

# LA/OC SMTA CHAPTER NEWS

May 2004 EDITION

## May 2004 Presentation & Plant Tour Meeting...

### PARK-NELCO

### Laminate Technology & LF Material Selection

#### DATE

Thursday, May 20th, 2004

#### AGENDA

6:00PM, Dinner @ Embassy Suites  
6:30PM, Presentation @ Embassy Suites  
7:15PM, Plant Tour @ Park Nelco

#### MEETING FEES

\$20, Members

\$25, Nonmembers

#### MENU

Fajita Bar

#### DINNER/PRESENTATION LOCATION

Embassy Suites

3100 East Frontera

Anaheim, CA



#### PLANT TOUR LOCATION

### Park-Nelco

2401 East Katella Avenue  
Anaheim, CA 92806

### LIMITED SEATING AVAILABLE

#### RESERVATIONS

Call: MaskTek  
(714) 557-3383

NO SHOWS WILL BE INVOICED  
If you can not attend, please cancel your reservation by 12 Noon on Wednesday, prior to the meeting. See you there!

LA/OC SMTA is proud to Present...

## June 2004 Dinner & Plant Tour

#### DATE

Thursday, June 17th, 2004

#### AGENDA

6:30PM, Dinner/Presentation  
7:30PM, Plant Tour

#### MEETING FEES

\$20, Members

\$25, Nonmembers

#### MENU

Pat & Oscars Catering

#### LOCATION

SimpleTech, Inc.  
3001 Daimler St.  
Santa Ana, Ca. 92705

#### RESERVATIONS

Call: MaskTek  
(714) 557-3383



Los Angeles & Orange County Chapter

*"The Surface Mount Technology Association membership is a network of professionals who build skills by sharing practical experiences and developing solutions in electronic assembly technologies and related business operations."*

LA/OC SMTA CHAPTER IS PROUD TO PRESENT...

## May 2004 Presentation & Plant Tour Meeting

LAMINATE TECHNOLOGY & LF MATERIAL SELECTION

Presented By:

**FRED E. HICKMAN, III**

**VP OEM MARKETING & TECHNOLOGY**

**PARK-NELCO**

### PRESENTATION ABSTRACT

Fred will first provide an overview of how laminates and prepregs are made. He will then discuss some of the many material options that are available for the current and future applications. He will also present Park Nelco's Technology Roadmap that shows some of the new materials that they are bringing to the market to meet the OEMs needs (lead free, halogen free, CAF resistance, improved thermal performance, etc).

### SPEAKER PROFILE

Fred Hickman is the VP of OEM Marketing and Technology for Park - Nelco. In this role, Fred is responsible for providing OEMs, EMS and CMs necessary technical and commercial information about Park - Nelco's product line in order to assist them in designing their current or future product applications.

Fred has been working in the PCB industry for 24 years and has been with Park - Nelco for 13 years. He has served in a number of technical roles since coming to Park - Nelco, including Director of Technology, Technical Service Manager and Reliability Manager. Prior to coming to Park - Nelco in 1991, Fred worked for Hadco Corporation (now Sanmina) and Digital Equipment Corporation in Senior Engineering capacities.

Fred has a BS in Chemistry from the University of South Carolina. Through the years, Fred has written a number of Technical articles for the various industry publications.

### What's Inside this Months News Letter...

- Page 2.....Presidents Message
- Page 3.....May 2004 Plant Tour Meeting Information
- Page 4.....Technical Article
- Page 5.....2004 5th Annual SMTA/CCA Aloha Golf 'Get Together' Golf Chairman Message
- Page 6.....2004 5th Annual SMTA/CCA Aloha Golf 'Get Together' Flyer
- Page 7.....November 2004 SMT Process Engineer Certification Information
- Page 8.....2004/2005 LA/OC SMTA Monthly Chapter Meeting Presenters Request

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**Presidents Message****By: Scott Penin**

I think by now we have realized our summer preview is here. If weather is predictable, May showers and June gloom could be around the corner and then it will be time for Southern Californian's to take vacations. We do love our summer.

April's meeting on Moisture Sensitive Device reactions by Michelle Ogihara & Anthonette Leen and the follow up pictures of actual failures by Kathy Palumbo was one of our most intriguing presentations to date. We thank Seika Machinery and Production Analysis & Learning Services for there time and effort.

