



Please join us for our 2019 Houston SMTA Expo & Tech Forum at the Stafford Centre, 10505 Cash Road, Stafford, Texas 77477. If you look forward to seeing the latest products and services in the industry and an opportunity to enjoy presentations by experts in our profession, you won't want to miss this show!

Come see over 60 local and national tabletop exhibitors. Free lunch from 12:00 Noon to 12:45 P.M catered by Kelley's Country Cookin and lots of chances to win door prizes. We'll also have drawings after each technical session. You must be present to win.

This is a free show for attendees. We are pleased to offer another outstanding technical program with information and technology presented by industry leaders to keep your skills up to date!

To register for the show, go to <http://www.smta.org/expos/#houston> and register in the attendee section.

Show Schedule

10:00 A.M. - Expo open to attendees

11:00 A.M.-11:45 A.M. Technical Presentation

Topic: *"What is Additive Manufacturing of Electronics? What Can Be Done Today? How Does It Enable The Electronics of Tomorrow?"*.

Speaker: Simon Fried – President, Nano Dimension USA & Co-Founder

11:45 A.M. - drawing for prize and 2 gift cards

12:00 Noon - 12:45 P.M. - Free lunch catered by Kelly's Country Cookin

12:45 P.M. – drawing for prize and 2 gift cards

1:00 P.M. - 1:45 P.M. Technical Presentation

Topic : *"On-Going Cleanliness Testing on Production Hardware"*.

Speaker: Dr. Mike Bixenman –Chief Technology Officer, Kaizen

2:00 P.M. – 2:45 P.M.

Topic : *"The X-Factor - How X-ray Technology is Improving the Electronics Assembly Process"*.

Speaker: Dr. Bill Cardoso, President, Creative Electron

3:00 P.M. - end of show

Thursday, March 21, 2019
10:00 A.M. to 3:30 P.M.



Technical Presentations



11:00 A.M. – 11:45 A.M

“What is Additive Manufacturing of Electronics? What Can Be Done Today? How Does It Enable The Electronics of Tomorrow?”.

Simon Fried – President, Nano Dimension USA & Co-Founder

The presentation will introduce innovative precision 3D printed electronics capabilities, including: The potentially revolutionary role of additive manufacturing of electronic circuits and electromechanical parts. The ‘factory in a box’ allows for rapid in-house iterations and manufacturing saving time, allowing for completely new design freedoms and ensuring that IP security is total. Learn about how additive can allow designers to make the unmakeable.

Mr. Fried serves as President of Nano Dimension USA and is Co-founder of Nano Dimension, a leading additive manufacturing of electronics company developing technologies that enable new ways of making and designing electronics. Nano Dimension develops hardware, software and unique nano-materials which allows for precision 3D printing of complex multilayer and non-planar circuitry. Simon is an authority on printed electronics and its evolution from what was a new technology 20 years ago to the industry changing force that it has become today.



1:00 P.M. – 1:45 P.M.

“On-Going Cleanliness Testing on Production Hardware”.

Dr. Mike Bixenman –Chief Technology Officer, Kaizen

The performance and cost advances over the past 20 years have enabled technologies to advance beyond what anyone could have imagined. In spite of these technology advances, the cleanliness standards that contractors rely on to ensure the design, production, and quality of next-generation Class 2 & 3 electronic hardware has remained unchanged. As technologies advance, the companies who build the device need guidance on what to do and how to do it.

Dr. Michael Bixenman (aka Dr. Mike) is known to many as the world’s leading expert in cleaning electronic circuit assemblies and advanced packages. He is also one of the industry’s leading authorities on the design of electronic assembly, cleaning materials and process integration. In fact, Dr. Mike literally wrote the book on electronics manufacturing process cleaning standards (*Cleaning & Contamination Process Guide*).

Dr. Mike’ contributions to the electronic assembly industry have lead to multiple professional honors and recognitions, including the IPC President’s Award and chairmanship of the IPC/SMTA Cleaning Symposium. Currently, he is chair of the IPC Cleaning Handbook Task Group.



2:00 P.M. – 2:45 P.M.

“The X-Factor - How X-ray Technology is Improving the Electronics Assembly Process”.

