@threedimensions.com • Phone +1 562 860 8180

www.emc2009.org

6/10/08 Rev.6