Plasma-Therm

ADVANCED VACUUM
A Plasma-Therm Company

IN PARTNERSHIP WITH

上海交通大学 SHANGHAI JIAO TONG UNIVERSITY AEMD

上海交通大学先进电子材料与器件平台
Center for Advanced Electronic Materials and Devices

Plasma-Therm Technical Workshop:
Fundamentals of Plasma Processing (Etching and Deposition)

April 25, 2014 (Friday), 8:00am to 5:30pm
Room 3-200 SEIEE Building, 800 Dong Chuan Rd, Shanghai
地址：上海市闵行区东川路 800 号电院群楼 3 号楼 200 室

The workshop will focus on the fundamentals of plasma etching and deposition. Lectures will include the basics of plasma reactors and mechanisms for etching and deposition and review state-of-the-art etching and deposition technologies as applied to semiconductor, MEMS, and nanofabrication. Talks will cover compound semiconductor, dielectric, and deep silicon etching as well as PECVD and high density plasma CVD of silicon based materials. Fundamental and new ideas for endpoint detection and sample thermal budget management will be presented.

Event is free. Pre-registration is requested before April 18, 2014 at
http://www.planetReg.com/E2198184518523

For general and registration inquiries, please contact:
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Objectives

- Learn the fundamentals of plasma, reactors, and etching mechanisms
- Review current etching technologies for deep silicon etching, compound semiconductors, and dielectrics
- Provide essentials of PECVD and HDPCVD
- Explore the fundamentals and new ideas in endpoint detection
- Understand thermal budget considerations

Light breakfast and lunch will be provided
Scheduled details and speaker information follows

Program

7:30 am	-	8:00 am	Registration and light breakfast (provided by Plasma-Therm)
8:00 am	-	8:15 am	Welcome
8:15 am	-	9:45 am	Basics: Plasma and Reactors
9:45 am	-	10:00 am	Break
10:00 am	-	11:00 am	Plasma Etching Mechanisms
11:00 am	-	12:00 pm	Dielectric Etching
12:00 pm	-	1:00 pm	Networking Lunch (provided by Plasma-Therm)
1:00 pm	-	2:00 pm	Compound Semiconductor Etching
2:00 pm	-	2:45 pm	Deep Silicon Etching
2:45 pm	-	3:00 pm	Break
3:00 pm	-	3:30 pm	Endpoint Basics
3:30 pm	-	4:00 pm	Thermal Budget Management
4:00 pm	-	5:15 pm	PECVD and HDP CVD (high density plasma CVD)
5:15 pm	-		Q&A

Speaker Information: David Lishan, Ph.D.

David Lishan received his undergraduate degree in Chemistry from UC Santa Cruz and Ph.D. from UC Santa Barbara in Solid State Electrical Engineering. He has worked and published on a wide range of material, semiconductor, and chemistry R&D projects in the areas of lithography, photochemistry, x-ray mask fabrication, PVD, and plasma processing. During his 15 years at Plasma-Therm, he has had business unit management and worldwide marketing responsibilities. Currently he is in the roles of Principal Scientist and Director in the Technical Marketing Group. His primary focus is on the application of plasma processing for R&D, MEMS, photonics, data storage, power, and compound semiconductor applications. He holds two patents in the area of semiconductor processing and has over 60 publications and conference presentations.

With Plasma-Therm, he has organized and presented plasma processing workshops at leading institutions throughout the world, including Harvard University, UC Berkeley, University of Notre Dame, UC Los Angeles (UCLA), University of South Florida, Stanford University, Lund University (Sweden), IMRE (Singapore), UC Santa Barbara (UCSB), ISCAS (Beijing, China), SINANO (Suzhou, China), UT Austin, Cornell University, Pennsylvania State University, KANC (S. Korea), University of Alberta, and in Israel.

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