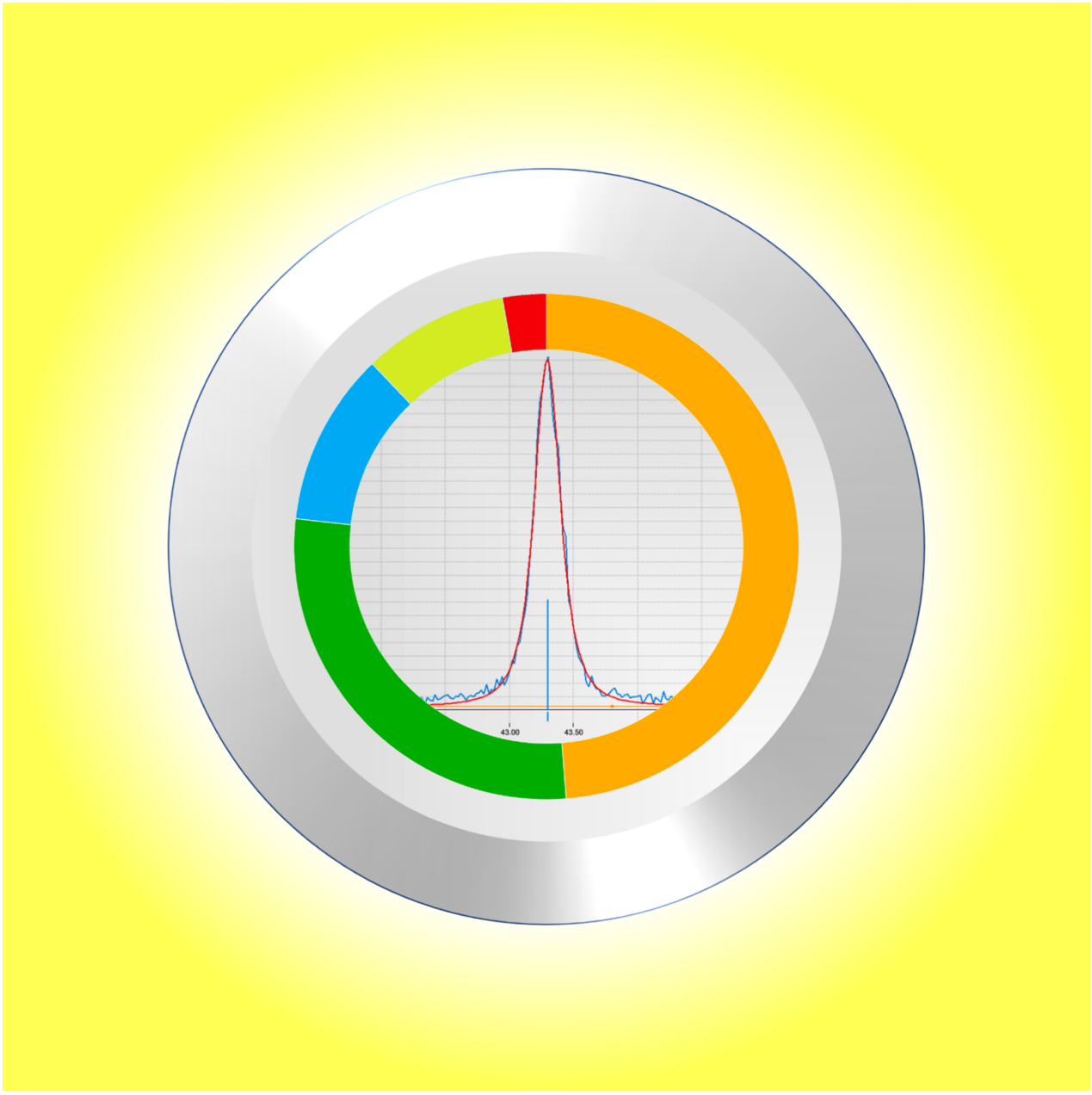
MATCH!

