



Title: Postdoctoral Research Associate

Category: Postdoc Res Assoc.

Location: Sivas Cumhuriyet University Sivas-Turkey

Deadline: 15/07/2021

Description: Sivas Cumhuriyet University Nanophotonics Research and Application Center (CUNAM- <http://nanofotonik.cumhuriyet.edu.tr/>) has an immediate opening for postdoctoral research associates to work on epitaxial crystal growth and characterization of III-V semiconductors (In, Ga, Al As/P/N) using metal-organic chemical vapor deposition (MOCVD). In particular, the research will focus on developing and utilizing a novel crystal growth for electronic, optoelectronic applications and detailed characterization of grown epitaxial layers.

Duties:

The candidate will be responsible for designing and executing crystal growth experiments using the MOCVD system. The electrical, structural and optical properties will be characterized using XRD, Hall, IV-CV, Spectrophotometer, PL, Raman, and Ellipsometry systems. More specifically, you will:

- Define, organize, and validate process developments for the epitaxial growth of materials and look for specific integration solutions.
- Identify process requirements and development opportunities,
- Timely execute process optimisation and development projects,
- Actively contribute to the research programs and joint development programs with external partners,
- Share and discuss your results at team and program meetings,

Qualifications:

- Ph.D. degree in Physics, Materials Science, Electrical Engineering, Nanotechnology or a closely related area by the time of the appointment.

- Good publication track record.
- Good written and verbal communication skills.
- Experience in epitaxial crystal growth. Experience in MOCVD or MBE will be a plus.
- Experience in Characterization techniques (XRD, PL, Raman, Hall, Spectrophotometer, Ellipsometer)

Summary of conditions:

- Full time work (40h/week)
- Contract Length: Temporary (1 year contract with extension possibility up to 5 years)
- Salary: will be equal to salary of Assistant Professor or Associate Professor of Sivas Cumhuriyet University (depend on qualifications and demonstrated experience)
- Health Insurance.

How to apply:

- A cover letter.
- A full CV including contact details.
- 2 Reference letters or contact information.

Please e-mail your documents to idemir@cumhuriyet.edu.tr or cunam@cumhuriyet.edu.tr