



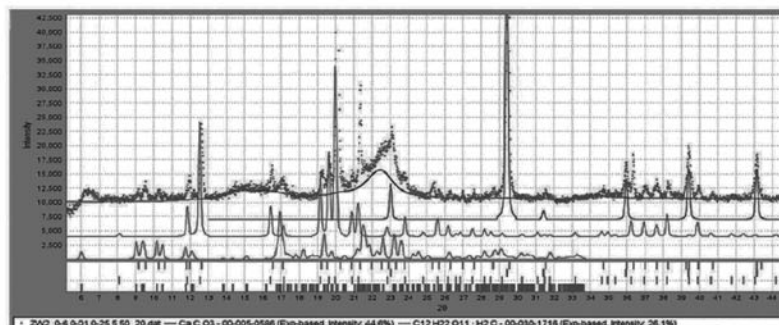
PDF-4/Organics 2017

Solve Difficult Problems, Get Better Results

**Comprehensive materials database featuring
516,000+ organic and organometallic compounds**

- 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 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.

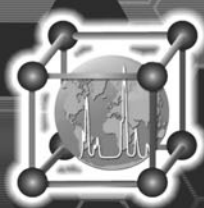
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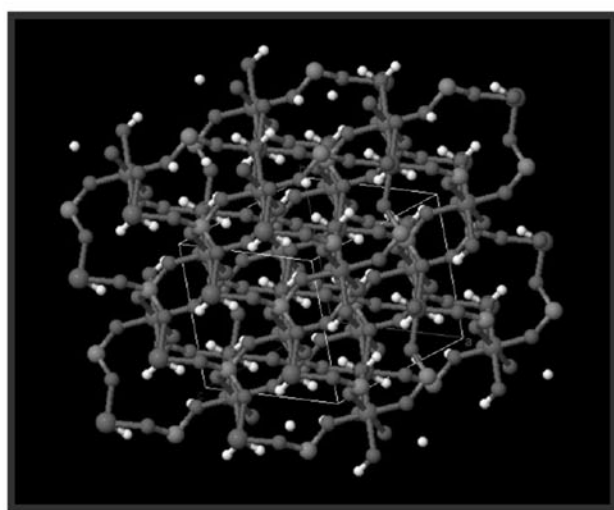
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PDF-4+ 2016

Designed for phase identification
and quantitative analysis

Comprehensive materials database featuring 384,000+ entries



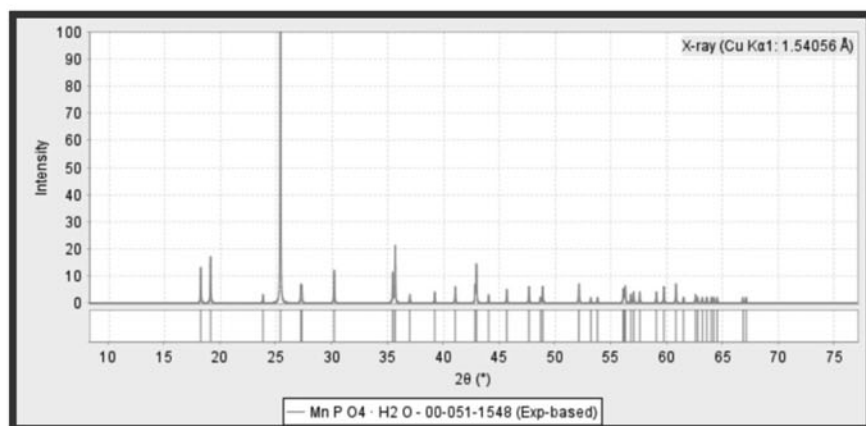
All entries have digital patterns for use
in total pattern analysis

271,449 entries with atomic coordinates

286,885 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



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GRANT-IN-AID Program

JOIN ICDD'S ELITE GROUP OF SCIENTISTS
who contribute experimental powder diffraction patterns
to the Powder Diffraction File™.

