RADC/NBS Workshop, Moisture Measurement and Control for Semiconductor Devices, III, 1983

Session I Moisture Analysis (Chairman, Robert W. Thomas, RADC)

What s Happening at RADC

By B. A. Moore (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1983, P3

Moisture Analysis at Oneida Research Services, Inc.

By T. J. Rossiter and D. Feliciano-Welpe (Oneida Research Services, Inc.) - Published in RL/NIST Moisture Workshop 1983, P8

Gas Analysis at Gollob Analytical Service

By F. Gollob (Gollob Analytical Service) - Published in RL/NIST Moisture Workshop 1983, P19

Control Chart Analysis of Moisture in Cerdips

By R. B. Elo and A. M. Massoletti (American Microsystems) - Published in RL/NIST Moisture Workshop 1983, P24

A Moisture Standard for IC Package Gas Analysis

By R. F. Haack (Jet Propulsion Laboratory) - Published in RL/NIST Moisture Workshop 1983, P39

The Evolution of Method 1018

By R. W. Thomas (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1983, P51

Session II Moisture Measurements Methods (Chairman, Robert K. Lowry, Harris Semiconductor)

Selecting Moisture Measurement Methods for Semiconducto Devices

By R. K. Lowry (Harris Semiconductor) - Published in RL/NIST Moisture Workshop 1983, P59

The Influence of Filling Gas of Hermetically Sealed Packages on Device Reliability: A Demand for a Complete Residual Gas Analysis

By L. J. Van Beek and H. A. Loos (Bell Telephone Mfg. Co.) - Published in RL/NIST Moisture Workshop 1983, P62

Extended Computer Control and Data Processing for the Mass Spectrometric Analysis of Package Atmospheres

By L. J. Rigby (Standard Telecommunication Laboratories) - Published in RL/NIST Moisture Workshop 1983, P69

Gaseous Compositions of Hermetic Package Cavity Ambients II

By R. K. Lowry (Harris Semiconductor) - Published in RL/NIST Moisture Workshop 1983, P86

Improvements in the Capacitance-Ratio Method of Using an IC Die as a Moisture Sensor By R. P. Merrett (British Telecom Research Laboratories) - Published in RL/NIST Moisture Workshop 1983, P94

Comparison of Various Moisture Measurement Methods: Test Procedure at RADC By N. K. Annamalai (Rome Air Development Center) - Published in RL/NIST Moisture Workshop 1983, P106

Laser Spectrometric Determination of Moisture

By J. A. Mucha (AT&T Bell Laboratories) - Published in RL/NIST Moisture Workshop 1983, P119

Total Water Measurement Equipment and Process Using Method 1018, Procedure 2

By C. Sloneker and B. Church (Medtronic, Inc) - Published in RL/NIST Moisture Workshop 1983, P128

Session III Moisture Sensors (Chairman, Victor Fong, Panametrics)

Fundamental Studies of the Aging Mechanism in Aluminum Oxide Thin Films

By C.-H. Lin and S. D. Senturia (Massachussetts Intitute of Technology) - Published in RL/NIST Moisture Workshop 1983, P129

Recent Evaluations of Al2O3 In-Situ Moisture Sensors for Industrial Electronic Hermetic Components Application

By M. Brizoux and J. Perdrigeat (Thomson-CSF) and D. Kane, and R. Gauthier (I.N.S.A. Lyon) - Published in RL/NIST Moisture Workshop 1983, P140

Moisture Sources and Measurement in CERDIP Packages with Alumina Sensors

By H. Joss (Coors Porcelain Company) - Published in RL/NIST Moisture Workshop 1983, P153

Moisture Content Control Using Alumina Sensor

By C. M. Roberts, Jr. (Analog Devices) - Published in RL/NIST Moisture Workshop 1983, P162

Monitoring of Moisture in CERDIP Devices Using a Moisture Sensor Chip

By J. Hunter (Advanced Micro Devices, Inc.) - Published in RL/NIST Moisture Workshop 1983, P171

Session IV Hermeticity and Moisture (Chairman, Stanley Ruthberg, NBS)

How to Raise the Permissible Leak Rate by Four Orders of Magnitude

By J. G. Davy (Westinghouse Manufacturing Systems and Technology Center) - Published in RL/NIST Moisture Workshop 1983, P180

Hermeticity and Moisture Ingress

By A. Der Marderosian (Raytheon Company) - Published in RL/NIST Moisture Workshop 1983, P196

Leak Detection, Gross and Fine, Using Helium as a Trace Gas

By P. R. Florant (Varian / Lexington Vaxuum Division) - Published in RL/NIST Moisture Workshop 1983, P217

Using Optical Correlation to Measure Leak Rates in Sealed Packages

By J. W. Wagner, L. C. Phillips, E. P. Mueller, and R. E. Green, Jr. (John Hopkins University) - Published in RL/NIST Moisture Workshop 1983, P222

Session V Moisture Physics (Chairman, Aaron DerMarderosian, Raytheon Company)

The Physisorption of Water Onto Integrated Circuit Package Components

By J. M. Ammons, G. R. Hoff, M. Kovac, J. H. Linn, and W. E. Swartz, Jr. (University of South Florida) - Published in RL/NIST Moisture Workshop 1983, P226

Simulating the Corrosion Threshold of LSI / VLSI Devices Using Moisture Sensitive Test Patterns By J. B. Kiely (Intel Corporation) - Published in RL/NIST Moisture Workshop 1983, P236

The Effect of Humidity on Cermet Resistors

By T. R. Homa and P. P. Vadala (IBM Corporation) - Published in RL/NIST Moisture Workshop 1983, P251

Moisture Effects on Passive Hybrid Components - 4 Year Exposure Test

By J. A. Ronning, Jr. And A. H. Jevne (Medtronic, Inc.) - Published in RL/NIST Moisture Workshop 1983, P263

Session VI Moisture and Organics (Chairman, Thomas J. Rossiter, Oneida Research Services)

Mass Spectrometric Evaluation of Epoxy Adhesive Systems

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Moisture Transport in Polymide Film: Implications for Moisture Measurement in IC Packages By D. D. Denton, D. R. day, and S. D. Senturia (Massachussetts Institute of Technology) - Published in RL/NIST Moisture Workshop 1983, P279

Moisture Content Variation in a High Polymer Content Package

By B. Church (Medtronic, Inc.) - Published in RL/NIST Moisture Workshop 1983, P288

Volatility Behaviour of Organic Die Adhesive Materials

By R. K. Lowry and K. L. Hanley (Harris Semiconductor) - Published in RL/NIST Moisture Workshop 1983, P289

Session VII Moisture Control (Chairman, John Kiely, Intel Corporation)

Moisture in Electonic Packaging: Measurement and the Control of It

By G. B. Cvijanovich (AMP Incorporated Research) - Published in RL/NIST Moisture Workshop 1983, P296

Evaluation of Moisture Sources in Hybrid Microcircuits

By G. H. Ebel, H. hammer, and s. Herman (Singer Company) - Published in RL/NIST Moisture Workshop 1983, P302

Implantable Pacemaker Moisture Control

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