May's meeting concerning Laminate technology and selection will keep us moving, as we are starting the meeting in our usual spot for dinner and then moving to Park-Nelco for the tour. Laminates are a very important part of our business and should be considered a prerequisite to assembly processes. If we know the types and behavior of laminates it is easier for assemblers to identify proper processes.

June's regularly scheduled plant tour will be held at Simple Tech in Santa Ana on the 17<sup>th</sup>. They have been implementing Lean Manufacturing and therefore will give everyone a chance to see the next generation of manufacturing. We thank Shane Mortazavi, SimpleTech's VP of Operations and Dick Garlic of RG & Associates for setting up the tour for us.

We are setting up the balance of the year with a Golf "Get Together", Lead-Free technology, SMT Process Engineers Certification Course and finish up with our annual Christmas Party. Please join us.

As always, if you have any suggestions that will assist or improve our chapter, please contact us at [www.laocsmta.org](http://www.laocsmta.org).

LA/OC SMTA is proud to Present...

## **May 2004 Presentation & Plant Tour Meeting...**

# **PARK-NELCO Laminate Technology & LF Material Selection**

### **DATE**

Thursday, May 20th, 2004

### **AGENDA**

6:00PM, Dinner @ Embassy Suites  
6:30PM, Presentation @ Embassy Suites  
7:15PM, Plant Tour @ PARK-NELCO  
7:35PM, Q&A @ PARK-NELCO

### **MEETING FEES**

\$20, Members  
\$25, Nonmembers

### **MENU**

Fajita Bar

**HURRY, LIMITED SEATING AVAILABLE! RESERVE NOW!**

### **RESERVATIONS**

Call: MaskTek  
(714) 557-3383

### **PLANT TOUR LOCATION**

## **PARK-NELCO**

2401 East Katella Avenue  
Anaheim, CA 92806

### **SPEAKER**

Fred E. Hickman, III  
VP OEM Marketing & Technology  
PARK-NELCO

### **SPEAKER PROFILE**

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### **ABSTRACT**

Fred will first provide an overview of how laminates and prepregs are made. He will then discuss some of the many material options that are available for the current and future applications. He will also present Park Nelco's Technology Roadmap that shows some of the new materials that they are bringing to the market to meet the OEMs needs (lead free, halogen free, CAF resistance, improved thermal performance, etc).

## Technical Article

Excerpted From "SMALL TIMES" Business Magazine By: Deon Nungaray

### "To Outsource Offshore or Not"

As the outsourcing trend has continued, somewhat, please consider the following:



Polychromix will produce its P-DCO, or dynamic channel equalizer, in its new Mass. plant.

March 30, 2004 – Put yourself in [Polychromix's](#) shoes. You endured the telecom shakeout. You raised some venture money. You recently rolled out a product and have some orders. It would appear to be time to set up offshore manufacturing.

Instead, the 25-person optical equipment startup is expected to unveil a new manufacturing facility in Wilmington, Mass., today to make its [P-DCO](#), or dynamic channel orchestrator. And to staff the 24,000-square-foot space, the company intends to hire about 15 new people this year, mostly engineers and technicians.

#### ***So much for outsourcing.***

Polychromix executives say the choice was motivated by concerns over cost and quality. Outsourcing manufacturing introduces complexities and risks – not the least of which include overcoming language barriers and reconstituting production lines using specialized equipment – which they did not want to undertake.

"It's a less risky activity for us to build them locally," said Mouli Ramani, vice president of business development and marketing.

But they say the biggest hurdle is actually transferring a production process to another manufacturer. "There is an amount of inherited knowledge that is very difficult to transfer," Ramani said. "No matter where we would transfer it to, there would be risks in the transfer itself."

In short, the executives say, they have confidence in their product process but not in their ability to transfer it to another manufacturer. Process transfer is especially important given the complexity of the dynamic channel orchestrator. The device separates and recombines the wavelengths of light and is used to reconfigure optical networks "on the fly" for both long haul and metro networks.

MEMS consultant [Bill Trimmer](#) said Polychromix's technology is, to some extent, an expression of the design philosophy of its founder, chairman and chief technology officer -- MIT professor [Stephen Senturia](#).

