

Monday, March 19, 2018

8:00 a.m. – 12:00 p.m.
Morning Short Courses
Session Chair: Pablo Hidalgo, Aavid Thermacore

Short Course 1 **San Jose**
Thermal Challenges for Power Electronics
Instructor: Brian Zahnstecher, Power Rox

Short Course 2 **Santa Clara**
Managing Cooling Fan Noise and Power Consumption
Instructor: David Nelson, Nelson Acoustics

Short Course 3 **Carmel**
Efficient Flow and Thermal Modeling of Large Scale Electronics Systems
Instructors: Jan Visser, Boyd Corp., and Suhkvinder Kang, Aavid

Short Course 4 **Monterey**
Design of LED-based Applications
Instructors: Genevieve Martin, Philips Lighting, and András Poppe, Mentor Graphics

1:30 p.m. – 5:30 p.m.
Afternoon Short Courses
Session Chair: Pablo Hidalgo, Aavid Thermacore

Short Course 5 **San Jose, Santa Clara**
Experimental Measurements in Electronics Cooling Systems
Instructors: Dr. Alfonso Ortega, Santa Clara University, and Dr. Marcelo del Valle, Intel

Short Course 6 **Carmel**
Computational and Experimental Thermal Characterization for the Future of the Microelectronics Industry: A Philosophy and Promising Directions
Instructor: Peter E. Raad, SMU

Short Course 7 **Monterey**
Fundamentals of Vibration and Shock for Electronics Applications
Instructor: Nick Clinkinbeard, Rockwell Collins

3:30 p.m. – 6:30 p.m. **Bayshore Ballroom**
Attendee Registration **Foyer**

5:30 p.m. – 6:30 p.m. **Bayshore Ballroom**
Welcome Reception **Foyer**

6:30 p.m. – 7:45 p.m. **San Carlos**
Program Committee Meeting

Tuesday, March 20, 2018

7:00 a.m. – 7:45 a.m.
Speakers' Breakfast
(March 20 Speakers and Chairs only)

7:00 a.m. – 5:00 p.m. **Bayshore Ballroom**
Attendee Registration **Foyer**

8:10 a.m. – 8:20 a.m. **Oak and Fir**
Symposium Opening and Welcome
General Chair: Jesse Galloway, Amkor

8:20 a.m. – 9:20 a.m. **Oak and Fir**
Keynote Address: Thermal Challenges and Industry Trends of Consumer Electronics Devices
Dr. Andre Ali, Google

9:20 a.m. – 9:40 a.m. **Gateway Foyer**
Networking Break

9:40 a.m. – 11:00 a.m. **Oak**
Parallel Session 1: 2.5D and 3D Electronics
Session Chair: Jesse Galloway, Amkor

9:40 a.m. – 11:00 a.m. **Fir**
Parallel Session 2: Two Phase Cooling/Liquid Cooling
Session Chair: Pablo Hidalgo, Aavid Thermacore

11:00 a.m. – 11:20 a.m. **Gateway Foyer**
Networking Break

11:20 a.m. – 12:40 p.m. **Oak**
Parallel Session 3: Concurrent Design/LED
Session Chair: Ross Wilcoxon, Rockwell Collins

11:20 a.m. – 12:40 p.m. **Fir**
Parallel Session 4: Consumer Electronics
Session Chair: Bill Maltz, Electronic Cooling Solutions

12:40 p.m. – 1:50 p.m. **Pine and Cedar**
Luncheon and Presentation:
ASHRAE Technical Committee 9.9 (TC9.9) Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment
Presenter: Dr. Dustin W. Demetriou, IBM

1:30 p.m. – 6:00 p.m. **Bayshore Ballroom**
Exhibits Open

2:00 p.m. – 5:00 p.m. **Oak and Fir**
Vendor Workshops Parallel Sessions

6:15 p.m. – 7:30 p.m. **Pine and Cedar**
Dinner

7:30 p.m. – 9:00 p.m. **Oak**
Evening Tutorial:
The Internet of Things: A Personal Perspective
Presenter: Dr. Bruce Guenin

San Jose **7:00 a.m. – 7:45 a.m.**
Speakers' Breakfast
(March 21 Speakers and Chairs only)

7:00 a.m. – 5:00 p.m. **Bayshore Ballroom**
Attendee Registration **Foyer**

8:10 a.m. – 8:20 a.m. **Oak and Fir**
Welcome Message
Program Chair: Adriana Rangel, Cisco Systems

