

# Spectroscopy in Diagnostics

## Clinical Chemistry

Automated analyzers. Glucose, electrolytes, enzymes.

## Immunoassays

ELISA, CLIA. Antibody-based detection. High sensitivity.

## Molecular Diagnostics

PCR, qPCR, NGS. Pathogen detection, cancer markers.

## Validation

Accuracy, precision, sensitivity, specificity. FDA/CLIA requirements.