"He pushed the entire industry to be able to flexibly measure stuff," Trimmer said. "And that's what his product is. In a lot of ways it's the evolution of what he's been talking about. It's a metrology tool (for measuring light.)"

It is also time-intensive to manufacture. The orchestrators require painstaking alignment and intermittent wait times for various components to set. Polychromix expects to initially crank out one device per week from its four production lines and to ramp up to two devices per week later in the year. "We could build them faster if we wanted," Ramani said, "We've chosen to be very deliberative about how we do each cycle."

Company executives also said that doing early manufacturing at home gives them the ability to try new things. For example, when customers request tweaks, "You can have the same people on the manufacturing line doing the 'what-if' scenarios." These, are concluded, some of the essential reasons to keep manufacturing at home.

## 2004 5th Annual SMTA/CCA Aloha Golf 'Get Together' Golf Chairman Message

Aloha Golfers, Wannabe Golfers and Fun Seekers,

I can hardly believe that we are into May and that the 2004 SMTA / CCA Aloha Golf Get Together is just 3 months away. With the event growing closer it is time for me to get geared up to once again be your host for this event. As in past years Laura will be by my side assisting me along with many other hard working people.

You may have noticed that this year we have added "Aloha" to the events name and while many of you know the story there are some that may not. So for those of you that know the story please give me a minute to share the story with the others.

Just before the 2003 SMTA / CCA Golf Get Together, my Mother, Rosie, passed away after suffering from a heart blockage. For over a month before she passed away Laura and I spent night and day at the hospital at her side to comfort her and to insure that she received the best possible care. Even with all of our modern technology she succumbed to complications of an operation and the irony was that the operation was a success. With the Golf Get Together less than a month away Laura and I were not sure if we could pull off a successful event. Many volunteers and supporters help to make my job easier and with this combined effort the event was the biggest and best ever.

My mother was born and raised in Hawaii and her outward offering of friendship, having fun and sharing the "Aloha" spirit has always been something that I admired and enjoyed. I decided to share this Aloha Spirit with everyone in the event by having an artificial lei's for everyone and asking everyone to wear an Aloha shirt.

Well things went off better than I could have imagined with friend's showing up with real lei's for Laura and me. Aloha shirts were also the shirt of the day on the course and during the banquet. Laura and I were sincerely overwhelmed by the outpouring of caring and Aloha spirit.

Sometime during the early morning of the event I believe it was Michelle Ogihara that added the "Aloha" to the event and it just got more momentum as the day went on. So this year we are continuing to carry on the spirit of my Mom's Aloha by formally naming the event the Aloha Golf Get Together.

I know that many of you have taken the time and effort to be a sponsor, player, volunteer, or maybe you just come out for the banquet. Regardless I would like to take this opportunity to offer a big Mahalo (for you haoles, that means thank you) to each of you for your past support.

This year, with your continued support, I am planning to have a bigger and better 2004 SMTA / CCA Aloha Golf Get Together. So please help by passing along the word on our event to family, friends, and others. We are looking for Player, Volunteers and Sponsors for this year's big event.

### Here are the particulars on the 2004 SMTA / CCA Aloha Golf Get Together

**Where:** California Country Club

**Sign In:** Starting at 11:00 AM

**Tee Off:** Shotgun Start 1:00 PM

**Cost per Player:** \$110.00 Covers Tee Fees, Shared Cart, Warm Up Balls (Netted warm up area), Fruit Bowls, Tee Gift Bag, and Awards Banquet.

**Dress Code:** Hawaiian Attire Preferred. (Aloha shirts for the guys and grass skirts for the ladies)

**Format:** To Be Determined

*Come early so you don't miss out on the warm up games that we have planned. I guarantee that you will have a good time with this year's new contests.*

I wish you a very warm Mahalo.

Frank Kurisu

SMTA / CCA Aloha Golf Get Together Chairman

SolderMask, Inc.

714 842-1987fkurisu@soldermask.com

**P.S.** *Please enjoy the upcoming Mother's Day. All of our Mother's are so special and you should let them know.*



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LA/OC SMTA is proud to Present...

