

ANADEF 2012 Review

ANADEF 2012 Workshop Report

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The ANADEF 2012 Workshop attendees

The 13th ANADEF Workshop (failure analysis and failure mechanisms of electronic components) was held June 5 to 8, 2012, at the sea resort Les Tuquets in Seignosse, France, near the famous surfing spot of Hossegor on the Atlantic Ocean. The French failure analysis (FA) community meets biennially in a unique, friendly, and intergenerational spirit. Training and sharing of experiences and skills on solved and unsolved FA case studies, techniques, and tools as well as trends and the future of FA are presented in a warm, friendly, and informal but professional manner that includes extended after-dinner exchanges.

The ANADEF Workshop gathered 158 people (breaking the 2010 record) from a wide industrial and university background: IC manufacturers, energy, aeronautics, space, defense, automotive, tool suppliers, FA lab providers, and university labs.

Similar to previous workshops, the four conference days were split into two parallel tracks including six plenary sessions, four microsessions, and four tutorials. This year, a session on counterfeiting opened the workshop, with presentations from manufacturers, brokers, and users. The other sessions covered such topics as interconnections/report and packaging,

FA of VLSI, power device technologies, and failure mechanisms. These sessions closed with a presentation on new objects and challenges.

Four micro-workshops were organized parallel to the plenary sessions. In a more informal and interactive manner, experts were able to share solved and unsolved case studies, with an exchange of tips and tricks.

For only the second time, a professional education program was provided for technicians, engineers, and postgraduates. More than 60 attendees came from across France to participate in the short program instruction by industry experts, all of whom were ANADEF members. Most attendees were beginning and midcareer technical scientists involved in FA who wished to advance their careers.

Failure analysis of VLSI had an important place in the program, with one session, three micro-workshops, and one tutorial dedicated to the topic. The tutorial allowed participants to cover the main techniques and tools used in many labs, including the most recent techniques. During the plenary session, authors presented the flow and tools used for the most advanced processes up to 22 nm, with case studies using laser voltage imaging/probing, thermography for localization, and transmission electron microscopy



A relaxed but studious plenary session

for physical characterization. The micro-workshops, with more than 50 attendees at each, were very active and included much discussion and debate to share critical cases and propose hypotheses and possible solutions.

A high-quality FA photo contest and a quiz on equipment manufacturers created competition among all the participants. The winners were awarded bottles of Grands Crus Bordeaux wine and an iPad.

A sense of belonging to a family radiated from the first moment of participation in this workshop. Even

after the days' programs, small groups gathered spontaneously in the swimming pool, around a beer until midnight, or during a jog along the beach to share their expertise in FA and to deepen the discussion of topics presented during the sessions.

Since 1988, the ANADEF event has been held biennially. The next workshop is scheduled for 2014. It is organized by ANADEF, the French Electronic Failure Analysis Society. For more information, visit www.anadef.org.



Attendees at a micro-workshop

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