

# JADE Pro JADE Pro is all-inclusive!

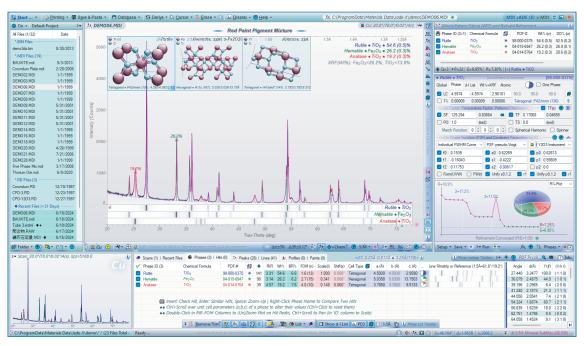
JADE Pro includes all of the features of JADE Standard, plus batch processing Whole Pattern Fitting (WPF) and Rietveld refinement tools that go beyond what is available in JADE Standard.

JADE's One-Click-Analysis  $^{\rm TM}$  and Toolkit are only found in JADE Pro. Additionally, JADE Pro

features a unique floating network license that allows access on one concurrent system at a time, so when a license is not in use, it is available to someone else in your organization. Discounted additional seats create access to more concurrent shareable licenses that work together.

## **P** KEY POINTS

- All-inclusive Everything in JADE Standard and so much more
- Phase ID (Search/Match)
- Batch processing Whole Pattern Fitting (WPF) and Rietveld
- One-Click-Analysis™ for Whole Pattern Fitting (WPF)
- Pattern Indexing (All Crystal Systems)
- Rietveld Structure Refinement (Atomic Parameters)
- Ab Initio Tools (Charge Flipping +)
- Cluster Analysis of Powder Patterns
- Hardware Independent supports a wide range of diffractometers
- Floating Network License can work as a shareable multi-seat license
- Discounted Additional Seats Available





## **Toolkit is found only in JADE Pro**

TOOLKIT

ED-XRF ▶

For manual or automatic identification of elements and minerals.

## **XRD Digitizer**

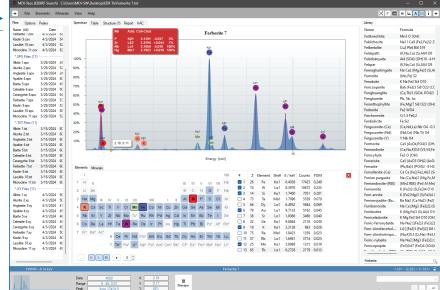
Take a picture of an XRD plot and this tool will convert it to a digital format that you can now work with in JADE. Use advanced image editing options to tweak any imperfections or remove artifacts from your image.

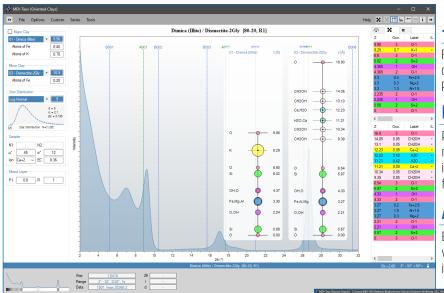
## **Charge Flipper + Solve Structure**

For structure solution using the charge flipping method.

## **Regression Analysis**

Easily perform regression analysis on data without leaving JADE Pro's Toolkit.





## **◄ For Oriented Clays**

For (001)-patterns. Performs simulations and analyses of oriented clays based on structure types introduced by R.C. Reynolds.

#### **Microstructure Tool**

Provides methods for the analysis of the residual stress and microstructure defects for various diffraction geometries and is applicable to cubic phases (FCC, BCC) following a profile fitting in JADE (D. Rafaja).

#### **Area Detector Tool**

Built to extract powder patterns from images obtained with flat area detectors, so that they can easily be analyzed in JADE Pro.

#### Raman Mineral >

Required Dements

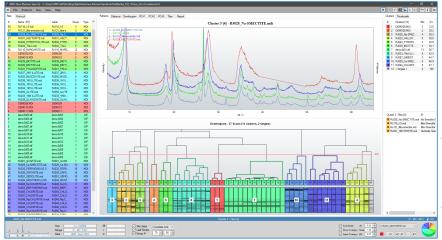
Designed for the mineral phase ID from Raman Stokes spectra. Whole spectra correlation functions are used for finding similarity matches for single-phase and multi-phase spectra.

#### **MDI SizeStrain**

Designed for crystallite size and micro-strain analysis using X-ray powder diffraction data. This Toolkit supports both Warren-Averbach and Williamson-Hall methods for crystallite size determination.

#### **3D Scatter Plot**

A scatter plot tool for xyz data sets from columnar data files.



## **◄ Cluster Analysis with Dendrograms**

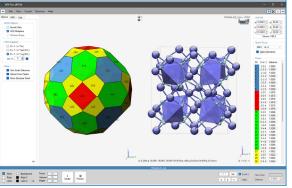
View your clusters with automatic cluster color coding with Principal Component or Fuzzy Clustering. Streamline your analysis by adding reference patterns as cluster markers, recalling setup protocols for reproducibility and other correlation functions for determining pattern similarities.

## **Pattern Matching**

Try the full Pattern Matching method used in both ROCKJOCK and ClaySim.

#### Laue Visualization

Laue simulations, stereographic projections and alternative structure visualizations.



## **◄ BFDH Morphology**

Create predicted crystal shapes based on the Bravais-Friedel-Donnay-Harker model. Many options for other calculations.

## Simulated Annealing ►

An alternative direct space structure solution method (SA)

designed for inorganic structures applying Coulomb interactions and repulsive potentials.

