

3RD EUROPEAN FAILURE ANALYSIS NETWORK EUFANET WORKSHOP

DATE OF THE WORKSHOP:

Wednesday, October 8, 2003 from 17:45 to 19:45

LOCATION OF THE WORKSHOP:

Auditorium, PALATIUM-ARCACHON (50 km from Bordeaux-Airport) ARCACHON-(France)
During ESREF Symposium ([http://www. Esref.org](http://www.Esref.org))

WORKSHOP PROGRAMME:

17h45 Welcome (Felix Beaudoin, Thales)

17h50 EUFANET summary report (Philippe Perdu, CNES)

18h00 New questionnaire results (Christian Boit, TU Berlin)

18h15 Web site draft presentation (Philippe Perdu, CNES)

18h30 Magnetic field analysis challenges and solutions

- Board : Romain Desplats (CNES), Gerald Haller (ST), Philippe Descamp (Philips), Wolfgang Buerkle (Infineon)
- Speakers, Lee Knauss (Neocera), Wolfgang Mertin (Duisburg University), Gurpreet Singh (Micromagnetics)
- Introduction (Romain Desplats): magnetic field analysis challenges, benefit of contactless current investigation, overview of existing solutions (Loop antenna, GMR, SQUID, MTJ and MFM).
- SQUID (Lee Knauss)
- Magnetic Force Microscopy (Wolfgang Mertin)
- Magnetic Tunnel Junction (Gang Xiao)
- Conclusion and Perspective (Board): How can the EUFANET member can learn more? Would a common benchmark evaluation be interesting? Could some requirements (sensitivity, types of problems) be expressed to confront the reality of IC analysis with existing magnetic field techniques?

WORKSHOP MAIN TOPIC

This workshop tackles a technical hot topic: magnetic mapping for Failure Analysis. We would like to:

- Give the participants a basic understanding of the available “magnetic solutions”.
- Have the participants express their problems linked with current / magnetic issues. (We will have to start expressing some of these problems).

- Try to classify these problems in order to confront them with the techniques presented. (The opportunity of having Lee Knauss, Wolfgang Mertin and Gang Xiao will be tremendous).
- Propose common evaluations of tools in order to share results, saving both times, money and increasing the validity of the obtained results. This should benefit both vendors and potential customers. These evaluations could be conducted through the EUFANET organization.
- Discuss the possibility to access (commercially) to such tool in Europe. Demo center? University? This could be very valuable for people who need to have results before deciding to invest in the appropriate tool.
- For Magnetic Force Microscopy where AFM microscope exists, we could discuss the applications for debug and analysis ICs and a way to develop an expertise level to the people already having an AFM

PEOPLE INVOLVED:

Open to everybody directly or indirectly concerned by failure analysis in companies, universities or institutes, National Organizations that host Failure analysis groups, European Sections of International organizations and European Failure analysis activities...

MODERATORS:

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