Motivation:
The stability of terahertz analog circuits is highly dependent on the quality of the DC supply. MMICs usually require several different DC levels for operation, which must maintain certain ramp-up and ramp-down sequences to avoid damaging the analog circuits. Further, to generate measurements over different operating points, DC voltages must be swept. Measurement automation ensures repeatability and high quality of performed measurements.

Goals:
For the lab power supply of analog integrated circuits Keysight and National Instrument SMUs are used. An interface should be developed to connect the SMUs within an existing environment for measurement automation in MATLAB.

Your Tasks:
• Programming and debugging of a custom software interface / driver library in MATLAB
• Provision of ramp-up and ramp-down sequences
• Validation
• Documentation and creation of user manual

Others:
Form, scope and reimbursement of the student assistant position will be arranged in consultation with the supervisors.

Language: German/English