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#### November 2011

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IEEE/Orange County Website: www.ieee.org/ocs

With thanks to our sponsors:



# **ORANGE COUNTY SECTION**

# The Chair's Corner:

#### by Alvin Joseph

Greetings and hope you are all on track to deliver on the goals you set at the beginning of the year!

On October 29th, the IEEE Orange County Section held it's annual awards dinner. We honored the volunteers who served the section in 2010 and also the winners of the 2011 IEEE Orange County Section awards – Alain Chahwan from Western Digital Corporation who won the outstanding engineer award and Dr. Menas Kafatos from Chapman University who won the outstanding leadership award. Dr. Raman Unnikrishnan, Dean of the college of Engineering and Computer Science at CSUF delivered an enlightening and thought provoking presentation on STEM education and the need to act on it now. Mathobotix (engineers4kidsusa) with whom we partnered this year in the Robotics and STEM education space demonstrated how they help to promote STEM education to middle school and high school kids. I'd like to take this opportunity to thank to all those who volunteer at IEEE Orange County Section. If do not volunteer yet and are interested in volunteering at the IEEE Orange County Section, please send me a quick note with your area of interest.

Here is the November Lynx OC section newsletter with updates on IEEE Orange County section activities and upcoming event information. November is a busy month with the Games Innovation conference, the IEEE annual Job fair and the IEEE OC annual student design contest in addition to the usual regularly scheduled seminars by the chapters. Please choose the events that are of interest to you and sign up soon. Also, let us know areas that you'd like to see more events on. This will help shape up our future programs.

As always, feel free to drop me a line at alvin@ieee.org. I'd love to hear from you on how the IEEE Orange County section can serve you better.

Happy Thanksgiving!

Alvin Joseph Chairman, IEEE Orange County Section www.ieee.org/ocs



# The IEEE Orange County Upcoming Events

#### Nov 2

**IEEE Student Design Contest** 

Radisson Hotel Newport Beach, CA www.socconference.com/students.htm

#### Nov 2 IEEE Job Fair

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#### Nov 2 - 4 International Games Innovation Conference

Chapman University, Orange, California http://ice-gic.ieee-cesoc.org/

#### Nov 2-4

# The Third IEEE International Games Innovation Conference

One University Drive, Chapman University, Orange, CA

#### **Nov 15**

# Short Course on Thermal Design and Modeling of IC Packages

Henkel Electronic Materials, LLC 14000 Jamboree Road Irvine, California

#### Dec 9

#### 3-D Integrated Circuits: Technologies Enabling the Revolution

Jazz Semi Auditorium, Conexant Systems Inc. 4321 Jamboree Rd., Newport Beach, CA

If you'd like your event to be included, please email details to me@sharonforsberg.com

## About the IEEE

The Institute of Electrical & Electronics Engineers [IEEE] is the leading organization for the advancement of technology. The IEEE is a 501(c)(3) non-profit, technical professional association of more than 390,000 individual members in over 175 countries. The IEEE Orange County Section serves over 3,700 members in Orange County in addition to the local community.

IEEE Orange County Section P.O.Box 15264, Irvine, CA 92623-5264

# IEEE Electron Devices Society and the IEEE Reliability Society to Sponsor Reliability Physics Conference

The IEEE EDS and Reliability societies are will co-sponsor the conference entitled "2012 IEEE International Reliability Physics Symposium (IRPS)". This conference will be held April 15-19, 2012 in Garden Grove, California, USA.

For further information, please contact,

David Barber

PO Box 2097

Banner Elk NC 28604 USA

Ph: +1 828 898 7001 Fax: +1 828 898 6379 dbarbsta@aol.com

or Conference Services Dept., at IEEE Operations Center at +1 732 562 3878

#### To IEEE Orange County Chapters:

# Newsletter Inputs

As we begin a new year of activities, it is fitting to remind OC Chapters of the protocol to get their news items published in the Newsletter. Simply, e-mail your news item to info.at.nanomems-research.com no later than the 15th of the month, prior to the month whose Newsletter you are targeting. For example, if you want the February'09 Newsletter to contain your news item, please, submit it no later than January 15th, 2009. In your e-mail, please, enclose your news item between two lines of "+" characters, i.e.:

News Item Title

Newsletter content Newsletter Co

Thank you,

Hector J. De Los Santos

IEEE Orange County Section, Newsletter Editor



# Member Discounts

As you well know, IEEE members can take advantage of a myriad of discount opportunities, either in the form of core IEEE products OR from IEEE sponsored programs which are offered at reduced rates as a benefit of membership. However, member surveys indicate that awareness of IEEE discount programs is low, such that 50% of members do not know about them or where to find them.

