

Lecture Title	Introduction to X-ray Photoelectron Spectroscopy (XPS)
Speaker	Emrah Ozensoy Chemistry Department, Bilkent University, 06800, Ankara, Turkiye & UNAM National Nanotechnology Center, 06800, Ankara, Turkiye
Abstract	X-ray photoelectron spectroscopy (XPS) is a commonly used surface sensitive material characterization technique which is based on the photoelectric effect. In this talk, we will provide fundamental insights regarding some of the capabilities, limitations, and opportunities offered by the XPS technique.
Keywords	XPS, Photoelectron spectroscopy, photoemission, surface sensitive elemental and chemical analysis
Level of the audience	Beginners
Language	English
Contents	<ol style="list-style-type: none"> 1. Basic Operational Principles of XPS 2. Origins of Surface Sensitivity 3. Chemical Shifts, Spin Orbit Splitting, Auger and Satellite Features 4. Baseline Correction and Peak Fitting & Deconvolution 5. Depth Profiling 6. Surface Charging and Charge Compensation