

## Semiconductor Physics WiSe 2024/25

## Lab course: HLP PR II

# Experimental methods of semiconductor physics

Course Manager: PD Dr. Holger von Wenckstern

#### **Objective:**

The 8 experiments in the summer term serve to consolidate the material covered in the lecture "Semiconductor Physics". The experiments cover the physics and manufacturing technology of simple semiconductor devices and are intended to familiarize students with basic experimental methods of semiconductor physics.

#### Completion and certification:

A basic understanding of each experiment is required for participation. At least 7 of the 8 experiments offered per semester must be performed and successfully completed, and test protocols must be written for 4 experiments. A graded final exam must be passed for at least 7 of the experiments per semester. A maximum of one "fail" may be retaken once per semester.

### Organization and procedure

PD Dr. Holger von Wenckstern, Office TA 305, <a href="wenckst@uni-leipzig.de">wenckst@uni-leipzig.de</a>, Tel. 32661

1. The experiment is always carried out in two groups on the scheduled date

Changing the group assignment is only allowed after consultation with PD Dr. von Wenckstern.

2. Preparation for the experiment is necessary using the script.

The scripts can be found at http://www.uni-leipzig.de/~hlp/te

http://www.uni-leipzig.de/~hlp/teaching/wahlpf.htm#PR-A

Username: hlpvl Password: getScripts

3. Confirm or change appointments at least 1 week before the experiment with the supervisor (e.g. by email)

- 4. Duration of the experiment: approx. 4 hours for each of the 8 experiments, Start (usually): in the morning at 8:15 a.m. or in the afternoon at 1:15 p.m.
- 5. Arrange an appointment with the supervisor to hand in the protocol and pass the test. It is recommended that the test be taken as soon as possible.
- 6. Participation in the safety briefing (with signature) is essential to start the internship.