To address this issue, a decision was made to present information about all these programs in a new centralized location, which is now the "IEEE Member Discounts" Web page. This notice also serves to announce that the brand "Financial Advantage Program" has been retired.

Please take a look at the new IEEE Member Discounts page: http://www.ieee.org/go/discounts.

The "IEEE product discounts" section is listed first and we are still working on compiling all the entries to appear here. The "IEEE sponsored discounts" section lists programs in the following categories: Insurance,

Travel, Technology and Home/Office Discounts. Programs that are available globally are clearly marked in this listing. We have also added an FAQ page that seeks to clarify the geographic availability of the sponsored programs and how they are developed and vetted.

# Welcome New IEEE members in Orange County!

We'd like to extend a warm welcome to the following new members:

Member	Grade	Matthew Thornton		
Wenpei Lin			Student Member	
Graduate Student Member		Amit Bhasin	Student Member	
Reza Sharifi	Member	Hisu Heidi Park	Student Member	
Jeremy Freeman	Member	David Mingdow Chou		
KATHY LE	Member		Student Member	
Gunjana Sharma	Member	Ivan Leroy Hoffman		
Adam Oberbeck	Student Member	Student Member		
Chung Wing Wu	Student Member	Leslie Wong	Student Member	
melanie m baque	e Student Member	Andrew Shih	Student Member	
Ramzi Bassam Rabadi		Michael Black	Student Member	
	Student Member	Ben Phung	Student Member	
michael blank	Student Member	Eric Scott Emers	on	
Alexander David Ramirez			Student Member	
	Student Member	Walter Heth	Student Member	
Vinci Enriquez Sevilla Jr. Student Member		David Van Workum		
			Student Member	
Gia Hoa Vu	Student Member			
William John Drewes				
	Student Member			



# Awards Dinner



- Alain Chahwan Outstanding engineer award (with Russel Hunter and Dr. David Cheng)
- ▼ Award for Western Digital (with Alvin Joseph and Dr. David Cheng)



- ▲ Dr. Menas Kafatos Outstanding Leadership award (with Russel Hunter and Alvin Joseph)
- ▼ Dr Unnikrishnan, guest speaker for the evening





▲ Alvin Joseph (with Russell Hunter)

▼ Hector J. De Los Santos (with Russell Hunter and Alvin Joseph)



Naveen Reddy (with Russell Hunter)

▼ Thomas Ha (with Russell Hunter and Alvin Joseph)



▲ Dr. David Cheng (with Russell Hunter and Alvin Joseph)

▼ Dr Shireesh Verma (with Russell Hunter and Alvin Joseph)



▼ Farhad Mafie (with Russell Hunter and Alvin Joseph)





Derrick Lo (with Russell Hunter)

▼ Russell Hunter (with Alvin Joseph and Dr. David Cheng)





▲ Enjoying the awards dinner

▼ Closing (Hector, Russell, Alvin)





# Job Openings in OC

#### **Optical Engineer**

#### **Job Summary:**

Are you a **Senior Software Engineer** (Visual Studio, C#, .NET, SQL Server) whose hands-on technical and **team leadership, project management** career path should ultimately lead to being the principal software engineer for the R&D division of this stable \$1B+ household brand that enjoys a 100+ year history of international name recognition?

You will be THE Senior in-house Software Engineer and key member of a small, elite R&D team, responsible for the development of the next generation of software to replace a legacy system involved in the automated quality screening, packaging, and distribution processes of the most recognized agricultural brand name in the world.

The job is 50% heads-down coding and 50% heads-up project management, collaborating and interfacing with a 3rd party development team, and being the key technical liaison between major customers and corporate executives. Ideally, the successful person in this capacity will evolve into technical leader and mentor of a small, accountable and high-energy internal software development team.

You'll enjoy a great deal of autonomy working in a stable and long established corporate environment (near Ontario International Airport) that offers great benefits, unlimited career growth and the opportunity to be solely responsible for software strategy and technical leadership in what amounts to the capstone of a 20 year long transition process from being an Academic/Research environment into a cutting edge and innovative Profit Center of the corporation.

