

Prof. Dr. S.E. Schulz

Seminar Topics/Questions

Seminar 1: CMOS – Definition and trends / Basics of deposition processes

- trends in microelectronics
- definition of geometric and equivalent scaling
- terms FEOL, BEOL, front end (FE), back end (BE); basic process step, process, process modules, (basic) technology
- basic steps/mechanism of CVD/Epitaxy; Arrhenius plot, reaction and transport limited regime
- definition of step coverage
- approaches for metallization: Cu/Cu, W/Al, subtractive, damascene (process sequences 2 groups)