

## Table of Contents

- 111. Electrical Characterization Methods and their Application to Metal Gate / High-k CMOS Reliability Evaluation  
*A. Kerber, Globalfoundries*
- 112. Forecasting BTI Impact in Circuits – It’s Sunny and Humid with Chances of Rain, *A. Bansal and J-J Kim, IBM T.J. Watson Research*
- 113. RTN Analysis for Defect Identification in Advanced Gate Stacks, *G. Bersuker, SEMATECH*
- 114. Hot-Carrier Degradation in Advanced CMOS Nodes: From the NBTI Shadow Back to the Front Scene, *A. Bravaix, ISEN-IM2NP*
- 121. Flash Memory Reliability, *A. S. Spinelli and C. Monzio Compagnoni*
- 122. Reliability Issues on PCM Memories, *M. J. Breitwisch, IBM T.J. Watson Research Center*
- 123. From Device to Library Reliability in Advanced CMOS Nodes, *V. Huard, STMicroelectronics*
- 124. Time-Dependent Dielectric Breakdown (TDDB) in High-K Dielectrics, *R. Degraeve, IMEC*
- 131. Semiconductor Chip Qualification and Variability, *P. Nsame, IBM STG*
- 132. Latest Developments in Failure Modeling of Electromigration and ILD TDDB, *J. Lloyd, SUNY Albany College*
- 133. Electromigration, Thermomigration, and Stress-Migration in Flip Chip Solder Joints, *K. N. Tu, UCLA*
- 134. BEOL Reliability Challenges and Its Interaction with Process Integration, *O. Aubel, GLOBALFOUNDRIES*
- 141. Basics of Reliability Physics, *J.W. McPherson, Texas Instruments*
- 142. Photovoltaic Module Reliability: Enduring a Storm, *G. Alers, University of California at Santa Cruz*
- 143. Failure Mechanisms and the Use of Accelerated Tests in the Development of Reliability PV Modules, *J. Wohlgemuth, National Renewable Energy Laboratory*
- 144. Reliability Issues in Optoelectronic Devices, *M. Meneghini, G. Meneghesso, and Enrico Zanoni, University of Padova*