Your development background in any of the following industries may qualify you for this career-making unique opportunity: Artificial Intelligence (AI), Algorithms, Process Control, Document Automation, Image Processing, Programmable Logic Controls (PLC), Robotics, Manufacturing Automation, Security Appliances, or Vision/Optics/OCR/Video/Radar, I/O or related embedded systems.

This mission critical role will guide the software technology involved in the NEXT 100 years of this company's history, and be an integral part of a new technical leadership team that includes the Director of Engineering and a Division VP/GM who have joined the organization expressly for this purpose from the unrelated but relevant automated material handling systems industry.

For more information and immediate confidential consideration, contact:

Mark A. Bassett, CPC SCVN Board of Directors

eNamix Inc.

emerging technology executive services

O: 949.502.4219 C: 949.395.7793

E: MarkB+at+eNamix+dot+com

If you or your company has a job to advertise, please send an email to shireesh@ieee.org with a concise description of the job and contact information. Depending on space availability, we will attempt to post the job opening in the IEEE Section newsletter and website.

## Advertising Section in the Newsletter

Our Newsletter now includes an advertising section. For details on how to place your ad please send us e-mail at: info.at.nanomems-research.com

Hector J. De Los Santos IEEE Orange County Section Newsletter Editor





www.ieee.org/ocs

# IEEE ORANGE COUNTY SECTION PRESENTS IEEE OC STUDENT DESIGN CONTEST (SDC)\*

9<sup>th</sup> International System-on-Chip (SoC) Conference, Exhibit & Workshops November 2 & 3, 2011 – Radisson Hotel Newport Beach

www.SoCconference.com

#### SPONSORED BY:





#### ENGINEERING & COMPUTER SCIENCE STUDENTS...

IEEE Orange County Section cordially invites you to participate in its 2011 **Student Design Contest** (SDC)! The Contest will be held on Wednesday, November 2, 2011, at the 9<sup>th</sup> International System-on-Chip (SoC) Conference Exhibit, at the Radisson Hotel Newport Beach.

The SDC provides an outstanding forum in which graduate and undergraduate students' efforts can be shared with an audience of academic and industrial technical experts.

#### **SDC PROJECT PROPOSAL**

The Student Design Contest is designed to encourage engineering and computer science undergraduates and graduates students to work on a new project and present their work at the 9<sup>th</sup> International System-on-Chip (SoC) Conference Exhibit to a group of judges from industry and academia.

Each project will be judged based on its overall complexity, originality, and completion of the work.

#### THE DESIGN PROJECTS COULD BE IN . . .

- Hardware Design
- Robotics
- Software Design
- Analog Design
- Digital Design
- EDA Tools
- Chip Design / SoC
- MEMS
- SOI vs. CMOS
- Optics
- Embedded platforms
- Graphics Sub-system
- Instrumentation
- Software Algorithms

- FPGA-Based Design
- Microcontroller-Based
- Embedded Systems
- Design Methodologies
- Detailed Technology Analysis/Research
- Bio-Engineering
- CPUs & DSPs
- Memory Design
- SSD
- I/O Sub-systems
- Web-Related Projects
- And Similar Topics . . .

"WILD & CRAZY" DESIGN PROJECTS ARE ALSO WELCOMED!
WE LOOK FORWARD TO HEARING FROM YOU.

# Don't Miss Out!

AN EXCELLENT OPPORTUNITY TO NETWORK & PROMOTE YOUR ENGINEERING TALENT & EXPERTISE!

#### **DATES TO REMEMBER**

(1) Monday, October 10, 2011: Deadline for submission of Design Contest Proposal/Abstract (1-2 paragraphs in MS Word) and your biography.

Submit to: SoC@SoCconference.com

(2) Friday, October 28, 2011: Deadline for submission of Final Report (in MS Word or PowerPoint).

 $Submit\ to:\ SoC@SoCconference.com$ 

**(3) Wednesday, November 2, 2011:** Projects will be reviewed and winner will be announced at the 9<sup>th</sup> International SoC Conference Exhibit reception starting at 5:00 PM, at the Radisson Hotel Newport Beach.

