

proXAS

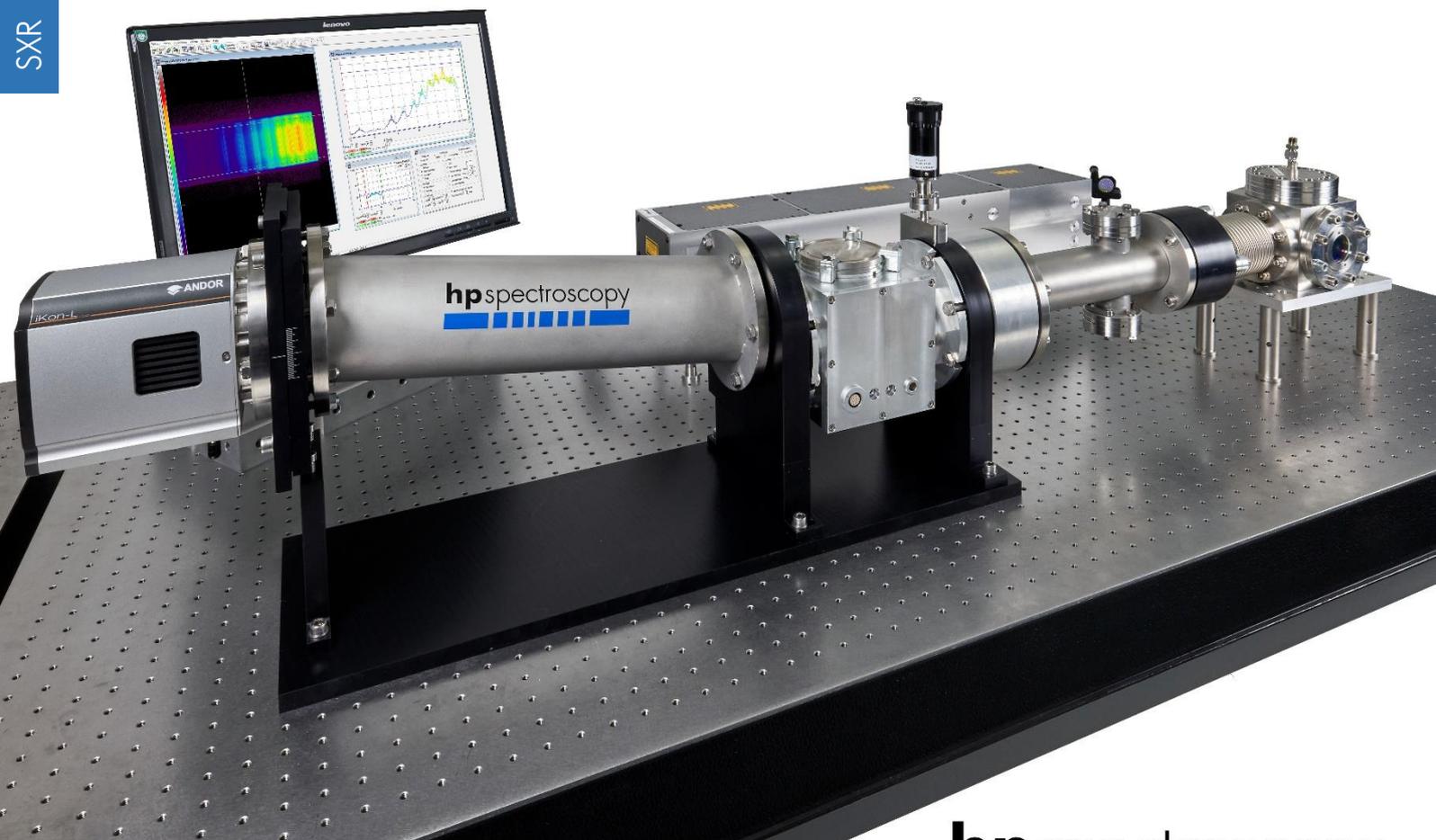
TABLE-TOP NEXAFS SYSTEM



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SXR XUV



hp spectroscopy

proXAS

Features

Integrated NEXAFS system

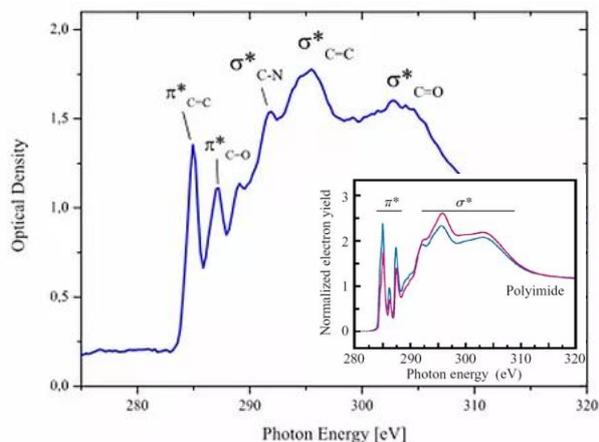
- first integrated table-top NEXAFS spectroscopy solution
- no need to apply and wait for beamtime
- chemical state analysis for geology, biology, materials research
- fast polychromatic acquisition

Synchrotron-quality spectra

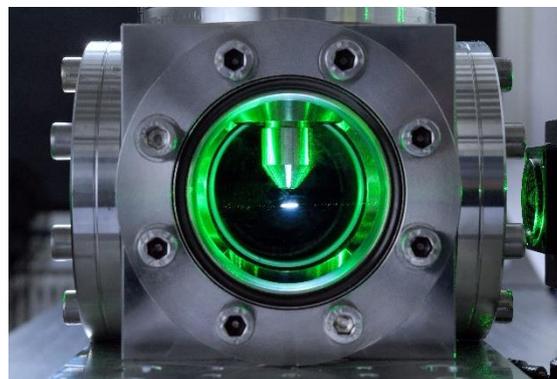
- energy range 200 to 1200eV
- high resolving power of 1900
- extremely high surface sensitivity
- information on molecular orbitals, oxidation state, coordination number
- software suite for spectra analysis

Applications

- analysis of organic materials, e.g. lipid membranes, humic acids, polymer films, especially at carbon K-absorption edge
- surface-sensitive chemical analysis of C, N, O, Ca, K, Ti



NEXAFS spectrum at the carbon K-edge of a polyimide film ($t=200\text{nm}$), measured with table-top system, averaged over 60 pulses. Insert, NEXAFS spectrum recorded at a synchrotron for comparison.
(data courtesy of Dr. K. Mann, IFNANO)



XUV light source using a highly-reliable laser-produced plasma. Energy range 200-1200eV. Repetition rate 25Hz

proXAS

Specifications

Source	debris-free laser-produced plasma XUV source
Energy range	200-1200eV / 1-6nm
Repetition rate	25Hz
Source power stability	$\pm 1.5\%$
Spectrometer	aberration-corrected flat-field spectrometer
Resolving power	1900
Sample mount	turret mount for multiple samples
Footprint	1.5m x 1.0m
Software suite	integrated system control, variety of spectra calibration and analysis functions



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