

5th International EUV Initiative Resist Technical Working Group Meeting

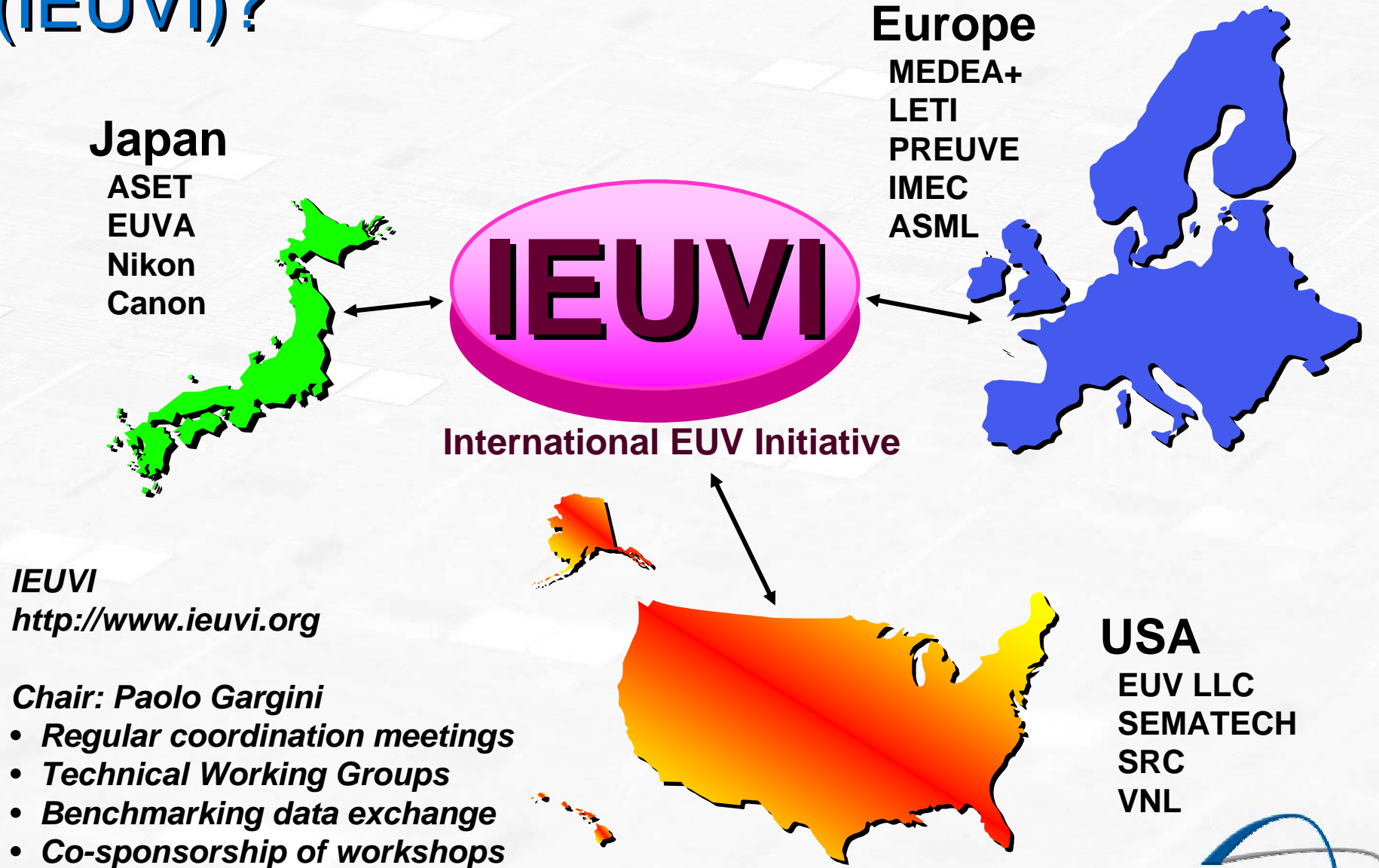
Kim Dean, SEMATECH
Serge Tedesco, CEA/LETI
Wolf-Dieter Domke, Infineon

March 3, 2005



Accelerating the next technology revolution.

What is the International EUV Initiative (IEUVI)?



What is the Objective of the IEUVI?

- **To coordinate collaboration among world EUVL consortia**
 - Align R&D activities to the International Technology Roadmap for Semiconductors (ITRS)
 - Coordinate R&D collaboration activities among consortia
- **To encourage coordination among suppliers**
- **Share progress reports**
- **Identify potential "show stoppers" for EUVL implementation**
- **Communicate implementation issues (e.g., to consortia, IC manufacturers, suppliers, and governments)**



What are the technical working groups (TWG) of the IEUVI?

- **Resist**

- Meeting Organizer: Serge Tedesco
- Meeting Chair: Kim Dean
- Meeting Co-chair: Wolf-Dieter Domke

- **Mask**

- **Contamination**

- **Source**



Resist TWG Members

Current Members

- ASET: Iwao Nishiyama, Hiroaki Oizumi
- CEA/Leti: Serge Tedesco, Cyril Vannuffel
- IBM: Carl Larson, Greg Walraff
- Infineon: Wolf-Dieter Domke
- IMEC: Mieke Goethals
- Intel: Wang Yueh, Heidi Cao
- SEMATECH: Kim Dean
- AMD: Adam Pawloski
- Freescale: Richie Peters
- Philips: Peter Zandbergen

New Members (pending your approval)

- Clariant: Georg Pawloski
- JSR: Daisuke Shimizu
- Rohm and Haas: Robert Brainard
- Sumitomo: Masumi Suesugu
- TOK: Mitsuru Sato
- AMSL: Noreen Harned
- Nikon: Katsuhiko Murakami



Goals and Objectives of Resist TWG

- **Goal—increased cooperation among EUV resist community world wide**
 - Develop resist specification roadmap
 - Coordinate efforts to address top 3 issues
- **Objectives—share data and information to speed development of EUV resist**



Top Three Issues for TWG Cooperation

- 1. What is a safe level of resist outgassing?**
 - Work together to determine specifications, include tool and resist suppliers
- 2. Understanding the resolution limits of chemically amplified resists**
 - Provide enough tool time for cycles of learning
- 3. How to optimize photospeed, LWR, shot noise?**
 - Design experiments to investigate these parameters



Resist TWG Meeting Schedule

- Frequency: 3 times per year
- Locations: one per year in each region (goal)
- Suggestions for 2005 Meetings
 - SPIE meeting in San Jose, California (today!)
 - Resist TWG met by teleconference mid-year
 - 4th International EUVL Symposium, November 7-11, San Diego, California

