

2019 Powder Diffraction File™

Diffraction Data You Can Trust

ICDD databases are the only crystallographic databases in the world with quality marks and quality review processes that are ISO certified.

PDF-4+

Phase Identification and Quantitation
412,000+ Entries
311,200+ Atomic Coordinates

WebPDF-4+

Data on the Go
412,000+ Entries
311,200+ Atomic Coordinates

PDF-2

Phase Identification + Value
304,100+ Entries

PDF-4/Minerals

Comprehensive Mineral Collection
46,100+ Entries
37,000+ Atomic Coordinates

PDF-4/Organics

Solve Difficult Problems, Get Better Results
535,600+ Entries
115,500+ Atomic Coordinates

PDF-4/Axiom

Enhance Your Benchtop Performance
87,000+ Entries • 59,000+ Atomic Coordinates

**Powder
Diffraction File™**
**893,400+
Entries**

Standardized Data

More Coverage

All Data Sets Evaluated For Quality

Reviewed, Edited and Corrected Prior To Publication

Targeted For Material Identification and Characterization



www.icdd.com

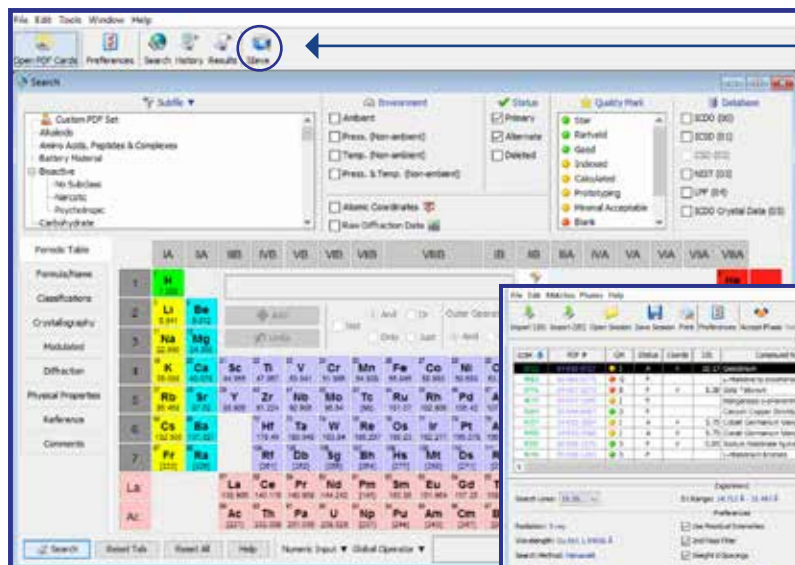




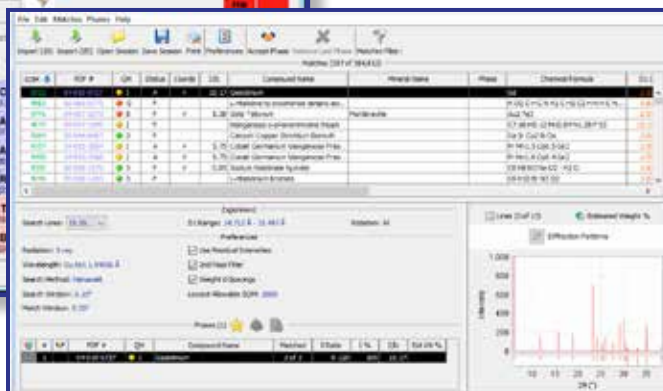
PDF-2 2019

Phase Identification + Value

Featuring over 304,100+ entries



- Sleeve, search indexing software, included FREE!
- 204,426 entries have I/I_c values for quantitative analysis by Reference Intensity Ratio
- Rapid, accurate phase identification
- Cost effective license (5 year)

