

ESREF 2003, the 14th European Symposium on Reliability of Electron Devices will take place at Bordeaux (France) from 6th to 10th October 2003.

This international symposium continues to focus on recent developments and future directions in Quality and Reliability Management of materials, devices and circuits for microelectronics. It provides a European forum for developing all aspects of reliability management and advanced analysis techniques for present and future semiconductor applications.

The scope of the previous **EOBT**, Electron and Optical Beam Test Conference is included in the ESREF Conference.

LOCATION OF THE CONFERENCE (50 km from the international airport of Bordeaux-Mérignac):

PALATIUM-ARCACHON

Phone : 33 (0)556 22 4700 – Fax : 33 (0)556 22 5555
e-mail : palais.des.congres.arcachon@wanadoo.fr

SUBMISSION GUIDELINES

The deadline for the submission of three page-extended summaries (including figures) is **March 31st, 2003**. The title page must include a five-line abstract, the complete address, the fax number and e-mail address of the corresponding author and the preference for oral or poster presentation. Please note that abstracts and papers must be in English.

Authors are requested to send an electronic file (in Adobe Acrobat PDF or WORD format) of the summary to the Technical Programme chair at:

esref@ixl.u-bordeaux.fr

DEADLINES

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|----------------------|---|
| 31 March 2003 | Submission of summary |
| 28 May 2003 | Notification of paper acceptance |
| 27 June 2003 | Submission of final manuscript |

The ESREF 2003 proceedings will be published as a special issue of the journal Microelectronics Reliability and on CD-ROM by Elsevier Science.

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| 18 July 2003 | Receipt of the final paper at the Publisher : Elsevier Science (UK) |
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TECHNICAL PROGRAMME

The conference will concentrate on two main areas of interest in electronics concerning designers, manufacturers and users:
- Strategy for Quality and Reliability Assessment during Product Development and Life Cycle
- Advanced Analysis Techniques for Technologies and Product Evaluation

SCOPE OF PAPERS

The Technical Programme Committee is inviting submission of papers that address one or more of the following topics:

Quality and Reliability Techniques for Components and Systems

Reliability indicators and early detection,
Reliability test structures,
Limits to accelerated tests,
Yield/reliability relationship,

Screening methods and burn-in,
HAST , HASS,
Field reliability.

Reliability models and simulations

Characterisation of defects,
Defect models,
Simulation of reliability related circuit constraints

Failure Mechanisms in new materials and devices

Hot carriers,
Passivation stability,
Metal migration and interaction,
High-k dielectrics, Cu interconnects,
Non-volatile and programmable devices,
Wide bandgap semiconductors,
High frequency devices,S
MEMS, Sensors.

Power Devices Reliability

Smart-power devices, IGBT, thyristors,
Thermal management.

Photonics Reliability

Optoelectronics and laser devices,
Passive elements and modules, MOEMS.

Packaging and Assembly Reliability

Bonding, solders and joints,
High densities assemblies, MCM,
BGA, CSP, flip-chip,
Connectors.

Advanced Failure Analysis: Defect Detection and Analysis

Electron, ion and laser beam techniques,
Backside techniques,
Scanning probe techniques, SCM,
Acoustic microscopy,
Electrical and thermal characterization,
Sample preparation, construction analysis,
Failure analysis: case studies.

Tutorials by experts will provide review presentation of relevant topics.

Invited papers will introduce the main stream topics.

Workshops organised on October 6st in correlation with the ESREF conference will give the opportunity to exchange the know-how and field returns on specific topics.

For further information concerning the Scientific Programme, please contact:

Nathalie LABAT

Phone : 33 (0)556 84 6551 – Fax : 33 (0)556 37 1545

esref@ixl.u-bordeaux.fr
<http://www.esref.org>

EQUIPMENT EXHIBITION

The Symposium will feature the latest in service providers, equipment manufacturers and suppliers.

A large exhibit floor will give the opportunity to key-vendors to represent the core business area in these fields.

For further information concerning the equipment exhibition, please contact :

Alain BELLIER, ADERA
esref@adera.fr

STEERING COMMITTEE

| | |
|------------------------|--|
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Journal edition chair :

N. LABAT - IXL, University of Bordeaux (F)

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Organisation Secretariat :

**I. VOIRIN,
ADERA**

Association pour le Développement de l'Enseignement et des
Recherches auprès des Universités, des Centres de recherche
et des Entreprises d'Aquitaine

ESREF 2003 SECRETARIAT

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CALL FOR PAPERS

14th EUROPEAN SYMPOSIUM RELIABILITY OF ELECTRON DEVICES, FAILURE PHYSICS AND ANALYSIS

*Bordeaux - France
6 - 10 October 2003*



with the technical co-sponsorship of :

IEEE - Electron Devices Society



in conjunction with :

**EOBT (Electron and Optical Beam Testing)
ANADEF**

organised by :

**Laboratoire IXL - UMR CNRS
Université Bordeaux 1 – ENSEIRB**