

Announcement of session on "Corrosion reliability of electronic materials and devices"

Corrosion reliability of electronics is a serious issue today due their wide spread use in all climatic conditions. Interaction of humidity with internal parts of the device such as Printed Circuit Board Assembly (PCBA) and components can cause several functionality issues, which are resulting from corrosion failure modes. Humidity related issues in electronics is caused by a combination of materials, corrosion, and electrical issues, which leads to reduced life span of the products and heavy economic loss due to failures. Problems are compounded by the fact that the electronic systems are built by multi-material combinations and additional accelerating factors such as corrosion causing process related residues, bias voltage, and unpredictable user environment.

Both industrial electronics and consumer electronics suffer from reliability issues due to corrosion, which includes application such as in humid and harsh environments. Therefore, incorporating enhanced corrosion performance in the design is relevant for all, which needs interaction between electronics, electrical, material, and corrosion specialists.

The session in Eurocorr 2018 will focus on the following topics:

- Corrosion failure modes and mechanisms in electronics
- Physics of failure approach to humidity related issues
- Process cleanliness, PCBA design aspects, and water layer formation
- Corrosion mitigation and prediction strategies for electronics
- Specific corrosion issues related to materials in electronics and components
- Issues related to the use of polymers in electronics and corrosion
- Reliability of electrical contacts and fretting corrosion
- Suitable devices and sensors for corrosion prediction
- Importance of enclosure design and packaging for humidity effects
- Modelling of humidity effects on electronics
- Testing for corrosion reliability

Please submit your abstract online via www.eurocorr.org before 16 January 2018.

For more information please go to http://www.efcweb.org/Working+Parties/ ...please link to the TF/WP page on the EFC website....

We are looking forward to your contribution to and participation in EUROCORR 2018

Rajan Ambat Chair WP23 "Corrosion reliability of electronics" Helmut Schweigart Co-Chair WP23 "Corrosion reliability of electronics"

Expected duration: 1.5 – 2.0 days

Audience: 30 - 50 attendees