AS A MEMBER OF THIS ELITE GROUP, YOU WILL RECEIVE THE FOLLOWING BENEFITS:

- Financial support to aid current research
- Publication of pattern(s) in the Powder Diffraction File™ (PDF®)
- Receive calibration standards
- Purchase certain ICDD products at reduced prices
- Web-based access to the list of compounds in the ICDD master database – includes published patterns, as well as patterns still in the editorial process
- First-time grantees receive a complimentary one-year subscription to Powder Diffraction

For over 50 years, ICDD has supported a well-developed program of grants to researchers around the world. One of our main objectives is to expand the range of reference materials by producing and cataloging high-quality diffraction patterns in our internationally renowned database, the Powder Diffraction File. Thanks to the longevity of this program, these contributions account for approximately a quarter of the current experimental file. ICDD awards financial support to qualified investigators in the form of grant-in-aid on a competitive proposal basis. The duration of a grant is 12 months with two cycles per year. Cycle I begins 1 April and Cycle II begins 1 October.

THE FINER POINTS OF THE GRANT-IN-AID PROGRAM

- Grant-in-Aid funds can be used most effectively as supplements to existing research projects involving the preparation and characterization of new materials, using powder diffraction techniques.
- Grant-in-Aid proposals will be considered, on a competitive basis, from any qualified investigator (academic, government, or industry), around the world, who can demonstrate expertise in the preparation of high quality powder diffraction patterns.
- Proposals addressing current opportunities to extend and improve the usefulness of the Powder Diffraction File™ are given highest priority.
- The duration of a Grant-in-Aid is 12 months. Renewal for additional 12-month periods may be considered on a competitive basis. Grant recipients are required to submit biannual progress reports.
- Deadlines for receipt of Grant-in-Aid proposals are due either by 31 July or by 31 January, depending on the cycle. Prior to submitting a grant proposal to the ICDD, please review the detailed Grant-in-Aid guidelines. These guidelines are available from ICDD's website at www.icdd.com/gia or by emailing the Grant Coordinator.

Any questions or comments regarding the ICDD Grant-in-Aid Program should be directed to:

Denise DelCasale, Grant Coordinator
Email: delcasale@icdd.com

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Geographic Locations of Grants for the Past 15 Years:

Argentina
Austria
Brazil
Canada
Chile
Columbia
Czech Republic
France
Germany
India
Israel
Italy
Japan
Malaysia
Netherlands
P.R. of China
Poland
Portugal
Russia
Spain
Switzerland
Taiwan
Tunisia
Ukraine
United Kingdom
United States
Uruguay

Total Proposals Funded for the Past Fifteen Years: 682



For more information on ICDD's Grant-in-Aid, visit www.icdd.com/grants

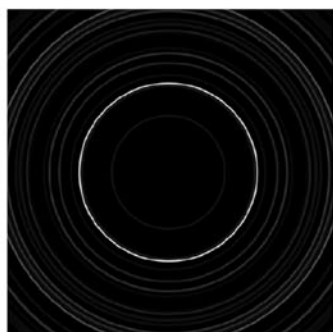


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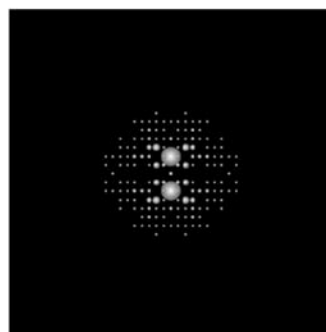
An Electron Diffraction Database

Designed for phase identification
using elemental composition

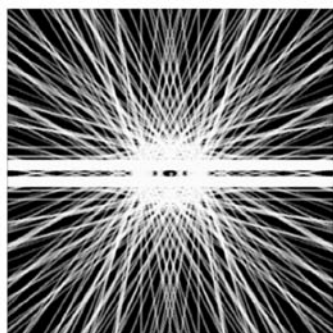
Electron diffraction simulations
for 334,000+ entries



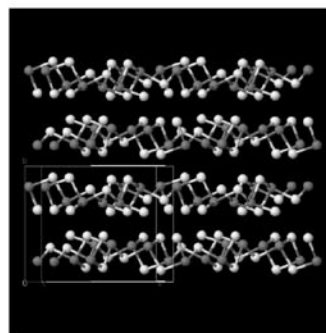
Electron diffraction
powder pattern



Interactive spot pattern,
including indexing



Electron backscatter
diffraction pattern



Atomic and molecular
visualization

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