**November 2004**

## **SMT Process Engineer Certification Course**

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**Get the recognition that you deserve.**

**These days it takes more than experience. It takes "proof".**

SMTA Certification will quickly become the electronic assembly industry's most respected sign of approval. Certification is one way to enhance your stature in our industry. Your certification can also be a marketing tool for your company. They will be able to proudly say that they have team members who are SMTA certified.

### **What The Certification Programs Are**

Each SMTA Certification program is a three-day workshop consisting of refresher topics in the SMT processes or systems. This will include both open and closed book examinations. The workshop, as well as the exam, assumes that the participant has at least one year of SMT experience and has an educational background equivalent to two years or more of college in a technical discipline. This is not an entry level program. Basic algebra and geometry will be used in the workshop and examination. The examination is "competitive" in that it requires written answers and some calculations. The intent of this procedure is to enable the students to establish competitive credentials as "Certified" by the SMTA in SMT Assembly Processes or SMT Systems.

### **SMT Processes Curriculum**

SMT Materials  
SMT Components  
Stencil Printing  
Dispensing  
Component Placement  
Reflow Soldering  
Wave Soldering  
Test and Inspection  
Line Balancing

### **Who Should Attend**

SMTA Certification is intended for manufacturing and process engineers. However, design, test and quality engineering personnel, as well as SMT assembly managers who want to confirm their current competence at a fundamental level of overall process technology, should also consider certification. The program assumes that the student has a year or more of SMT experience and is competent in elementary engineering mathematics.

### **DATE**

November 9th to 11th, 2004

### **AGENDA**

8:00AM, Check-In  
8:30AM to 4:00PM, Certification Course

### **COURSE FEES**

\$1195 SMTA member / \$1345 non-member includes the workshop, study guide, and test.  
\$745 SMTA member / \$895 non-member includes just the study guide and test (no workshop).

### **MENU**

TBD

### **LOCATION**

Irvine Electronics  
1601 Alton Parkway  
Irvine, Ca 92606  
(949) 250-0315

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## Get Connected!

### CHECK OUT

Chapter News  
 Technical Articles  
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 SMTA News  
 Books

[www.smta.org](http://www.smta.org)

Those of you who are receiving this newsletter by U.S. mail, please forward your e-mail address to:

[secretary@laocsmta.org](mailto:secretary@laocsmta.org)

...so that we may e-mail the news letter to you. This helps lower our distribution costs, which means more benefits for our members.



**Isn't It time...  
 You advertised...**



	Business Card	1/4 Page	1/2 Page
1 Month	\$ 50.00	\$ 90.00	\$ 175.00
1/2 Year (5 Issues)	225.00	400.00	750.00
1 Year (9 Issues)	375.00	675.00	1,200.00

### Submission Guidelines

**Acceptable Artwork Formats:** .pdf, .jpg, .bmp, .gif, .tif, html, & Camera Ready Artwork. Laser Printed Pages will not be accepted.

**Acceptable Font Style:** Graphic, MSWord, or html.

AD SIZES	WIDTH	LENGTH
Business Card	3.75"	2.25"
1/4 Page	3.75"	4.75"
1/2 Page	7.75"	4.75"
OR	3.75"	9.75"

### Schedule

Ads should be submitted at least one week prior to the end of the month preceding the first month of desired publication.

### Vendor Tables

Display your products and literature at a Chapter Meeting for a fee of \$100, and receive a bonus of one free 1/4 page AD for one month.

### Contact

Scott Penin

Call: (714) 403-1874 / E-Mail: [info@paradigmmanufacturing.com](mailto:info@paradigmmanufacturing.com)

## Calling All Members!

# WE NEED YOUR INPUT!!

We need presentations for our 2004/2005 meeting schedule

Currently our planning board has the following months available:

November 2004, January 2005, March 2005, April 2005, May 2005

We are looking for Presentations in the following categories:

Factory Enterprise Systems & QA Techniques/SPC, Lead-free Assembly & Performance Measurement, DFM/DFT/DFA & SMT Design Methodologies, PCB Final Finish Selection, BGA's, Chip Scale/Micro BGA's & Fine-Pitch components.

If you have a presentation and/or know of someone with a presentation we would like to hear from you.

Please E-mail Kathy Palumbo at [laocsmta@laocsmta.org](mailto:laocsmta@laocsmta.org) OR Contact by Phone at 949.713.7229