#### **PRIZES**

- (1) The first 30 students that submit their FINAL report/papers will receive a Western Digital Passport Hard Drive! You must be at the event on Nov 2, to receive your WD Hard Drive. No Exceptions!
- (2) First Prize: \$500.00 Second Prize: \$300.00 Third Prize: \$200.00
- (3) All participating students (who have submitted their Final Report) will receive a 2-Day Conference pass.
- (4) Names and pictures of the winners will be displayed on the SoC Conference and IEEE OC Section websites.

#### **CONTEST RULES**

- Final Report format must be in MS Word or PowerPoint.
- Poster size: 24x36 (or slightly larger).
- Poster presentation date: Wed, Nov 2.
- Students must be at the SoC Conference Exhibit Room for poster setup & to discuss their projects with the judges at 5:00 pm on Wed, Nov 2.
- Check the website for updates.
- \* SDC Program is subject to change. Savant Company Inc. and the SoC Conference Organizing Committee reserve the right to revise or modify the above program at its sole discretion. Please visit the SoC Conference website for updates and changes.

#### **OUESTIONS**

Please send your questions to: SoC@SoCconference.com or Visit the following websites: www.SoCconference.com/students.htm www.ieee.org/ocs





## **IEEE-OC Tech Job Fair**

ORANGE COUNTY SECTION Wednesday, November 2, 2011 — 3:00 P.M. - 6:00 P.M.

**Radisson Hotel Newport Beach** 

# www.SoCconference.com/JobFair.htm

# Free Admission for Job Seekers & Free Parking

#### Employers: You are invited to IEEE-OC Tech Job Fair if you are seeking to hire:

- **♦ Hardware Engineers**
- **♦ Control Systems Engineers**
- **♦** Biomedical Engineers
- **♦ EDA Engineers**
- Power Engineers
- Verification Engineers
- **♦ Layout Engineers**
- Project Managers

- Software Engineers
- ♦ IC & IP Designers
- **♦** Application Engineers
- **♦ Manufacturing Engineer**
- **♦ Technical Instructors**
- **♦ Test Engineers**
- **♦** Packaging Engineers
- **♦** Analog or Digital Designers
- Systems Engineers
- Sales Engineers
- Marketing Engineers
- Application Developers
- Web Developers
- Quality Engineers
- Project Engineers
- ♦ Etc . . .

Fee: | Table Fee: \$300

#### The Tech Job Fair Program Consists of:

- Free Resume Critique
- Free Mock Interviews and Job Search Counseling
- Free Pass to SoC Conference Exhibit (Going on in Parallel)
- Networking Opportunities & Much More . . .

IEEE-OC Tech Job Fair will be promoted by advertisements, IEEE OC Section and sponsoring organizations' Email lists, Newsletters, local media, etc.

#### **SPACE IS LIMITED!** TO RESERVE YOUR TABLE:

Please make checks payable to "IEEE Orange County Section" (i.e., a nonprofit organization).

Mail Checks to: IEEE Orange County Section P.O. Box 15264, Irvine, CA 92623-5264

If you have any questions, please contact: SoC@SoCconference.com or visit: www.SoCconference.com/JobFair.htm or www.ieee.org/ocs

**NOTE:** As our contribution to the Tech Community & IEEE Members, the International System-on-Chip (SoC) Conference is providing the space for the IEEE-OC Section Tech Job Fair FREE of charge. There is absolutely no financial gain for the SoC Conference or its organizing company and affiliates. All proceeds from IEEE-OC Tech Job Fair Tables go directly to IEEE-OC Section (i.e., a nonprofit organization).





## International Games Innovation Conference November 2-4, 2011

#### Venue

#### **Chapman University**

Orange, California USA (Near Disneyland and Newport Beach)

#### **Submission Deadlines**

**Power Point Presentations and** Proposals for Special Sessions Due: September 1, 2011

Two-page **Extended Abstract** Submission: On-going

Acceptance Notice: September 10, 2011

Final Paper & Presentation for Conference Proceedings: September 20, 2011

> For Submission Instructions:

http://ice-gic.ieeecesoc.org

**Contact: TPC Chair Gary Yip** gyip.igic2011@gmail.com







#### Call for Presentations

The IEEE Consumer Electronics Society is pleased to announce the Third International Games Innovation Conference. This conference is a platform for disseminating peer-reviewed papers and presentations that describe innovative research and development of game technologies. Participation from industry, academia, and government is welcome.