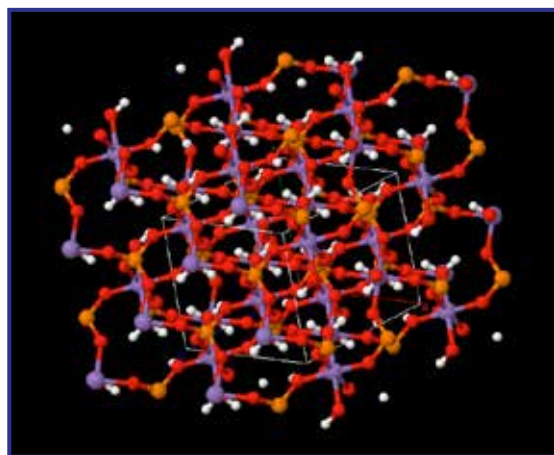


PDF-4+ 2019

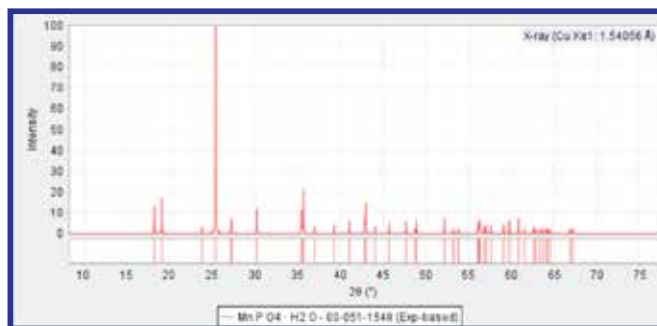
Phase Identification and Quantitation



Featuring 412,000+ entries
311,200+ entries with atomic coordinates



For PDF-4+ “Data on the Go”
ask ICDD about WebPDF-4+



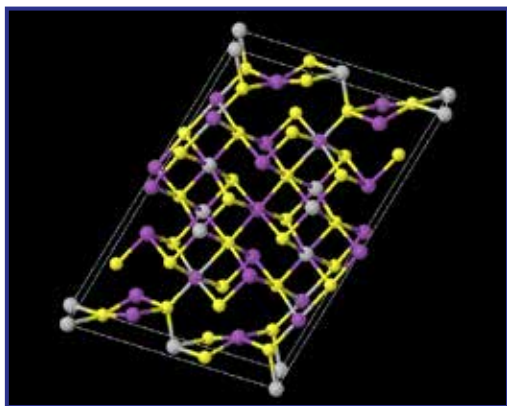
- All entries have digital patterns for use in total pattern analysis
- 311,225 entries with atomic coordinates
- 312,395 entries have I/I_c values for quantitative analysis by Reference Intensity Ratio
- All entries are stored in a standardized format for easy search and interpretation
- All entries go through a rigorous editorial process to ensure quality



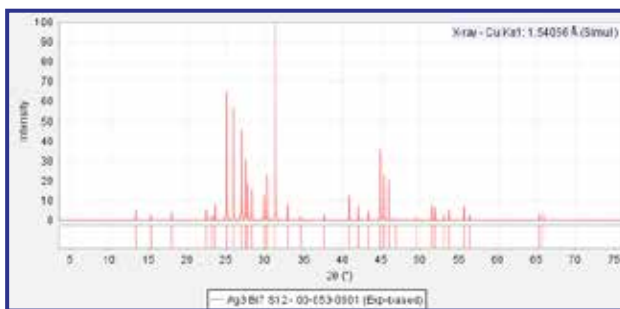
PDF-4/Minerals 2019

Comprehensive Mineral Collection

*Featuring 46,100+ entries
37,000+ entries with atomic coordinates*



- All entries have digital patterns for use in total pattern analysis
- 37,000+ entries with atomic coordinates
- 34,936 entries have I/I_c values for quantitative analysis by Reference Intensity Ratio
- Classified by IMA designations
- A subset of the PDF-4+ database with all of the features and capabilities, targeted toward minerals and mineral related compounds



PDF-4/Organics 2019

Solve Difficult Problems, Get Better Results

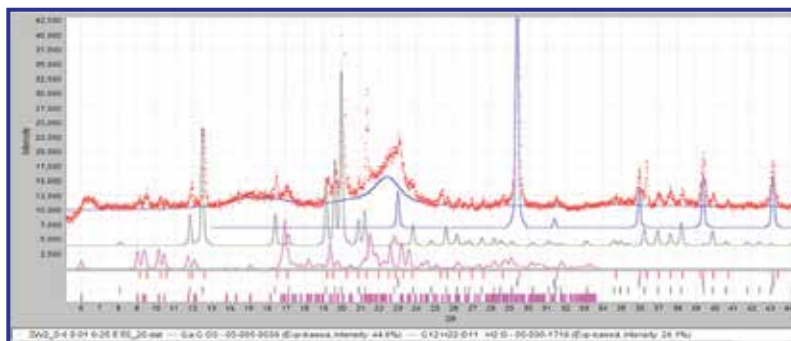


*Featuring 535,600+ organic & organometallic compounds
115,500+ entries with atomic coordinates*

- Features the largest collection of pharmaceuticals, excipients and polymers
- Highly targeted collection with special focus on materials used in commercial and regulatory fields
- Enhanced identification for crystalline, nano and amorphous materials
- Trade names for over 9,000 bioactive/pharmaceutical entries
- Integrated data mining software
- Sleve+ search-indexing software (included as an added value)

Combines powder diffraction and crystal structure reference data

The four phase identification of the formulation of Lipitor uses references from a single crystal determination, an experimental powder pattern of cellulose I β , a calculated powder pattern and pattern extracted from the patent literature. The identification required an inorganic excipient, polymer excipient and two organic compounds. A variety of reference materials and sources enabled the identification.





