INTERNATIONAL RELIABILITY PHYSICS SYMPOSIUM

2001 TUTORIAL NOTES

Tim Rost, CHAIR

WYNDHAM PALACE RESORT & SPA
ORLANDO, FLORIDA
APRIL 30–May 3, 2001
(Tutorials—April 30th)

title/bios **pdfs of powerpoint presentation visuals**

Topic 1. ERRORS MADE WHEN PERFORMING RELIABILITY EXPERIMENTS: DISCUSSION, CONSEQUENCES AND APPLICATIONS
L. Tielemans, DESTIN N.V. and K. Croes, IMO, LUC

Topic 2. SILICON AMNESIA:
A TUTORIAL ON RADIATION INDUCED SOFT ERRORS
R. Baumann, Texas Instruments

Topic 3. SEMICONDUCTOR FOUNDRY QUALIFICATION PANEL DISCUSSION
(a) R. Hijab, Cirrus Logic, (b) Y. J. Chang, UMC, (c) C. K. Lau, Chartered
(d) A. Preussger, Infineon, and (e) J. T. Yue, TSMC

Topic 4. NEW PHENOMENA IN THE DEVICE RELIABILITY PHYSICS OF ADVANCED SUBMICRON CMOS TECHNOLOGIES
G. La Rosa, S. E. Rauch, and F. Guarin, IBM Microelectronics

Topic 5. ESD RELIABILITY PHYSICS, DEVICES AND CIRCUITS
S. H. Voldman, IBM

Topic 6. AEROSOL SPRAY AND THE COOLING OF MICROELECTRONICS
P. J. Boudreaux, Laboratory for Physical Sciences and D. E. Tilton, Isothermal Systems Research, Inc.

Topic 7. A CHIP DESIGNERS PERSPECTIVE ON RELIABILITY
D. Overhauser, Simplex

Topic 8. THIN GATE OXIDE RELIABILITY:
DEGRADATION, STATISTICS AND BREAKDOWN MODES
J. Suñé, Universitat Autònoma de Barcelona and E. Miranda, Universidad de Buenos Aires

Topic 9. FERROELECTRIC MATERIAL AND DEVICE RELIABILITY
T. D. Hadnagy, Ramtron International Inc.

Topic 10. MICROSTRUCTURE, PROCESSING AND RELIABILITY OF CU-BASED INTERCONNECT STRUCTURES
J. Sanchez, Jr., Advanced Micro Devices

Topic 11. QUALIFICATION FOR RELIABILITY IN TIME-TO-MARKET DRIVEN PRODUCT CREATION PROCESSES
W.. Gerling, Infineon Technologies AG and F.-W. Wulfert, Motorola SPS