As the Call for Papers reaches its first milestone, we are inviting submissions of presentations in power point format (~ 15 slides with abstract of ~ 200 words on 1st slide) to foster industry and government participation that describe significant, original, and on-going work. Submissions are still welcome in the previously announced format of 2-page extended abstracts that include diagrams of ideas and early results from preliminary research and development. All presentation submissions will be reviewed on the basis of their relevance. technical soundness, novelty, clarity, and overall scientific or engineering contribution. At least one presenter must attend the conference in person to be included in the Conference Program and Proceedings, IEEE Xplore and Engineering Index. Presentations reporting innovations and new developments in all areas related to games are invited, including but not limited to the following:

#### **Multi-player Games**

Cloud based games Networked games Location

awareness Infrastructure Performance Latency Architecture Security

#### Beyond **Entertainment**

Health/exercise Education/Training **Business** Advertising Social Change

#### **Platforms**

Mobile/handheld Computers Consoles Portable consoles Cloud servers Network severs System architecture Network architecture

#### **User Experience**

Playing experience Behavioral impact Social impact Player modeling Learning Cultural impact Usability beyond games Lessons from games

#### **Development** and Production

Design of games **Tools** Interdependence of Software & Hardware Graphics Animation Content generation Artificial intelligence Cinematography

#### **Technology**

Multi-core processors Memory Mobile SoC Virtual reality Storage MEMS/Nano devices

#### **Interfaces**

Interoperability Wearable devices Biometrics 3D effects **Haptics** Gaze Proximity Audio Gesture

3D Graphics 3D Display Augmented reality Game mechanics Vision/imaging Wireless/RF

Industry Track: This conference provides an opportunity to submit power-point presentations describing design and technology challenges that should be addressed in the short-to-medium term. These presentations are encouraged for sharing of development experience, with less focus on full-paper publication.

Special Panels, Workshops and Tutorials: IGIC 2011 is planning interactive sessions (120 minutes each) in the forms of panel discussions, workshops and tutorials focusing on the latest development in game technology, including hardware, software, content development and demonstrations. Topics of discussions on future issues, especially related to innovation in game technology, are welcome.



# International Games Innovation Conference November 2-4, 2011

Chapman University – City of Orange, California 92866 USA (Near Disneyland and Newport Beach)

## Conference Opening



**Trip Hawkins**Founder, Electronic Arts,
3DO and Digital Chocolate

# **Keynote Speakers**

Reception Banquet



Robert J. Mical SONY

Award Luncheon



Craig Hampel
Rambus

## Conference Closing



Ohad Shvueli
PrimeSense

Committed Panel: Playing with Reality, Alternate Reality Games, Urban and Serious Play



Leader: Patrícia Gouveia Universidade Lusófona de Humanidades e Tecnologias

Darren O'Donnell
The Tendency
Group
Toronto, Canada

Jeff Watson University Southern CA Los Angeles, CA USA Michael Liebe Mediaboard Berlin-Brandenburg GmbH Berlin, Germany Flavio Escribano ARSGAMES Madrid-Seville, Spain

For more information, go to <a href="http://ice-gic.ieee-cesoc.org">http://ice-gic.ieee-cesoc.org</a>, or contact conference coordinator, Charlotte Kobert <a href="mailto:ckobert@ieee.org">ckobert@ieee.org</a>









International Games Innovation Conference November 2-4, 2011

# Rambus











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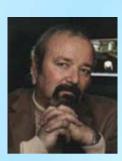
# **More Committed Talks:**



Tutorial Speaker:
Adrain David Cheok
Nationall Univiversity of
Singapore & Keio University
Tutorial Topic:
Culture, Learning, Play in Our Radically
Connected Era



Panel Leader:
Tom Coughlin
Coughlin Associates
Panel Topic:
No Storage – No Games:
The Role of Memory and Storage
Architectures in Game Design Performance



Panel Leader:
Jim Parker
University of Calgary
Panel Topic:
University Curriculum Development
Feeding the Games Industry



#### **CPMT Society – Orange County Chapter**

# Short Course on Thermal Design and Modeling of IC Packages

#### Overview:

This short course will provide a systematic approach to the understanding of IC package-related thermal issues, thermally enhanced packages, industry standard thermal tests, IC package thermal modeling techniques, and system thermal design using IC package compact and detailed thermal models. Students completing this class should gain basic understanding of IC package thermal characteristics, improve their ability and understanding to make appropriate IC package technology selection and system design decisions, and to achieve reliable performance of complex electronic devices.

