

**Workshop registration is via the XXI Conference on Applied Crystallography website:**

[www.cac.us.edu.pl/welcome.php](http://www.cac.us.edu.pl/welcome.php)

**Participants are encouraged to bring their laptops to this workshop. ICDD will provide a demo version of the PDF-4+ to facilitate a hands-on workshop.** It is recommended that your computer have the following specifications for loading the DEMO copy of the PDF-4+ database and associated software:

Intel Core 2 Duo processor or equivalent with 2 GB system memory  
Microsoft® Windows® Operating System: 2000 SP4, **or** XP® Professional SP3, **or** Vista™ Business Edition SP1  
NTFS File System, 6 GB free hard-disk space

**Speakers: Matteo Leoni, University of Trento, ICDD Regional Co-chair for Europe  
Cyrus Crowder, ICDD Principal Scientist**

**Thursday, September 24, 2009**

**16:00 – 16:30 Live Demo Software Installation:** This half hour will be used to install the demo version of the ICDD PDF-4+ software and database on participants PC's. A PC running Windows® 2000, XP® or Vista™ is required to run this demo.

**16:30 – 17:30 Getting Started Tutorial (Part 1)** This tutorial will discuss and demonstrate the basic functions of DDView+, thus enabling the user to distill the huge number of entries in the PDF-4+ database to a manageable, selected subset.

- Searching: Selecting search criteria, then viewing/manipulating search results
- History: combining search criteria
- PDF Card: Viewing pattern data and related tools

**17:30 – 18:00 Break**

**18:00 – 19:00 Getting Started Tutorial (Part 2)** Continued demonstration of DDView+ basic functions

- Diffraction Pattern: viewing and manipulating digitized pattern graphs
- Advanced GUI tricks

**Friday, September 25, 2009**

**9:00 – 10:30 Expert's Tutorial**

Learn shortcuts that speed the selection and filtering of entries for comparison with experimental laboratory data and methods that graphically exhibit advanced functions of pattern information.

- Integral Index: A similarity index comparing user's full experimental data to patterns in PDF-4+.
- 3D Structures and bond distances/angles
- Advanced data mining: how to solve problems faster with XRD data
- Using Sleve+ – effective identification strategies, optimizing search criteria

**10:30 – 11:00 Break**

**11:00 – 12:00 Problem Solving Examples**

- Published solutions to difficult problems using PDF-4+

**12:00 – 13:30 Applications**

- Integral Index and the use of total pattern matching
- Applications to nanomaterials

**13:30 Lunch**