

SMC 2017

September 18-20

DoubleTree by Hilton | San Jose, CA

Strategic Materials Conference (SMC) 2017: Materials Accelerating Innovation DoubleTree by Hilton, San Jose, CA.

Monday, September 18, 2017

5:30pm-7:00pm **Welcome Reception Sponsor: Entegris**

Tuesday, September 19, 2017

7:30am-8:30am Registration/**Continental Breakfast Sponsor: Air Liquide**

8:30am-8:35am **Welcome – Dave Anderson, President, SEMI Americas**

8:35am-8:40am **Opening Remarks – Mark Thirsk, Managing Partner, Linx Consulting, SMC 2017 Co-Chair**

8:40am-9:20am **Keynote 1: *Future of Semiconductor: Moore's Law Plus***
Mark Papermaster, Chief Technology Officer and Senior Vice President, Technology and Engineering, AMD

9:20am-9:50am **Keynote 2: *The Next Level: Is it Time for Equipment and Materials Suppliers to Collaborate More?***
David Hemker, Ph.D., Chief Technology Officer, Lam Research Corporation **Keynote Sponsor: Lam Research**

9:50am-10:20am Networking Break: **Break Sponsor: Applied Materials**

SESSION 1: ECONOMIC/MARKET TRENDS: THE CONSOLIDATION GAME (M&A), CHINA & MORE: Session Sponsor: Applied Materials

10:20am-10:25am **Welcome and Introductions: Sanjay Malhotra, Senior Director, Applied Materials**

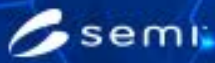
10:25am-10:55am ***Drivers and Opportunities for the Wafer Fab Equipment Industry***
Arthur Sherman, CMO & Vice President of Strategy & Market Research, Applied Materials

10:55am-11:25am ***The Rise of China IC Industry: Challenges and Opportunities***
Lung Chu, President, SEMI China Topic: SEMI China Market Trends & Outlook (including Semiconductor Fab Investments)

11:25am-11:55am ***Trends in the Materials Market in 2017***
Mark Thirsk, Managing Partner, Linx Consulting

11:55am-12:25pm ***Semiconductor Renaissance – The Staples of a Data Driven Economy***
John Pitzer, Managing Director, Credit Suisse

12:25pm-1:30pm Lunch



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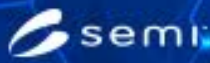
Tuesday, September 19, 2017

SESSION 2: PROCESS CHALLENGES AT 5NM AND BEYOND: Session Sponsor: Chemours

- 1:30pm-1:35pm **Welcome and Introductions: Mark Thirsk, Managing Partner, Linx Consulting**
- 1:35pm-2:05pm *The Art of Advanced Materials Management*
Joe Wu, Ph.D., Deputy Director, Nano-Materials Center, TSMC
- 2:05pm-2:35pm *Beyond CMOS — The Rise of Non-volatile Switches*
Lucian Shifren, Senior Principal Research Engineer, ARM
- 2:35pm-3:05pm *Material Challenges of 1x and Beyond Technology Nodes*
Pratik Joshi, Ph.D., Staff Engineer, Materials Technology, Samsung Austin Semiconductor
- 3:05pm-3:35pm Networking Break: **Break Sponsor: SACHEM**

SESSION 3: UNIVERSITIES: INNOVATION DRIVERS:

- 3:35pm-3:40pm **Welcome and Introductions: Kim Arnold, Executive Director, Wafer Level Packaging, Brewer Science**
- 3:40pm-4:10pm *Extending the Era of Moore's Law through Materials Innovation*
Tsu-Jae King Liu, Ph.D., University of California, Berkeley
- 4:10pm-4:40pm *Paper and Circuits, only Atoms Thick*
Jiwoong Park, Ph.D., Department of Chemistry Institute for Molecular Engineering James Franck Institute, University of Chicago
- 4:40pm-5:10pm *Selective Atomic Layer Processing*
Stacey Bent, Ph.D., Stanford University
- 5:10pm-7:00pm **Networking & Reception – Reception Sponsor: JX NIPPON MINING & METALS**