#### Who Should Attend:

Packaging engineers, system engineers, thermal and mechanical engineers, PCB layout engineers, field support personnel, marketing personnel, design, process, failure analysis, reliability engineers, and material scientists.

Please note class size max: 40

#### Location:

Building: Henkel Electronic

Materials, LLC

Room Number: Room 304 14000 Jamboree Road Irvine, California 92606

Date: 15 November 2011

Time: 12:00PM to 05:00PM

(5.00 hours) All times are: US/Pacific

#### Admission Charge applies.

#### Register here:

http://www.eventbrite.com/event/2189815798

#### Meeting Agenda:

12:00-1:00pm: Lunch 1:00-5:00pm Short Course

#### Speaker:

#### Dr. Sam Z. Zhao of Broadcom Corporation

Topic: Thermal Design and Modeling of IC Packages

Understanding IC Package Thermal Data

• Theta-ja, Theta-jb, Theta-jc, Psi-jt

IC Package Thermal Enhancement Design

- Minimization of Theta-jc: Exposed Pad, Heat Spreader, TBGA, Flip Chip, Others
- Minimization of Theta-jb: Exposed Pad on Board,
   Drop-in Heat Sink, Thermal Vias, Ground Balls

JEDEC Standards for Package Thermal Characterization

 Still Air Test, Wind Tunnel Test, Theta-jb Measurement Discussion

Thermal Modeling of IC Packages

- Computational Fluid Dynamics (CFD) Based Simulations
- Heat Conduction Based Simulations
- Example of a Package Level Simulation: JEDEC Thermal Characterizations
- Example of a System Level Simulation using compact and detailed package models: Network Switching Box

#### **Biography**

Dr. Sam Z. Zhao is an Associate
Technical Director at Broadcom
Corporation, Irvine, CA. He received
his Bachelor's and Master's degrees
from Tsinghua University, Beijing,
China, and his Ph.D. degree from
the University of Illinois, Chicago. He
did research at Cornell University in
Ithaca, NY, and at the Swiss Federal



Institute of Technology (ETH), Zurich in Switzerland. He has published more than 38 technical articles in peer-reviewed journals and conference proceedings. He has over 38 issued US patents.

Email: szhao@broadcom.com





The Institute of Electrical and Electronics Engineers, Inc.



# Components, Packaging and Manufacturing Technology Society Orange County Chapter

Presents an All-Day Workshop on

# 3D Integrated Circuits: Technologies Enabling the Revolution

Date: Friday, December 9, 2011

Location: Jazz Semi Auditorium, Conexant Systems, Inc. 4321 Jamboree Road, Newport Beach, CA 92660

#### **Program Agenda**

09:00 - 09:05am: Welcome & Introduction

Session - 1: Market, Architecture & Design

09:05 – 09:35am: "Opportunities and Challenges for 3D Integrated Heterogeneous Electronic Systems" – Prof. Muhannad Bakir, Integrated 3D Systems Group, Georgia Tech, Atlanta, GA

09:35 – 10:05am: "Economics to Drive 3D Stacking" – Dr. Phil Garrou, Microelectronic Consultants of North Carolina, Research Triangle Park, NC

10:05 – 10:35am: "Stack Silicon Interconnect Development and Key Role of Supply Chain Collaboration" – Dr. Suresh Ramalingam, Sr. Director, Xilinx, San Jose, CA

10:35 - 10:45am: Break

10:45 – 11:15am: "Emerging Challenges for Power, Signal, and Reliability Verification on 3D-IC/Silicon Interposer Designs" – Dr. Norman Chang, Co-Founder, Apache Design Systems, Ansys, San Jose, CA

11:15 – 11:45am: "3D IC Test Challenges and Solutions" – Dr. Stephen Pateras, Product Marketing Director, Silicon Test, Mentor Graphics, San Jose, CA

11:45 – 12:15pm: "<Pre>resentation Title to be announced>"
– A. La Manna, K. Rebibis, Dr. Eric Beyne, Dr. B. Swinnen,
IMEC, Leuven, Belgium

12:15 - 01:15pm: Lunch

**Session – 2: Manufacturing Technologies & Materials** 

01:15 – 01:45pm: "Cost-Effective 3D Semiconductor Packaging Solutions Based on Embedded Die in Laminate Technology" – Ted Tessier, Senthil Sivaswamy, Flip Chip International LLC, Phoenix, AZ, Dr. Kazuhisa Itoi, Fujikura Ltd, Tokyo, Japan

