



Intel® Core™ i7, i5 or i3, 8GB RAM, 24" or larger monitor, Windows 10 (or Windows 8 or 7)

JADE has been written to take full advantage of the Windows environment and ever more powerful hardware available today.

JADE makes many calculations and provides a tremendous amount of information back to the user. Your JADE experience will be richer on a larger screen.

JADE can read all current data formats from Synchrotron Beamlines, Rigaku, Bruker (Siemens), Malvern Panalytical (Philips), ARL Thermo Fisher Scientific (Scintag), Shimadzu, Proto, XOS, X-Y data and other formats.

JADE also understands the many reference patterns and structure databases and their formats including ICDD® PDF™
PDF-4+
PDF-4/Axiom
PDF-4/Minerals
PDF-4/Organics
PDF-2
NIST Crystal Data, AMCSD *.amc
CIF, MOL, PDB, and others, including custom databases.

California-based Materials Data has created XRD applications for over thirty years, enjoying a well-earned reputation for being pioneers of implementing new scientific ideas and novel approaches into our XRD Applications. We were the first to include Whole Pattern Fitting and Rietveld methods, long before others realized the impact. We were the earliest to create patterns from structures which showcased the importance of pattern simulation. We can claim the k-alpha cursor's many uses as part of our contribution to the XRD community.

We started out by building tools that we wished existed for ourselves and our fellow XRD community. We continue on this path today. Our products are used for analysis on every continent in the world (yes, even Antarctica) and across a broad spectrum of fields of research, education and exploration.

Why Standard

The Standard version of JADE was created as an entry point for labs whose current research does not require the extra features found in the more encompassing and All-Inclusive Professional version of JADE.

The Standard version of JADE is available in three different levels and is designed to enable feature expansion when more powerful and advanced analysis is desired. There is no annual renewal fee for these versions. Standard JADE is for use on single stand-alone workstations and does not include a floating-seat license.

<u> Materials Data</u>

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The Professional Version of JADE **Includes everything found in JADE Standard, Level 3 and MORE.**

JADE Pro includes all the features of the Standard version as well as some more powerful features not found in any of the 3 levels of the Standard version.

JADE Pro has a low buy-in with updates serviced by subscription. One of the most valuable benefits of software as subscription is that your software is always up to date. All new features are included, which helps you expand the capabilities of your lab and expand knowledge of your particular science and appreciation of your data sets.

JADE Pro can be used as a shareable multiseat or floating-seat license. For example, a group of 5 people can share a 3-seat license which would provide for 3 systems running JADE Pro concurrently.

For most of our customers, the Professional version of JADE is the most logical path to provide the most features for the least cost. If you have any questions at all as to what path may be best for your lab or organization, please contact us - we always love to hear from our fellow XRD Scientists!

In addition to all the features found in JADE Standard, below is a highlight of some additional features found only in JADE Pro.

One-Click Phase ID and Rietveld Analysis

Size and Strain Analysis (Warren-Averbach)

Pattern Indexing (All Crystal Systems)

Line-Based Cell Refinement

Simulate Series of Powder Patterns from Crystal Structures

WPF and Rietveld Batch Processing

Rietveld Structure Refinement (Atomic Parameters)

Fourier Map Tools

Ab Initio Tools (Charge Flipping +)

Cluster Analysis of Powder Patterns

Floating (Shareable) Network License

Future Feature Updates via Subscription

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517	ווערווע ו	2A	2B	3	
Intuitive, State-of-the-Art UI	•	•	•	•	
Reads All Vendor Pattern Files	•	•	•	•	
Smart Column Data Importer	•	•	•	•	
Merge Multi-Scans/Segments	•	•	•	•	
1, 2 and 3D Pattern Overlay	•	•	•	•	
Déjà Vu ID Similar Pattern Files	•	•	•	•	
Supports Multiple Axes/Wavelengths	•	•	•	•	
Handles Variable/Fixed-Slit Data	•	•	•	•	
Zero Offset and Theta Calibration	•	•	•	•	
Background Fitting/Batch Fitting/Removal	•	•	•	•	
Auto Peak Search and Multi-Filter Search	•	•	•	•	
Wide Variety of Report and Print Options	•		•	•	
Includes Starter Database	•	•	•	•	
ICDD PDF Database Access and Others	•	•	•	•	
Multitude of Choices for Data Retrieval	•	1	•	•	
View Crystal Structures and Reflection Plan	es	•	•	•	
Simulate Patterns from Crystal Structures	•	•	•	•	
Individual Analyst/Shared Work Environmen	ts	•	•	•	
Supports Custom d-I% list for Phase Overla	y	•	•	•	
Profile Fitting with RIR Quant	•	•	•	•	
Batch Profile Fitting	•	•	•	•	
Whole Pattern Based Search/Match (S/M)	Base	•	Х	•	
Use Chemistry and Unit Cell Data in S/M	se Se		Х	•	
Solid-Solution and Isotypical Phase ID	Base S/M	•	Х	•	
Preferred-Orientation Data and Single Peak	S/M		Х	•	
Minor and Trace Phase ID		•	Х	•	
Structure Database Manager		•	•		
WPF-Rietveld Refinement (Unlimited Phase	s)	<u>≨</u> . ≽	•	•	
Gold Standard Quantitative Analysis		JADE Standard with S/M	•	•	
Seamless Integration with Database Retriev	al	∱and ✓	•	•	
Auto-Loading of Structure Data from Databa	ard	•	•		
Combination of Phases with/without Structure Data					
Linking of Unit Cell, Phase Broadening Para		•	•		
Custom d-I% (hkl, FWHM, Skew) to Fit Clay Phases					
March-Dollase and Spherical Harmonics Orientation Function					
Amorphous Content with/without Internal wt% Standards					
Atomic Occupancy and Bond Distance Constraints					
Polynomial and Spline Curve Background Fitting					



JADE Standard is available in three levels and is a curated subset of JADE Pro. If you have questions as to which level will work best for your analysis needs please contact us.

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JADE Standard with both S/M and WPF

JADE Standard with WPF