

NBS/RADC Workshop, Moisture Measurement Technology for Hermetic Semiconductor Devices, II, 1980

Session I Mass Spectrometry Measurement of Moisture

The Paradox of Moisture Measurement - A Modern Tetralogy

By John C. Pernicka and Bruce A. Raby (Pernicka Corporation) - Published in RL/NIST Moisture Workshop 1980, P3

Three Volume Calibration Valve - Calibration and Operation Procedure for Carroussel Mass Spectrometer System

By Kenneth L. Perkins (Rochwell International Corporation) - Published in RL/NIST Moisture Workshop 1980, P8

Gaseous Compositions of Hermetic Package Cavity Ambients

By Robert K. Lowry (Harris Semiconductor) - Published in RL/NIST Moisture Workshop 1980, P15

Correlation Between Mass Spectrometer and Aluminium Oxide Sensor Measurements of Moisture in Hermetic Package

By Rebecca J. Gale (Bell Laboratories) - Published in RL/NIST Moisture Workshop 1980, P19

Moisture Standards for Mass Spectrometers

By Benjamin A. Moore (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1980, P32

Method 1018.2 Certification Results

By Benjamin A. Moore (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1980, P39

Session II Moisture Sensors

A Procedure for Preparing Hermetic Packages with Known Moisture Levels

By Malcolm L. White and Robert E. Sammons (Bell Laboratories) - Published in RL/NIST Moisture Workshop 1980, P49

A Surface Conductivity Moisture Monitor for Hermetic IC Packages

By Robert K. Lowry (Harris Semiconductor) - Published in RL/NIST Moisture Workshop 1980, P64

Some Observations on the Response of Dew Point Detection Chips

By Malcolm L. White and Albert F. Walcheski (Bell Laboratories) - Published in RL/NIST Moisture Workshop 1980, P76

Cross Correlation Experiments on Different Types of Sensors

By Michael G. Kovac (University of South Florida) - Published in RL/NIST Moisture Workshop 1980, P79

Moisture Sensors, Mass Spectrometry, and MIL Standards

By John Hale (Texas Instruments, Inc.) and Victor Fong (Panametrics, Inc.) - Published in RL/NIST Moisture Workshop 1980, P90

Dew Point Moisture Measurements

By Bert A. Unger and Peter R. Bossard (Bell Laboratories) - Published in RL/NIST Moisture Workshop 1980, P98

Water Vapor Measurements in Integrated Circuit Packages Using an Infrared Diode Laser

By J. A. Mucha and Peter R. Bossard (Bell Laboratories) - Published in RL/NIST Moisture Workshop 1980, P105

Session III Process Control

A Recent Evaluation of Al₂O₃ Moisture Sensors in Metal Hybrid Packages

By Robert F. Macko (Hughes Aircraft Company) - Published in RL/NIST Moisture Workshop 1980, P110

Moisture Monitoring and Control During Assembly of LSI Circuits via In-Situ Moisture Sensors

By Saeed H. Siddiqui (Digital Equipment Corporation) - Published in RL/NIST Moisture Workshop 1980, P113

Moisture Failures in Hybrids

By E. Wes Poate (General Dynamics) - Published in RL/NIST Moisture Workshop 1980, P117

Test Method 1018.2 - A Progress Report

By Robert W. Thomas (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1980, P126

Hybrid Stress Testing in Wet and Dry Packages

By Michael Richtarsic (Martin-Marietta Corporation) - Published in RL/NIST Moisture Workshop 1980, P128

Session IV Moisture Physics

Conceptual Model of Aluminium Corrosion of an Integrated Circuit

By Allen R. Bailey (AMP Inc.) - Published in RL/NIST Moisture Workshop 1980, P129

Conductivities and Electrolytic Properties of Adsorbed Layers of Water

By George B. Cvijanovich (AMP Inc.) - Published in RL/NIST Moisture Workshop 1980, P149

Microenvironments and Accelerated Testing

By Michael G. Kovac (University of South Florida) - Published in RL/NIST Moisture Workshop 1980, P165

Moisture Failure Mechanism

By George H. Ebel (Singer Company) - Published in RL/NIST Moisture Workshop 1980, P175

Experiences un Microcircuit Moisture Problems

By James R. Duffy (Hugues Aircraft Company) - Published in RL/NIST Moisture Workshop 1980, P178

Thermodynamic and Kinetic Considerations of Moisture Sorption Phenomena

By J. Gordon Davy (Westinghouse Defense and Electronic Systems Center) - Published in RL/NIST Moisture Workshop 1980, P184

The Detection of Cracks In Ceramic Packages by Vapor Condensation

By Aaron Der Marderosian (Raytheon Corporation) - Published in RL/NIST Moisture Workshop 1980, P201

Thresholds for Corrosion

By Aaron Der Marderosian (Raytheon Corporation) - Published in RL/NIST Moisture Workshop 1980, P212

Session V Packaging

Moisture Content of Solder Glasses

By Rama K. Shulka, J. SinghDeo, Nirmal K. Sharma, and Richard Blish (Intel Corporation) - Published in RL/NIST Moisture Workshop 1980, P213

Dry Sealing Glasses - A Summary of Research

By Robert K. Lowry (Harris Semiconductor) - Published in RL/NIST Moisture Workshop 1980, P220

What's Wrong with Cerdips?

By Robert W. Thomas (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1980, P234

Moisture Impermeable Polymers

By Philipp wh Schuessler (IBM Corporation) - Published in RL/NIST Moisture Workshop 1980, P239

Plastic Packaging

By Dimitry Grabbe (AMP Inc.) - Published in RL/NIST Moisture Workshop 1980, P246

Session VI Hermeticity, Fact or Fiction

A Method of Assessing The Surface Conductivity of Plastic Encapsulation Integrated Circuits

By Robert P. Merrett (British Telecom Research Laboratories) - Published in RL/NIST Moisture Workshop 1980, P247

Internal Moisture Measurement of IBM Integrated Circuir Memory Package

By Henry C. Baron, F. Richard Moser, and John Susko (IBM Corporation) - Published in RL/NIST Moisture Workshop 1980, P258

A Method of Leak Detection and Location for Conformally Coated Packages)

By George H. Ebel and Richard A. De Cristofara (Singer Company) - Published in RL/NIST Moisture Workshop 1980, P271

Improved RTV Silicone for IC Encapsulant

By Ching P. Wong and Donald E. Maurer (Western Electric Company) - Published in RL/NIST Moisture Workshop 1980, P275

Leak Testing Electronic Components

By Paul R. Florant (Varian) - Published in RL/NIST Moisture Workshop 1980, P281