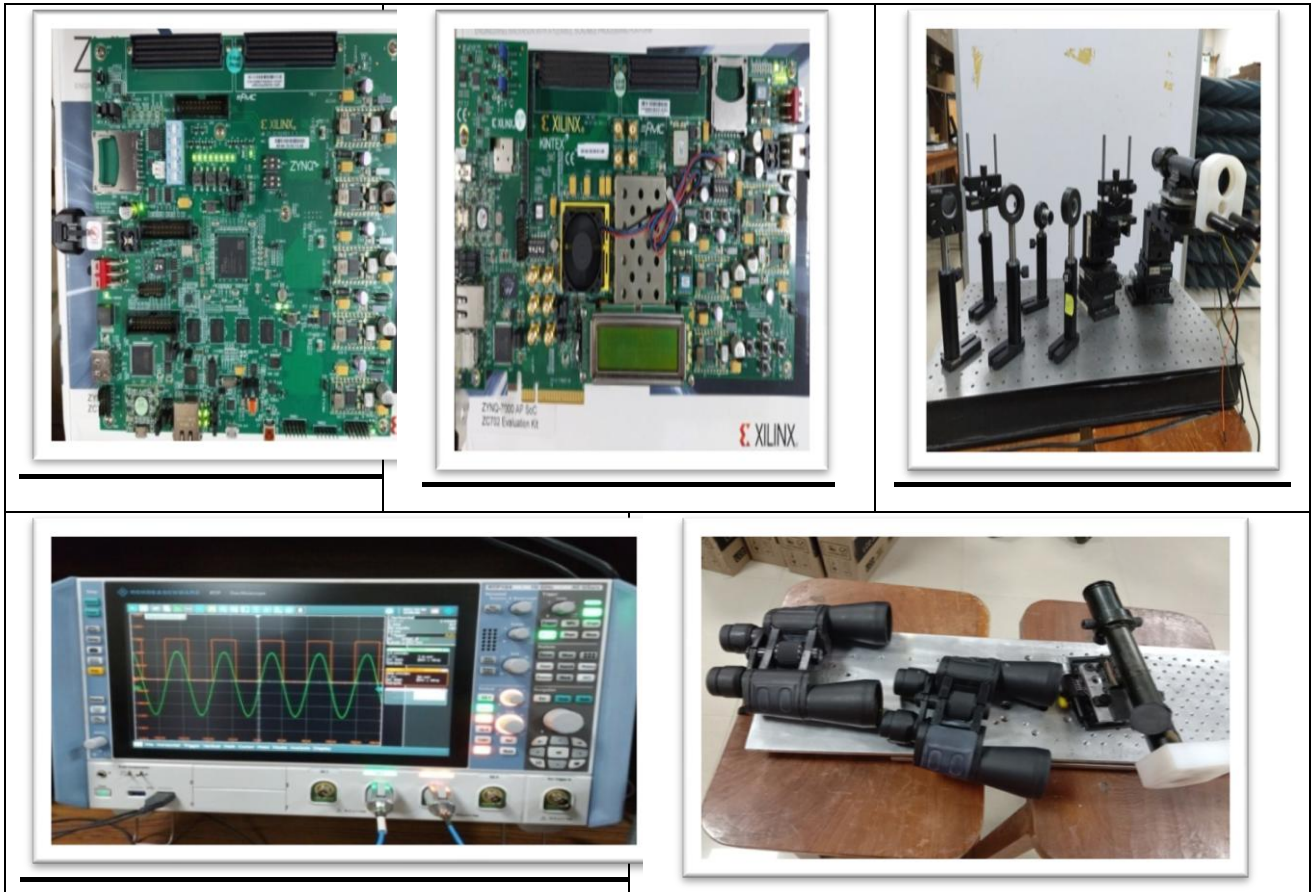


# Photonic Systems Laboratory

In the Photonic Systems Laboratory there are some research areas like Indoor Wireless Optical Communication. Free Space Optical Communication. AI Assisted Atmospheric Optical Beam Profile Modeling. Atmospheric Attenuation and Turbulence Strength Modeling. MIMO-FSO Communication- Advance Modulation/Channel Coding Techniques. Optical Camera Communication (OCC). Long-Range Aerial Platform (UAVs, Drones and Balloons) Communication/Control/Tracking. Beam Tip-tilt Stabilization and deformation correction.



## NAME OF COMPONENTS

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. 14 GHz Portable Spectrum Analyzer</li> <li>2. 4 Channel- 384 W RPS.</li> <li>3. Laser mounting LoS Aligner for FSO Transmission.</li> <li>4. FSO Receiver System.</li> <li>5. Photonics Research Test-Bed.</li> </ol> | <ol style="list-style-type: none"> <li>6. 16 GHz - 4 Channel RTO.</li> <li>7. Signal Processing ZYNQ Platform.</li> <li>8. Real Time DSP-Kintex 7 FPGA Platform.</li> <li>9. 6 GHz Vector Signal Generator.</li> <li>10. 68 Channel Logic Analyzer.</li> </ol> |
|---|--|