

**SEMINAR:
Plasma Process Technology****NETWORKING DINNER**

At 19:00 in Berlin-Adlershof

On Wednesday evening, April 24, 2024

Location of the PLASMA SEMINAR:**SENTECH Instruments GmbH**
Schwarzschildstrass 2, Berlin-Adlershof
On Thursday, April 25, 2024**SEMINAR PROGRAM**

09:00 **Welcome and introduction of the program, organisation, and SENTECH employees**
Friedrich P. Witek, SENTECH GmbH, Krailling and SENTECH Instruments GmbH, Berlin

Etching:

09:10 **SENTECH Plasma Process Technology –
Latest developments in etching of LiNbO₃, diamond structures, and stress-controlled ICPECVD**
Marcel Schulze, SENTECH Instruments GmbH, Berlin
Friedrich P. Witek, SENTECH GmbH, Krailling and SENTECH Instruments GmbH, Berlin

09:40 **Comparison of different PEALE modes on nitride semiconductors**
Christian Miersch, Fraunhofer-Institut für Integrierte Systeme und Bauelementetechnologie IISB,
Außenstelle THM, Freiberg, Germany

10:10 **Coffee break and time for discussions**

10:45 **Challenges in manufacturing of mid-infrared semiconductor devices**
Artur Trajnerowicz, Vigo System S.A., Ożarów Mazowiecki, Poland

11:15 **In-situ depth control for plasma etching steps in optical III-V devices**
Ralph-Stephan Unger, Ferdinand-Braun-Institut gGmbH, Leibniz-Institut für Höchstfrequenztechnik, Berlin, Germany

11:45 **Applications of DRIE using Bosch process and cryogenic etching for Silicon**
Seçkin Akıncı, Koç Üniversitesi, Istanbul, Türkiye

12:15 **Lunch and time for discussions**

Deposition:

13:45 **Multilayered optical coatings by PVD, ICPECVD, and PEALD combined in a single cluster**
Mario Ziegler, Leibniz-Institut für Photonische Technologien e.V. (IPHT), Jena, Germany

14:15 **Advanced processing of large-area MoS₂ layers in a five-chamber cluster tool for (flexible) 2D electronics**
Claudia Bock, Ruhr-Universität Bochum, Fak. für Elektrotechnik und Informationstechnik, LS f. Mikrosystemtechnik,
Bochum, Germany

14:45 **Coffee break and time for discussions**

15:20 **In-situ process development of HfO₂, Al₂O₃, and AlN PEALD on SiC for power electronics**
Paul Plate, SENTECH Instruments GmbH, Berlin, Germany

15:35 **PEALD for metal-organic perovskites for solar applications**
Ludwig Marth, SENTECH Instruments GmbH, Berlin, Germany

15:50 **The SENTECH PTSA – a unique ICP plasma source**
Michael Höfner, SENTECH Instruments GmbH, Berlin, Germany

16:30 **All participants of the seminar are invited to visit the application laboratories at SENTECH Instruments**

17:30 **End of the seminar**