

Tutorial 2

Plasma- assisted atomic level processing- PEALD & ALE

Sunday, September 16th, 2018
9:00 – 17:30, Room Dreitorspitze

The focus will be on atomic level processing technologies, such as Plasma Enhanced Atomic Layer Deposition (PEALD) and Atomic Layer Etching (ALE). The tutorial will provide the basics of the processes, but also insights into the fundamentals of processes, as well as an overview of the processing equipment and applications of these leading edge technologies.

The tutorial is organized by Adriana Creatore, TU Eindhoven, Netherlands, in cooperation with Jonas Sundqvist, Fraunhofer IKTS, Dresden, Germany.

- 9:00** **Introduction**
- Adriana Creatore, Eindhoven University of Technology, the Netherlands
- 9:30** **“Overview of thin film deposition and nanofabrication by atomic layer deposition”**
- Adrie Mackus, Department of Applied Physics, Eindhoven University of Technology, the Netherlands
- 11:00** **Break**
- 11:30** **“In situ process monitoring for atomic layer processing”**
- Martin Knaut, Institute of Semiconductor and Mikrosystems Technology, Technische Universität Dresden, Germany
- 13:00** **Lunch break**
- 14:00** **“Plasma atomic layer deposition: basics, mechanisms and applications”**
- Harm Knoops, Oxford Instruments Plasma Technology, United Kingdom and Department of Applied Physics, Eindhoven University of Technology, the Netherlands
- 15:30** **Break**
- 16:00** **“Principles, basics and practical examples of Plasma Atomic Layer Etching”**
- Sabbir Khan, Niels Bohr Institute, University of Copenhagen, Denmark
- 17:30** **End of the tutorial**