SMTA Europe

Electronics in Harsh Environments Conference
Amsterdam, Netherlands
April 24, 25 & 26, 2018

Press Release

Contact:
Karlie Severinson, Administrative Assistant
Surface Mount Technology Association
6600 City W. Pkwy.
Suite #300
Eden Prairie, MN 55344
952-920-7682

SMTA Europe announces *Session 5* Technical Program on *Adhesives and Coatings* at the "**Electronics in Harsh Environments Conference"** to be held in Amsterdam, Netherlands, on April 25th, 2018.

Significant performance and reliability challenges exist for harsh environment electronics within the automotive, power electronics, oil & gas, and aerospace applications. Under varying harsh operating environments, the life expectancy of electronic components and systems reduces exponentially if they are not designed, packaged, and protected appropriately. Dr. Rakesh Kumar of Specialty Coatings will present on thermally-stable, vapor-phase conformal coating for protection of electronics in harsh environments.

Highly dense assemblies are commonly packaged in designs that are permeable to moisture. While operating in hostile environments, the thickness and coverage variability of conformal coating over components impacts reliability. Phil Kinner of Humiseal will present research that compares and contrasts coating thickness to help the assembler determine optimum levels needed to withstand harsh environments. The attendee will gain insight into coating types, properties and reliability expectations.

Area array components, such as Ball Grid Arrays (BGAs), Chip Scale Packages (CSPs) and Flip Chip (FCs), then to add complexity to conformal coating processes. Previous studies have shown that the presence of conformal coatings under an area array component can induce solder joint failure. Dave Hillman of Rockwell Collins will present on how conformal coatings impact solder joint integrity of these advanced packaging. The research finds that some of the coating configurations degraded component reliability while others improved reliability.