

11th International EUV Initiative Resist Technical Working Group

October, 2nd, 2008

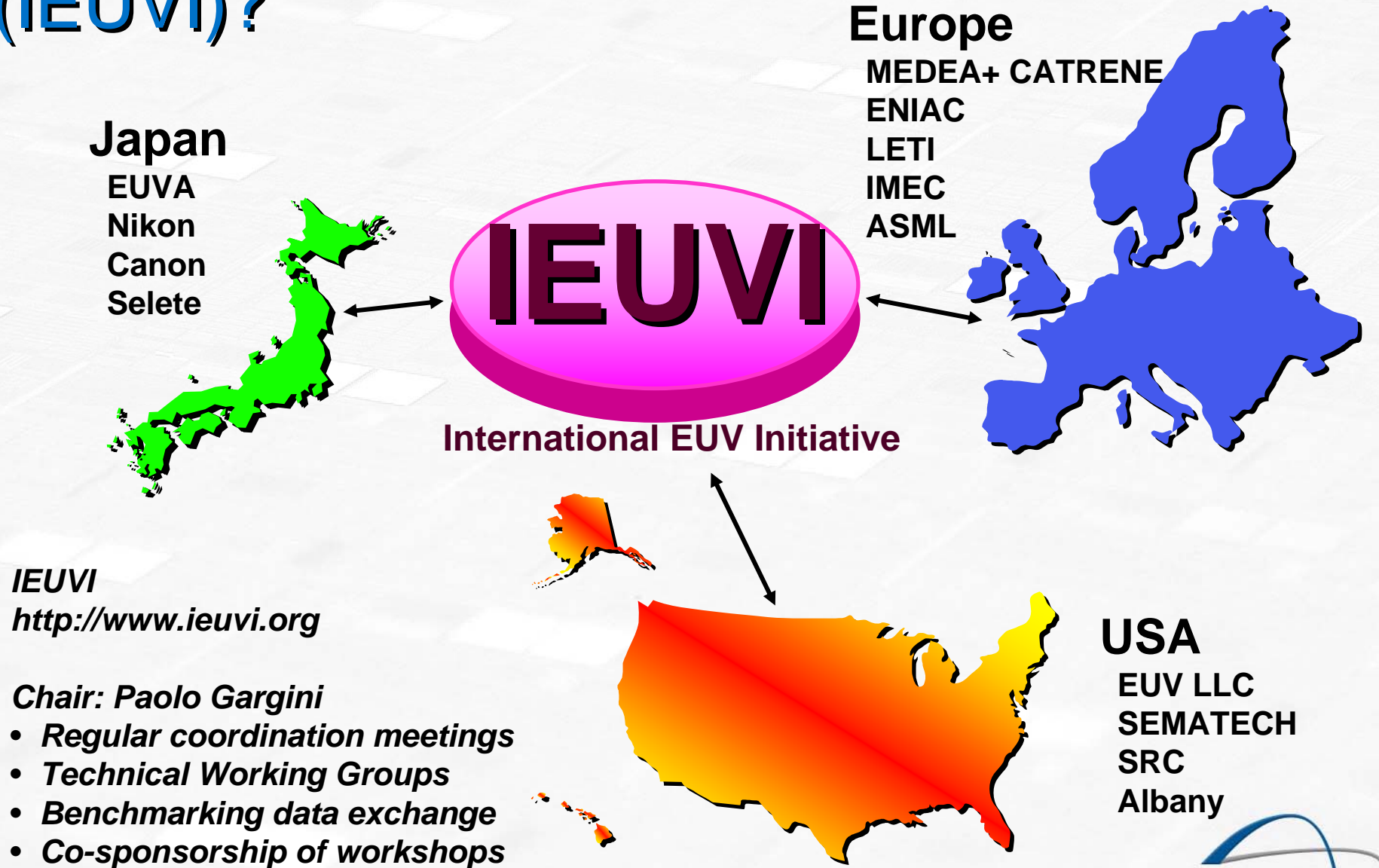
Lake Tahoe, USA

**Jacque Georger, SEMATECH
Serge Tedesco, CEA/LETI**



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What is the International EUV Initiative (IEUVI)?



IEUVI
<http://www.ieuvi.org>

Chair: Paolo Gargini

- **Regular coordination meetings**
- **Technical Working Groups**
- **Benchmarking data exchange**
- **Co-sponsorship of workshops**



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Goals and Objectives of Resist TWG

- **Goal—increased cooperation among EUV resist community world wide**
- **Objectives—share data and information to speed development of EUV resist**

Confidentiality Notice

- Non-Confidential Meetings-

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 - The discloser does so with the knowledge that the audience may include non-members
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Questions?

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 - **Unless pre-registered and a member employee**
 - **You are a Foreign National of a Restricted Country**
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Today TWG objective

Good progress in CAR resists have been shown:

- As a consequence resist has been dropped from the 2nd to the 3rd place on the focus list
- But if specs are almost there for 32 nm hp we need to address 22 hp and beyond

What are the key (the knobs) to optimize RLS?

Materials
Processing
Under layer
Mask
.....

Does $LER < 1$ nm could be reached?

Please don't hesitate to interact !



Agenda

12:00 PM – 1:00 PM	Lunch	<i>Alpine Ballroom</i>
1:00 PM – 1:10 PM	Welcome and Introduction	<i>Serge Tedesco, CEA-LETI</i>
1:10 PM – 1:20 PM	Intro Focus Topic & Targets: What are keys to Optimizing RLS?	<i>Jacque Georger, SEMATECH</i>
1:20 PM – 1:35 PM	Resist Based Dose Calibrations Update	<i>Noreen Harned, ASML</i>
1:35 PM – 2:00 PM	Optimizing RLS	<i>Seiichi Tagawa, Osaka University</i>
2:00 PM – 2:25 PM	Optimizing RLS	<i>Alex Robinson, Birmingham University</i>
2:25 PM – 2:50 PM	Optimizing RLS	<i>Naoto Ohshima, FujiFilm EM</i>
2:50 PM – 3:05 PM	Break	
3:05 PM – 3:30 PM	Optimizing RLS	<i>Robert Brainard, University at Albany, CNSE</i>
3:30 PM – 3:55 PM	Optimizing RLS	<i>Mieke Goethals, IMEC</i>
3:55 PM – 4:20 PM	Optimizing RLS	<i>Todd Younkin, Intel</i>
4:20 PM - 5:00 PM	Open Discussion	
5:00 PM	Adjourn	

Wrap Up



Topics and Speakers for Next TWG

Progress towards 16nm resists

- **Recommendations: Report process windows, not just resolution. Standardize feature size reported for dose and LWR.**
- **LER/LWR of devices or etched features (EUV)—**
- **Effects of 450 wafer size on resist processing?**
- **Aspect ratio, thin film effects**



Plans for Next TWG Meeting

SPIE 22-27 February 2009 in San Jose



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