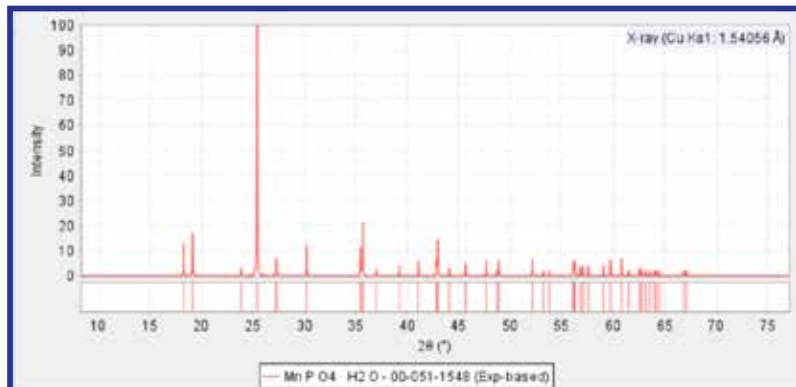
PDF-4/Axiom 2019

NEW!

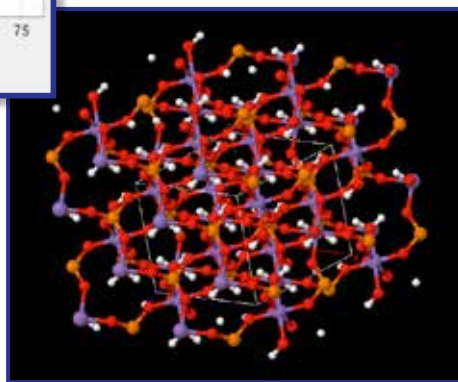
Enhance Your Benchtop Performance

Featuring over 87,000+ entries

59,000+ entries with access to atomic coordinates



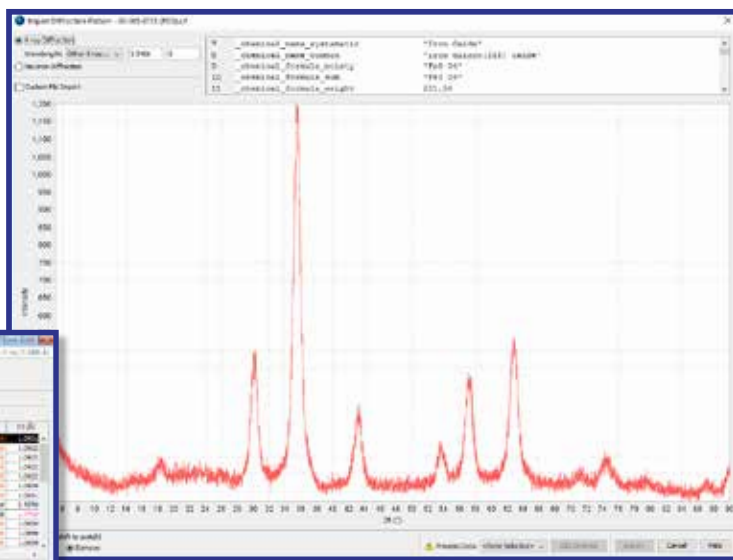
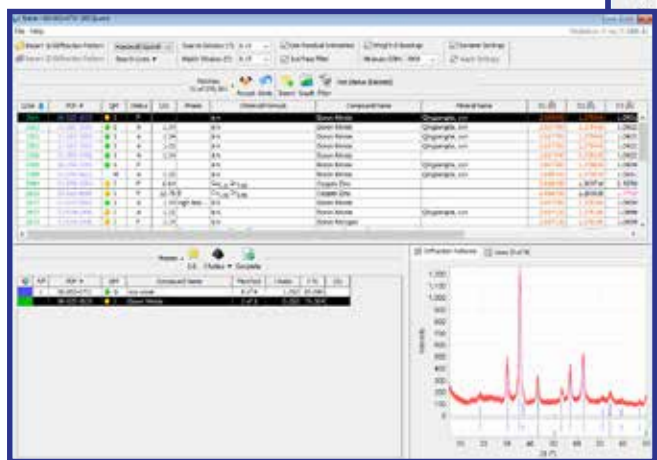
- Data focused on ambient entries
- Fundamental mineral entries
- Low cost, (3) year license term
- No subscription
- Data mining and search-identification software are **not** included
- Requires diffraction equipment manufacturer or vendor software



Sleve/Sleve+ 2019

Support Software for the PDF-2 and PDF-4

- Match filter algorithms - better results, more accuracy
- Directly interfaces to all PDF databases for accurate filtering and analysis - full data mining
- Excels at the identification of low concentration phases
- Supports X-ray and synchrotron data
- Sleeve **FREE** with PDF-2 2019
- Sleeve+ **FREE** with PDF-4/Organics 2019



30 Day trial of Sleeve+ for **FREE**
with PDF-4+ 2019 and
PDF-4/Minerals 2019