



1999 *International*

**INTEGRATED
RELIABILITY
WORKSHOP**



October 18-21, 1999

<http://www.irps.org/irw/>

Stanford Sierra Camp, Lake Tahoe, CA

CALL FOR PAPERS

The Integrated Reliability Workshop continues to focus on ensuring semiconductor reliability through component fabrication, design, characterization, and analysis tools. It provides a unique environment for envisioning, developing, and sharing reliability technology for present and future semiconductor applications. New technology advances such as Silicon On Insulator, Copper metallurgy, Low K dielectrics continue to raise CMOS performance levels and present new challenges for both device and product reliability.

We invite you to submit a presentation proposal that addresses one or more of the following topics:

- **IDENTIFICATION OF RELIABILITY EFFECTS:**
failure mechanisms and sensitivities to materials and manufacturing.
- **RELIABILITY MODELS (EXISTING/NEW) USED TO SHOW:**
experimental agreement between short-duration and long-duration test results, limits to accelerated stress, applications for AC, pulsed, and DC conditions.
- **RELIABILITY TEST STRUCTURES:**
design, characterization, uses and data analysis; integrated on-chip reliability test systems (including electrical and/or physical test/analysis).
- **WAFER LEVEL RELIABILITY TESTS AND TEST APPROACHES:**
test and analysis methodologies, reduction in development time, relation to circuit element and package tests, in-line monitors; use and interpretation of WLR data; success stories; learning achieved with WLR, the fine tuning of a WLR implementation.
- **DESIGNING-IN RELIABILITY (CIRCUITS, PROCESSES, PRODUCTS):**
methodologies and concepts, modeling, simulation tools, reliability-driven design rules and checkers; use of WLR for design rule verification.
- **CUSTOMER PRODUCT RELIABILITY REQUIREMENTS:**
reliability evaluation methodologies; data bases; reporting systems; future reliability targets.

IRW is designed to give you a unique opportunity to present your work, test your ideas, and seek the reactions and suggestions of your peers. This is accomplished in a small, intense, but welcoming meeting of no more than 135 attendees in a secluded site that promotes conversations and discussions throughout the days and evenings of the workshop. Several authors have used the experience to prepare papers that have received outstanding- and best-paper awards at IRPS. For more details about IRW, see our web site.

SUBMISSION DEADLINE: *Received no later than July 2, 1999.*

Please submit 15 copies of your two-page (maximum) presentation proposal (including figures). Your submission should state clearly and concisely the results of your work and why they are significant. Representative data and/or figures that support your proposal are REQUIRED. The proposal must include the title of the presentation, and the name, affiliation, complete return address, telephone and telefax numbers, and e-mail address for each author. Submission should be by post or express mail (preferred). Telefax submissions will NOT be accepted. All submissions will be acknowledged. Visual aids for accepted proposals are required by September 10, 1999 for inclusion in the Presentation Handout at the meeting. A written presentation summary is due by November 1, 1999 for inclusion in the Final Report.

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