

Work Experience

Innovations of High Performance (IHP)| Frankfurt(oder)

Internship (Apr. 2023- Nov. 2023)

- Experimenting on GeSn samples with Raman Spectroscopy and cryostat setup for Thermo-electric appliances
- Analyze the acquired data with Python and Origin

Laboratory hands-on (4 weeks)

- Study on Boron incorporation into SiGe in CVD reactor system
- Ellipsometry for thickness of the film
- XRD
- SIMS

Education

Brandenburg University of Technology | Cottbus, Germany

Physics and Research, Master

Apr. 2021 – Present

Modules

Light and Matter: covers topics on Photonics (spectroscopy techniques in labs for material characterization)

Advanced Seminar: follows the most exciting innovations on experimental (Photonics) and theoretical bases

Semiconductor Technology: includes knowledge on Si substrate devices (PN diode, MOSFET, BJT, HBT) and their fabrication technique(planar technology) in labs

Nano-electronics: foundations on MOS structure, MOSFET, FINFET, tunneling diode. Laser diode)

Experimental Solid State Physics: lectures on Band structure of direct and indirect materials(group 3-5 and their compounds) and strain engineering

Gas dynamics : Conservation laws, flows , flow regimes, entropy)

Computational thinking CFD: knowledge on python, python projects

Tribhuvan University | Kathmandu, Nepal

Physics and Research, Bachelor

Mar.2015 – Nov.2019 (Physics as major and Statistics as minor)

Focused more on quantum mechanics and solid state theory

College For Higher Education | Birtamode,Nepal

Higher Secondary Level

Mar.2013 – Jul.20215

Skills

 Python

 Origin

Paper Published: "Structural and Electronic Properties of Palladium and Palladium Doped Graphene," *International Journal of Scientific Research in Physics and Applied Sciences*, Vol.11, Issue.5, pp.37-42, 2023.