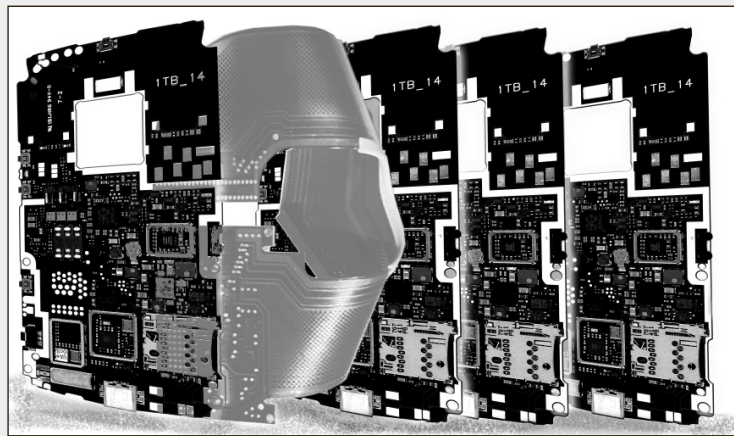


Association Connecting Electronics Industries



IPC INTERNATIONAL CONFERENCE ON FLEXIBLE CIRCUITS



IRVINE, CALIFORNIA
Full-day Technical Conference
Wednesday, June 16, 2010

Flex Technology Workshops
Tuesday, June 15, 2010

Solving the challenges of flex circuits — from the materials and methodology involved in their manufacture to business opportunities — is crucial to your success. The IPC International Conference on Flexible Circuits covers all the issues.

GET THE ANSWERS YOU NEED ON FLEX!



IPC INTERNATIONAL CONFERENCE ON FLEXIBLE CIRCUITS

TECHNICAL WORKSHOPS

Tuesday, June 15

10:00 am to 1:00 pm **Desmear, Metalization and Electroplating for Rigid Flex and Flexible Printed Circuits**
Mike Carano, Vice President, OMG Electronic Chemicals

This workshop will address critical process parameters required for proper desmear, metalization and electrodeposition for flexible and rigid-flexible substrates. The ultimate goal is to prevent defects associated with inadequate adhesion of the deposited metal, issues related to interconnect defects and hole-wall pullaway. Insuring long-term reliability of the plated via is of utmost importance. Additional defects such as delamination, wedge voids, plating folds, microvoids and surface pitting carry significant costs and will be presented from a root cause analysis perspective. Specific issues addressed include:

- Desmear Technology
- Metalization of Flex and Rigid Flex
- Direct Metalization and Direct Metalization Process
- Acid Copper Electrodeposition
- Solderable Surface Finishes for Flex and Rigid Flex

Your Instructor

Michael Carano is vice president of technical operations for OMG Electronic Chemicals, Inc. He holds 29 patents covering a variety of technologies including plating, metalization processes and PCB fabrication techniques. Mr. Carano has published and presented numerous articles in the areas of copper plating, tin plating, PCB technologies, and analytical control of electroplating baths. He serves on the IPC Board of Directors.

2:00 pm to 5:00 pm **Test Issues in Flex**
Brent Sweitzer, Senior R&D Engineer,
Multek Flexible Circuits, Inc.

What should you be discussing with your customers and vendors regarding flexible circuit materials to ensure your testing strategy is correct? This workshop will address the questions you should be asking, and, more importantly, how to proceed with the answers you are given. You will discover:

- What you need to know about your customer's requirements
- What you need to know about supplied test data to make materials decisions
- How to determine the correct material and the appropriate test strategy

Your Instructor

Brent Sweitzer has worked in R&D at Sheldahl (Multek Flexible Circuits) for 29 years, developing new adhesiveless copper-polyimide materials, and leading a team that was awarded a grant by the USDC to develop a roll-to-roll patterning process for FPD materials on plastic. Mr. Sweitzer holds two patents. He graduated with honors from Caltech, earning a degree in chemistry, and attended graduate school at UCLA.

CONFERENCE

Tuesday, June 15

6:00 pm to 8:00 pm **Networking Reception**

Wednesday, June 16

7:30 am Registration and Networking

8:00 am Welcome and Introduction

8:15 am **Business Opportunities for Flex Manufacturers**

- Al Wasserzug, Director of Business Development, Vulcan Flex Circuit Corporation
- Jay Desai, Director of Marketing, M Flex

9:15 am **Embedded Passives and Flex: It is Happening**

- Robert Burns, National Sales and Marketing Director, Printed Circuits, Inc.

10:15 am Break

10:30 am **Impedance in a Flex Application: What Happens to the Signal?**

Panel Presentations and Debate

- Happy Holden, Chief Technical Officer, Foxconn
- Robert Sheldon, Applications Engineering Manager, Pioneer Circuits, Inc.

Noon Luncheon

1:30 pm **Packaging on Flex**

- Zach Gaubert, Mechanical Engineer, Raytheon

2:15 pm **Reliability Requirements for Flex**

- John Bauer, Senior Material and Process Engineer, Rockwell Collins

3:15 pm **New Applications for Liquid Polymer Crystal**

- Representative from Rogers (invited)

4:00 pm **Solving the Challenges of Materials Performance Issues**

Impedance, Dimensional Stability, Advance Structures, Thermal Management

- Mark Verbrugge, Flex Circuit Applications Engineer, Minco Products
- Sidney Cox, Research Associate, DuPont

5:00 pm Adjourn

Contact IPC Professional Development Manager at AnneMarieMulvihill@ipc.org or +1 847-597-2827 for more information.

HOW TO REGISTER

Register online at www.ipc.org/flex-registration

	IPC Member	Standard Industry Rate
Full-day Conference Only, June 16	\$395	\$550
Conference Plus Two Workshops	\$595	\$795
Individual half-day workshop, June 15	\$200	\$300

Please email registration@ipc.org or call +1 847-597-2861 with any questions.

LOCATION

This event will take place at the Marriott Hotel in Irvine, California:

Marriott Irvine
18000 Von Karman Avenue
Irvine, CA 92612
+1 949-553-0100

ROOM RATE

\$139 for IPC event participants. To confirm your room at this discounted rate, please state that you are with IPC.

Special IPC pricing includes internet service in guest rooms, and is available until May 24. After that date, rooms and rates are based on availability. Make your reservation now!

SPONSORSHIPS AND TABLE TOP EXHIBITS ARE AVAILABLE.

To discuss how this important event can help you reach your target audience, contact IPC Professional Development Manager at AnneMarieMulvihill@ipc.org or +1 847-597-2827.