Seminar on Climatic reliability of electronics:

Global challenges and perspectives

20-21 March 2019

Technical University of Denmark

Teknologisk Videndeling
ATV-SEMAPP.DK

Celcorr

EFC
EUROPEAN FEDERATION OF CORROSION

PROGRAMME
Wednesday 20 March 2019

09:00-09:30	Registration and breakfast
09:30-10:30	Lecture on fundamentals of corrosion and relevance to electronic corrosion
10:30-11:00	Break
11:00-12:00	Lecture on humidity and intrinsic aspects of PCBAs causing climatic reliability issues in electronics
12:00-13:00	Lunch
13:00-14:00	Lecture on methods to improve humidity related reliability of PCBAs – Intrinsic and extrinsic methods
14:00-14:30	Theory to practice – some examples of how to improve reliability
14:30-15:00	Some basic tips for corrosion related failure analysis on PCBA
15:00-15:30	Break
15:30-17:00	Lab demonstration of some failure analysis methods
17:30-19:30	Reception

Workshop teachers:
Dr. Rajan Ambat, Professor, Centre for Electronic Corrosion, DTU
Dr. Morten Jellesen, Senior Scientist, Centre for Electronic Corrosion, DTU

Thursday 21 March 2019

08:45-09:00	Breakfast
	Session 1
09:00-09:15	Introduction to the seminar and relevance of climatic reliability of electronics today *Rajan Ambat, CELCORR, DTU, Denmark*
09:15-09:45	Automotive electronics and ambient humidity *Maxime Makarov, Renault Group, France*
09:45-10:15	Environmental reliability testing demands of LEDs for automotive and outdoor applications *Stefan Shoemaker, OSRAM, Germany*
10:15-10:45	Break
	Session 2
10:45-11:15	PCBA cleanliness as a solution for humidity robustness *Rajan Ambat, CELCORR, DTU*
11:15-11:45	How wet is wet? Robust automotive electronics in humid environment *Lothar Henneken, Bosch Automotive Electronics, Germany*
11:45-12:15	New quality test for susceptibility of encapsulated electronics to harmful gas corrosion *Markus R. Meier, ZESTRON Europe*
12:15-13:15	Lunch

Thursday 21 March 2019

Session 3

13:15-13:45	Outgassing behaviour of SMT flux residue during reflow soldering *Theresia Richter, Bosch Automotive Electronics, Germany*
13:45-14:15	Humidity driven degradation in power semiconductor devices *Nando Kaminski, University of Bremen, Germany*
14:15-14:45	Methodology for corrosion studies in microelectronic assemblies *Kirsten Weide-Zaage, Uni. Hannovar, Germany & Hélène Fremont, Universite Bordeaux, France*
14:45-15:15	Break
15:15-15:45	Unique solutions to prevent solder joint fatigue *Gary Moffat, Retronix, UK*
15:45-16:15	Corrosion of NiCr-conductors due to humidity *Lutz Muller, Bosch Automotive Electronics, Germany*
16:15-16:45	Effect of PCBA cleanliness on the performance of conformal coating *Morten Jellesen, CELCORR, DTU, Denmark*
16:45-17:00	Closing remarks *Rajan Ambat, CELCORR, DTU, Denmark*

NOTES

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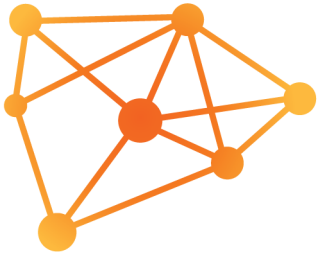

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