8:20 a.m. – 9:40 a.m. **Oak and Fir**
Session 5: Simulation
Session Chair: Robin Bornoff, Mentor, A Siemens Business

9:40 a.m. – 10:00 a.m. **Gateway Foyer**
Networking Break

10:00 a.m. – 11:00 p.m. **Oak and Fir**
Embedded Tutorial:
Selecting Adhesives and Thermally-Conductive Adhesives for Electronics Systems
Dave Saums, DS&A LLC, Tom Rogers, Polyonics

11:00 a.m. – 11:20 a.m. **Gateway Foyer**
Networking Break

11:20 a.m. – 12:40 p.m. **Oak**
Parallel Session 6: Data Center and Heat Sinks
Session Chair: Marcello del Valle, Intel

11:20 a.m. – 12:40 p.m. **Fir**
Parallel Session 7: Measurement Techniques
Session Chair: Kazuaki Yazawa, MicrosanJ

12:40 p.m. – 1:50 p.m. **Pine and Cedar**
Luncheon and Presentation:
Tales from the Mars Science Laboratory Thermal Protection System Development (Or, Try Not to Panic When Your Heatshield Material Disappears)
Presenter: Dr. Helen H. Hwang, NASA Ames

1:30 p.m. – 6:30 p.m. **Bayshore Ballroom**
Exhibits Open

2:00 p.m. – 5:00 p.m. **Oak and Fir**
Vendor Workshops Parallel Sessions

5:15 p.m. – 6:30 p.m. **Bayshore Ballroom**
Exhibitor Reception

7:00 p.m. – 9:00 p.m. **Oak and Fir**
How To Courses

Thursday, March 22, 2018

San Jose **7:00 a.m. – 7:45 a.m.**
Speakers' Breakfast
(March 22 Speakers and Chairs only)

7:00 a.m. – 2:00 p.m. **Gateway Ballroom**
Attendee Registration **Foyer**

8:10 a.m. – 8:20 a.m. **Oak and Fir**
Welcome Message
General Chair: Jesse Galloway, Amkor

8:20 a.m. – 9:20 a.m. **Oak and Fir**
"THERMI" Award Presentation
Bruno Michel, IBM Zurich Research Laboratory

9:20 a.m. – 9:40 a.m. **Gateway Foyer**
Networking Break

9:40 a.m. – 11:00 a.m. **Oak and Fir**
Session 8: Thermal Interfaces
Session Chair: Gene Pruss, Laird

11:00 a.m. – 11:20 a.m. **Gateway Foyer**
Networking Break

11:20 a.m. – 12:20 p.m. **Oak**
Parallel Session 9: Air Mover Technologies with Low Acoustics
Session Chair: David Nelson, Nelson Acoustics

11:20 a.m. – 12:20 p.m. **Fir**
Parallel Session 10: Automotive/Aerospace/Outdoor
Session Chair: Shailesh Joshi, Toyota

12:30 p.m. – 1:50 p.m. **Pine and Cedar**
Awards Luncheon

2:00 p.m. – 4:00 p.m. **Bayshore Ballroom, Siskiyou, Donner**

Panel Discussion: Challenges in Consumer Electronics Cooling
Moderator: Mark Carbone, Intel

4:30 p.m. – 6:00 p.m. **San Carlos**
Post Conference Review Meeting

Friday, March 23, 2018

San Carlos **8:00 a.m. – 12:00 p.m.**
JEDEC JC15 Meeting (Members Only)
Chair: Jesse Galloway, Amkor Technology Inc.

Thermal Characterization Techniques for Semiconductor Packages
Activities within JC-15's scope include the standardization of thermal characterization techniques, both testing and modeling, for electronic packages, components, and materials for semiconductor devices.

The following events are open to all Registered SEMI-THERM Attendees:

Tuesday:

- Exhibits
- Vendor Workshops
- Evening Tutorial

Wednesday:

- Exhibits
- Vendor Workshops
- How To Courses

Thursday:

- Panel Discussion

Plan on attending SEMI-THERM 35 at the DoubleTree by Hilton in San Jose, CA, March 18-22, 2019.

Consider submitting an abstract for a paper presentation at ST 35.

The Call for Papers (CFP) will be listed at www.SEMI-THERM.org by April 1, 2018.

SEMI-THERM will be accepting abstracts for both peer and non-peer reviewed papers shortly thereafter, with a final submission deadline on September 15, 2018.