



OUR VISION

To be a leading international research center with qualified R&D activities and high value-added production in the field of optoelectronics and electronic device technology

OUR MISSION

To grow crystals for optoelectronic and electronic device applications, to develop high value-added strategic product(s) based on R&D, and to carry out business development, project management, infrastructure service, consultancy and training activities in the related field with national international co-operations

Sivas Cumhuriyet University Nanophotonics Application and Research Center

CUNAM, with its semiconductor-based advanced technology R&D and production-oriented studies, it makes significant contributions to science and technology in our country. Innovative research and development studies initiated by the founding team in the early 2000s reached the project stage in 2006 and gained an official identity as 'Cumhuriyet University Nanophotonics Application and Research Center' in 2013. In 2024, it gained the status of 'Thematic Research Infrastructure' within the scope of the 'Law on Supporting Research Infrastructures' numbered 6550.

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Scan the QR
code for more
information!

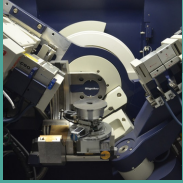


SIVAS CUMHURİYET UNIVERSITY

NANOPHOTONICS APPLICATION AND RESEARCH CENTER

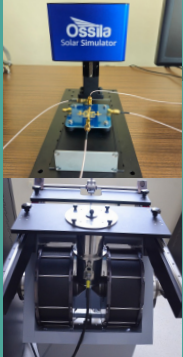


INFRASTRUCTURE



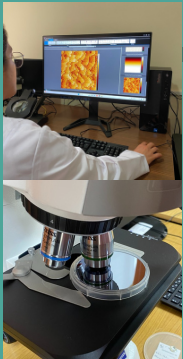
STRUCTURAL CHARACTERISATION

- Rigaku SmartLab High-Resolution X-Ray Diffraction



ELECTRICAL CHARACTERISATION

- Hall Effect Measurement System (HEMS)
- Keithley 4200-SCS Semiconductor Characterisation System and Motic PMS-1000 Microscope
- Solar Simulator Lamp
- Kulicke and Soffa Model 4124 Ball Wire Bonder



SURFACE CHARACTERISATION

- High-Performance Atomic Force Microscope (hp AFM) Device
- NanoMap 500LS 3D Profilometer
- ZeeScope Optical Profilometer
- Nomarski Mode Material Microscope
- Nikon Eclipse LV150N Optical Microscope



OPTICAL CHARACTERISATION

- Varian UV-VIS-NIR Spectrophotometer
- Broad Spectrum (200 - 2200 nm) High-Resolution Photoluminescence Spectrometer System
- OPT-S9000 Spectroscopic Ellipsometry



"We Carry the Power of Semiconductors Into Defense With Stability and Dedication"



GROWTH AND DEPOSITION SYSTEMS

- AIXTRON 200/4 RF-S Metalorganic Chemical Vapor Deposition (MOCVD) Method
- Nanovak (NVT5-500-2TH1DC1RF) Sputter/Thermal Thin Film Deposition System

AREAS OF WORK

- As/P and N-Based Crystal Growth and Characterisation for Optoelectronic and Electronic Devices
- Short/Extended Wavelength Infrared Photodetector Technology
- Quantum Cascade Lasers
- Vertical (External) Cavity Surface-Emitting Lasers
- Tandem Solar Cells
- Ultraviolet and Blue Light-Emitting Diodes