**01:45 – 02:15pm**: "Challenges and Solutions in Mid-end and Back-end Processes for 2.5D and 3D TSV – an OSAT Perspective" – Dr. Yeong Lee, Product and Tech. Marketing Director, STATS ChipPAC, Fremont, CA

**02:15 – 02:45pm:** "Advanced Underfills for 2.5D and 3D Applications" - **Dr. Rose Guino, Dr. Betty Huang, Dr. Kevin Becker, Dr. T. Takano, Henkel Electronic Materials, LLC, Irvine, CA** 

02:45 - 03:00pm: Break

03:00 – 03:30pm: "3D TSV Interposer and its Applications" – Dr. GS Kim, Founder & CEO, EPWorks, Ltd. Seoul, Korea

03:30 – 04:00pm: "Via Reveal – High rate Si Thinning and Low Temperature Dielectrics for Post-TSV Processing" – David Butler, Vice President – Marketing, SPTS Technologies, Newport, UK

04:00 - 04:05pm: Vote of Thanks

#### Registrations:

Early-Bird Registration Fees: IEEE Members - \$40; Non-Members of IEEE - \$50; Students - \$20 (includes lunch & parking)
Prices will go up by \$20 for each category, after November 25, 2011.

Registration Instructions at <a href="http://meetings.vtools.ieee.org/meeting-view/list-meeting/8019">http://meetings.vtools.ieee.org/meeting-view/list-meeting/8019</a>

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#### General Chair

Dr. Lawrence Williams, ANSYS Corporation, <a href="mailto:l.williams@ieee.org">l.williams@ieee.org</a>
Technical Program

Dr. Donald Frye, Henkel Electronics Materials LLC, <a href="mailto:donastes/donastes/donastes/baren.com/donastes/donaste

Mark Kuhlman, Semtech Corporation, Mkuhlman@semtech.com

#### **Workshop Organizing Committee**

**Publicity & Local Arrangements:** 

Jaydutt Joshi, Skyworks Solutions, Inc., <u>jaydutt@gmail.com</u>
Aaron Edwards, ANSYS Corporation, <u>aaron.edwards@ansys.com</u> *University Relations:* 

Prof. Mark Bachman, Univ. of California – Irvine, <a href="mailto:mbachman@uci.edu">mbachman@uci.edu</a> Registration & Finances:

Melissa Lau, Broadcom Corporation, melissa@broadcom.com

Vendor Exhibits and Sponsor Displays!



# 2011 IEEE Orange County Section — Executive Committee

#### **Section Officers:**

#### Chair

Alvin Joseph (714) 552-2489 alvin.at.ieee.org

#### Vice-Chair

John Collins (949) 651-8650 collins.at.ieee.org

#### **Treasurer**

Michael Perlongo (949) 484-9484 Perlongo.at.ieee.org

#### **Secretary**

Gary Stephens (714) 567-2557 gary.stephens.at.aecom.com

#### **Past Chair**

Russell Hunter (714) 697-5540 RussellH.at.Computer.org

# **IEEE-OC Technical Society Chapters:**

# Communications / Signal Processing Joint Society (COMSIG)

Naveen Reddy naveen.reddy.at.ieee.org

# Components, Packaging and Manufacturing Technology Society (CPMT)

Sam Karikalan (949) 413-0029 samkarikalan.at.ieee.org

#### **Computer Society (OCCS)**

Dwight Borse borses.d.at.gmail.com

#### Consultants' Network(OCCN)

Ralph Hileman (951) 780 3947 r.hileman.at.ieee.org

# Engineering in Medicine and Biology Society (EMBS)

Dr. Bill Tang (949) 824-9892 wctang.at.uci.edu

# Electromagnetic Compatibility Society (EMC)

Jeff Klinger (714) 579-0500 jeff.at.celectronics.com

# Microwave Theory Techniques / Electron Devices Joint Society(MTT/ED)

Dr. Héctor J. De Los Santos (310) 259-0767 hector.delossantos.at.ieee.org

# Power Engineering / Industry Applications Society (PES/IAS)

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# Product Safety Engineering Society (PSES)

Thomas Ha (714) 628-1020 tom.at.gmcompliance.com

#### **Robotics & Automation Society (RAS)**

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