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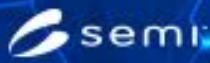
Wednesday, September 20, 2017

SESSION 4: THE FUTURE OF MATERIALS MARKET IN CHINA: Session Sponsor: LINDE ELECTRONICS

- 7:30am-8:30am **Continental Breakfast Sponsor: KMG Chemicals**
- 8:30am-8:35am Welcome – SMC Co-Chair: **Wenge Yang, Ph.D., Vice President of Marketing, Entegris**
- 8:35am-9:05am **Keynote: *Collaborate to Win in China***
Sunny Hui, Senior Vice President, Marketing, Semiconductor Manufacturing International Corporation (SMIC)
- 9:05pm-9:35am ***China Semiconductor Materials Market: Opportunities and Challenges***
Shuji Dinglee, Global Head of Lithography Technologies, Dow Chemical Company
- 9:35am-10:05am ***The Progress of Ultra-high Purity Metal Material for PVD in China***
Dr. Lijun Yao-Chairman & President, Konfoong Materials International Co., Ltd (“KFMI”)
- 10:05am-10:35am **Networking Break: Break Sponsor: EMD Performance Materials**

SESSION 5: MATERIALS SUPPLY CHAIN CHALLENGES IN ADJACENT INDUSTRIES

- 10:35am-10:40am Welcome and Introductions: **Ravi Kanjolia, Ph.D., CTO, Deposition Materials, EMD Performance Materials**
- 10:40am-11:10am ***Safety Critical: Emerging Quality and Supply Chain Requirements for Automotive Electronics***
Anish Tolia, Ph.D., VP Global Marketing, Electronics, The Linde Group
- 11:10am-11:40am ***Novel Metal Oxide Nanocrystals and Nanocomposites Technology Enabling Next Generation Opto-Electronic Devices***
Shree Deshpande, VP Business Development, Pixelligent Technologies
- 11:40am-12:10am ***Top Down vs. Bottom Up: Approaches for Making Electronics Systems Flexible***
Julie Bert, Ph.D., Research Staff, Prototype Devices and Circuits, PARC, a Xerox Company
- 12:10pm- 1:30pm **Lunch**



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SESSION 6: HETEROGENEOUS INTEGRATION: Design to New Materials & Packaging: Session Sponsor: Brewer Science

1:30pm -1:35pm Welcome and Introductions: **Kevin Peterson, Director of Sales & Marketing, JX Nippon Mining & Metals**

1:35pm -2:05pm *Heterogeneous Integration for Performance and Scaling*
Professor Subramanian Iyer, Distinguished Chancellor's Professor, Electrical Engineering Department, UCLA

2:05pm -2:35pm *3D Systems Partitioning-Processing Options and How They Link to Advanced Packaging*
Andy Miller, Group Leader, 3D Enables System Integration, IMEC

2:35pm -3:05pm *FanOut – Enabling the Third Wave of Interconnect Technology*
Eelco Bergman, Sr. Director, Sales and Business Development, ASE Group

3:05pm- 3:35pm **Networking Break: Break Sponsor: JSR Micro**

SESSION 7: EXECUTIVE PANEL: Session Sponsor: Brewer Science

3:35pm - 3:45pm Welcome and Introductions: **Kurt Carlsen, Director, Strategic Sourcing, Air Liquide**

3:45pm - 3:50pm Panelist 1 Device Maker – **Joe Wu, Ph.D., Deputy Director, Nano-Materials Center, TSMC**

3:50pm - 3:55pm Panelist 2 Device Maker – **E. Steve Putna, PhD, Materials & Equipment, Global Supply Management, Intel Corporation**

3:55pm - 4:00pm Panelist 3 Equipment Manufacturer – **Ben Rathsack, Director, Product Technology and Marketing, Tokyo Electron**

4:00pm - 4:05pm Panelist 4 Materials Manufacturer – **Gene Karwacki, Director, Global Strategic Marketing, Versum Materials**

4:05pm - 4:45pm **Panel Discussion, Q&A**

CLOSING REMARKS:

4:45pm – 5:00pm **Closing Remarks, CGMG Chair**

(Agenda as of 9/14/17. Subject to change)