Dr. Bill Cardoso, President, Creative Electron

Bill will explain cover a broad range of applications for x-ray inspection:

- Electronic component inspection and failure analysis.
- Component counting and material management.
- Reverse engineering.
- Counterfeit detection.
- Real-time defect verification.
- Computed tomography (CT) techniques and how to differentiate between 2D, 2.5D, and 3D x-ray inspection.
- Design for manufacturing (DFM) and design for x-ray inspection (DFXI).
- Voids, bridging, and head-in-pillow failures in bottom terminated components (BTC).

He will also discuss how artificial intelligence (AI) is changing the way we think about x-ray inspection. Things we would never dream of doing just a few years ago are now reality by combining AI and x-ray inspection.

Bill started his first company at 17 in Brazil, selling it a few years later to work for US Department of Energy’s Fermi National Accelerator Laboratory (Fermilab). At Fermilab Bill led research in nuclear physics to build the equipment that discovered the Higgs Boson (and the 2013 Nobel Prize in Physics). After 10 years at Fermilab, Bill was ready to get back to the entrepreneurial life. He moved from Chicago to sunny San Diego to start Creative Electron in his garage in 2008.

Creative Electron is 10 years old now, and after the acquisition of FocalSpot in 2016, it became the largest US manufacturer of x-ray systems to the electronics industry. Creative Electron’s fast growth has been driven by its artificial intelligence expertise combined by a core competency in x-ray inspection. At Creative Electron, Bill leads the team of engineers and scientists who combine AI and x-rays to deliver the most intelligent x-ray machines in the market.

Special Thanks to Our Lunch Sponsor NPI Technologies



Current Exhibitor List:

<u>Air Products and Chemicals, Inc.</u>	<u>MicroScreen</u>
<u>Amitron Corporation</u>	<u>Nikon Metrology, Inc.</u>
<u>ARQ Electronics</u>	<u>Nordson Test and Inspection</u>
<u>Manufacturing Services, Inc.</u>	<u>NPI Technologies, Inc.</u>
<u>Aven Tools, Inc.</u>	<u>Omron Inspection Systems</u>
<u>BBM, Inc.</u>	<u>PAC Global, Inc.</u>
<u>BPM Microsystems, Inc.</u>	<u>PACE Worldwide</u>
<u>Brady Corporation</u>	<u>PalPilot International Corp.</u>
<u>Condair Inc.</u>	<u>Panasonic</u>
<u>Conductive Containers, Inc.</u>	<u>Precision PCB Services, Inc.</u>
<u>Creative Electron, Inc.</u>	<u>ProActive Process Solutions Group</u>
<u>DG Marketing Corporation</u>	<u>Rich Sales</u>
<u>Eatman Associates</u>	<u>SEHO North America</u>
<u>Eurolacer Americas</u>	<u>Seica Inc.</u>
<u>Fancort Industries, Inc.</u>	<u>Seika Machinery, Inc.</u>
<u>FHP Reps</u>	<u>Shenmao America, Inc.</u>
<u>Fuji America Corporation</u>	<u>SMTXTRA USA Inc.</u>
<u>GEI Inc.</u>	<u>Southwest Sytems Technology, Inc.</u>
<u>Hisco, Inc.</u>	<u>STI Electronics, Inc.</u>
<u>I Source Technical Services, Inc.</u>	<u>Sunshine Global Circuits</u>
<u>IKEUCHI USA, INC.</u>	<u>Super PCB</u>
<u>InsulFab PCB Tooling</u>	<u>TAGARNO USA</u>
<u>JBC Tools, Inc.</u>	<u>The IPS Group, LLC</u>
<u>Kurtz Ersä, Inc.</u>	<u>Vision Engineering</u>
<u>KYZEN Corporation</u>	<u>Yamaha/Trans-Tec America</u>
<u>LPKF Laser & Electronics</u>	<u>ZESTRON</u>
<u>METCAL</u>	



Prizes



Drawing Schedule

Fitness Tracker, Car Dash Cam, and 1 Gift Card at 11:45 AM

Alon Home Security, Power Bank, and 1 Gift Card at 12:45 PM

Must be Present to Win!

Arlo Pro - Wireless Home Security Camera System with Siren



Fitness Tracker



Car Dash Cam



Power Bank Portable Charger



Two Gift Cards

