



ISSUE: December 2018

## Electronics In Harsh Environments Tackles Design For Reliability

by Tanya Martin, SMTA Executive Director

SMTA Europe is proud to announce the 2019 <u>Electronics in Harsh Environments Conference</u>, April 2-4 2019 in Amsterdam, Netherlands. This global conference is a two and a half day technical event focused on building reliable electronics used in power electronics and harsh environments.

Thermal, power and signal integrity requirements can present challenges in devices that operate within harsh environments. Component integration, paired with a growing complexity of the package architectures, larger form factors and higher interconnection densities increase the risk of in-field failures. Overpowering or overheating of a device can have serious consequences including internal package failure, downstream device errors and second-level interconnect solder joint failures. Soldering residues are more problematic, and if not understood, can result in both intermittent and complete device failure.

This conference tackles the challenges and best practices for building reliable electronic devices that will perform to design standards when used in harsh environments. Specific topics include building reliable high density assemblies, power electronics, electric hybrids, product assembly challenges, cleaning, coating, process control, and monitoring and tracking production hardware. Challenging areas such as high-temperature soldering, solder material advances, and new standards are presented.

The Electronics in Harsh Environments conference draws attendees, speakers and exhibitors from highly regarded companies such as BMW, Bosch, Danfoss, Henkel, IBM, Intel, Rockwell Collins, Rolls-Royce, SAAB, Schlumberger, Siemens AG, thyssenkrupp and highly accredited universities from around the globe.

If you have any questions or comments, contact me at tanya@smta.org.