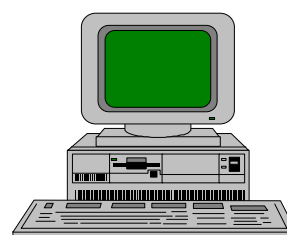


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The EXAFS Data Analysis software-package, called **EDA**, was created to carry out all steps of the x-ray absorption spectra (XAS) analysis.

The **EDA** package consists of a set of interactive programs written for IBM PC compatible computers (AT-486/66MHz or better is strongly recommended) running MS-DOS compatible operational system. The package has an open architecture and each of the programs can be used under menu-shell or separately.

PROGRAM TITLE	DESCRIPTION
EDAFORM:	experimental data conversion into the EDA's file standard.
EDAXANES:	extraction of the XANES and calculation of its first and second derivatives.
EDAEES:	extraction of the EXAFS using significantly improved algorithm for the atomic-like ("zero-line") background removal.
EDAFT:	Fourier filtering procedure with or without amplitude/phase correction and with the rectangular, Gaussian, Kaiser-Bessel, Hamming and Norton-Beer F3 "window" functions.
EDAFIT:	a non-linear least-squares fitting code, based on a high speed algorithm without matrix inversion. It uses the multi-shell Gaussian/cumulant model within single-scattering approximation and allows simultaneous analysis up to 20 shells with 8 fitting parameters ($N_i S_o^2$, R_i , σ_i^2 , ΔE_{0i} , C_{3i} , C_{4i} , C_{5i} and C_{6i}) in each. The range of values for any fitting parameter can be limited by boundaries or fixed to a constant value. The covariance and correlation matrices can be also calculated.
EDARDF:	a hybrid regularization/least-squares-fitting code allowing to determine <i>model-independent</i> radial-distribution-function (RDF) in the first coordination shell for a compound with arbitrary degree of disorder.
FTEST:	dispersive analysis of the fit results based on the Fisher's $F_{0.95\%}$ -test.
EDAPLOT:	general-purpose program for plotting, printing, comparison and mathematical calculations frequently used in the XAS analysis (29 functions totally !!!).



For IBM PC and Compatibles