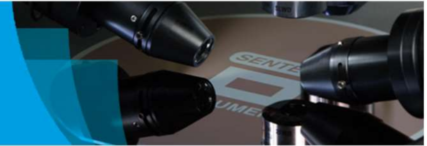
SENTECH Erfolg durch Leistung

Experts in Thin Film Measurement & Plasma Process Technology



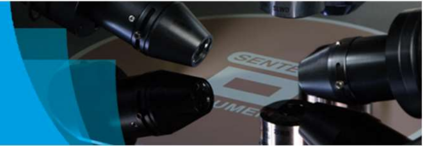
SENTECH Thin Film Metrology Seminar and Workshop

Thin Film Metrology Seminar

Date: **On Wednesday, 29th November 2023**
Host: **SENTECH Gesellschaft für Sensortechnik mbH,** Konrad-Zuse-Bogen 13, 82152 Krailling
Location: **SENTECH Instruments GmbH**, **Entrance**: Johann-Hittorf-Str./James-Franck-Str., 12489 Berlin
Networking dinner: **At Wandel Restaurant,** Eisenhutweg 118, 12489 Berlin-Adlershof

SEMINAR PROGRAM:

Pos.	Time	Talk
1.	9:00	**Welcome and SENTECH thin film metrology products** Friedrich P. Witek, SENTECH GmbH, Krailling and SENTECH Instruments GmbH, Berlin
2.	9:15	**Process control and monitoring of optical microsensors** Christian Möller, CiS Forschungsinstitut für Mikrosensorik GmbH, Erfurt
3.	9:45	**Quality control on SiC, Si and transparent substrates by SENDURO MEMS** Sven Peters, SENTECH Instruments GmbH, Berlin
4.	10:15	**Recent activities in in-situ ellipsometry and spectroscopy on optical coatings** Michael Vergöhl, Fraunhofer Insitute for Surface Engineering and Thin Films (IST), Braunschweig
	10:45	***Coffee Break***
5.	11:15	**Spectroscopic ellipsometry and Mueller matrix ellipsometry for the analysis of anisotropic materials and 2D periodic structures (scatterometry)** Alexander Treffer, SENTECH Instruments GmbH, Berlin
6.	11:45	**Ellipsometry for mid infrared applications** Valentin Wittwer, University Neuchâtel, Institute for Physics, Neuchâtel, Switzerland
	12:15	***Lunch break***
7.	13:45	**Tackling challenges in ellipsometry: low specular reflectance, inhomogeneous indices, and beyond** Sang Chatterjee, Justus-Liebig Universität Giessen, Giessen
8.	14:15	**Ellipsometry for quality control in device packaging** Uwe Richter, SENTECH Instruments GmbH, Berlin
9.	14:35	**To be confirmed** n.n.
	15:05	***Coffee Break***
10.	15:45	**Quality control on 300 mm wafers using SENresearch 4.0** Sven Peters, SENTECH Instruments GmbH, Berlin
	16:05	**End of Seminar.** **Everyone is kindly invited to visit the SENTECH Thin Film Metrology Application Laboratory.**
	19:00	**Networking dinner at Wandel Restaurant,** Eisenhutweg 118, 12489 Berlin-Adlershof



Thin Film Metrology Workshop

Date: **On Thursday, 30th November 2023**
Host: **SENTECH Gesellschaft für Sensortechnik mbH,** Konrad-Zuse-Bogen 13, 82152 Krailling
Location: **SENTECH Instruments GmbH**, **Entrance**: Johann-Hittorf-Str./James-Franck-Str., 12489 Berlin-Adlershof

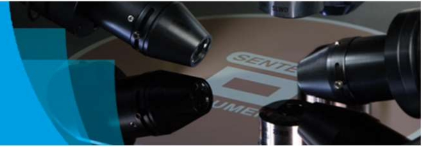
WORKSHOP PROGRAM:

Pos.	Time	Event
1.	9:00	**Introduction into spectroscopic ellipsometry – Complex sample analysis in a wide spectral range from DUV to NIR** Alexander Treffer, SENTECH Instruments GmbH, Berlin
2.	9:50	**How to recognise and push limits in spectroscopic ellipsometry** Sven Peters, SENTECH Instruments GmbH, Berlin
	10:40	***Coffee Break***
3.	11:00	**First Block of Workshops**
	12:10	***Lunch Break***
4.	13:30	**Second Block of Workshops**
5.	14:40	**Third Block of Workshops**
	15:40	***Coffee Break***
6.	16:00	**Fourth Block of Workshops**
	17:00	**End of Workshops**

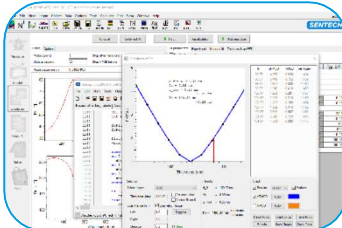
Please choose four topics in advance and notify us with your registration for the Workshop. This will help in advance with distributing everyone accordingly into teams of eight maximum. You will find the topics on the next page. If you are interested in Topic 3 and want to bring your own sample, check corresponding box.

Extra Notice:

Please take care not to bring confidential samples or samples under NDA for the Workshop "**Live measurements of customer samples on SENDIRA and SENresearch**" as these measurements are done in groups.



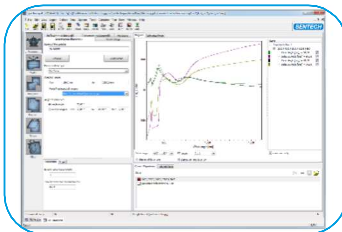
Topics:



1. **Programming of scripts for spectroscopic ellipsometry for automation and integration of external hardware**

   With Uwe Richter

   Location: Presentation room



2. **Workflow of spectroscopic ellipsometry with SpectraRay/4 - introduction to advanced operation**

   With Alexander Treffer

   Location: Conference room

3. **Live measurements of customer samples on SENDIRA and SENresearch 4.0**

   With Sven Peters

   Location: Metrology Application Laboratory, Main Room

4. **Automation of spectroscopic ellipsometry in production, SENDURO MEMS**

   With Georg Ditmar

   Location: Metrology Application Laboratory, Automation Room

5. **Benefits of reflectometry adding to ellipsometry for small spot size, fast mapping and trough silicon via (TSV) analysis**

   With Johanna Reck

   Location: Metrology Application Laboratory, Entrance Room

6. **How to apply in-situ metrology for plasma processing**

   With Marco Volleth and Jakob Zessin

   Location: Plasma Application Laboratory