Phase Analysis using Powder Diffraction

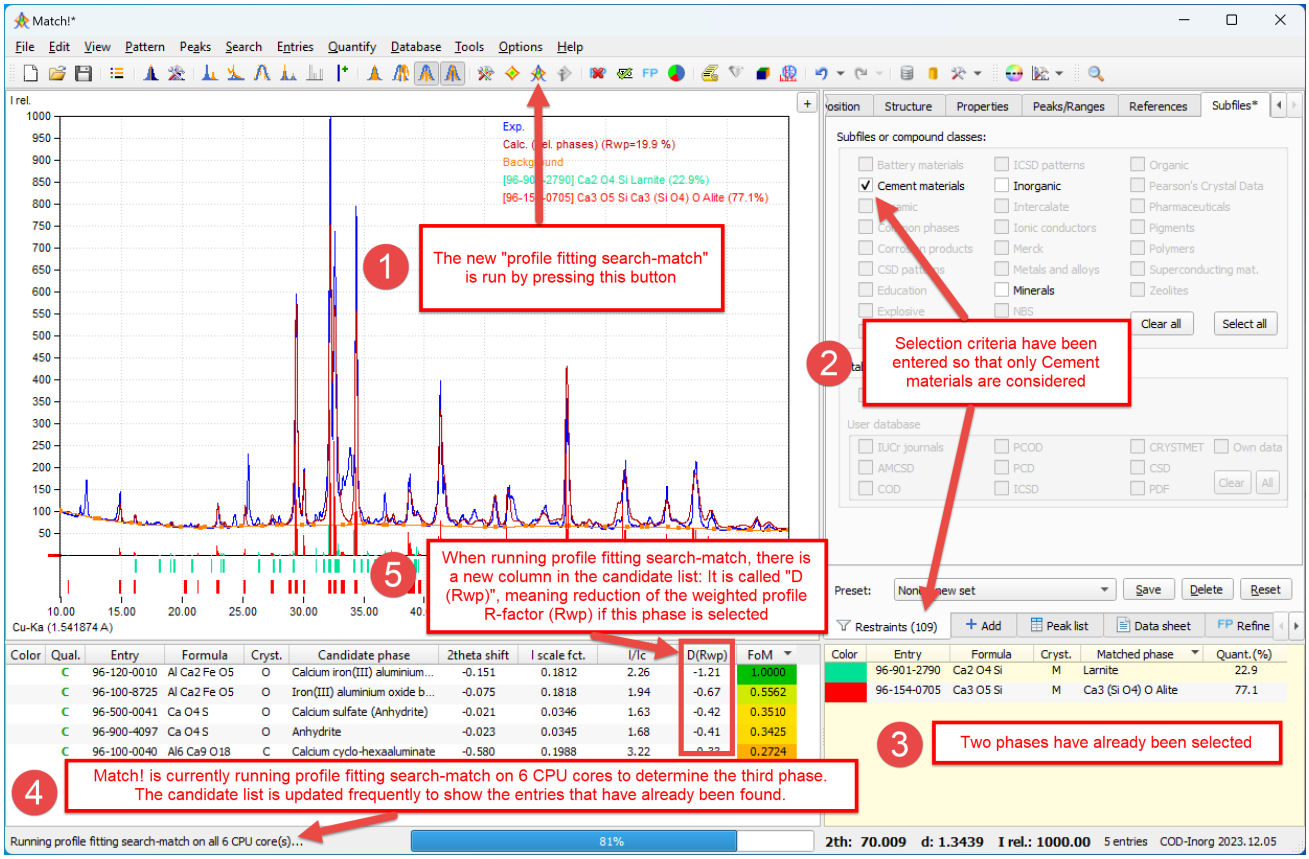


Easy, innovative phase analysis from powder

CRYSTAL IMPACT

Match! is an easy-to-use software for phase analysis using powder diffraction data. It compares the diffraction pattern of your sample to a database containing reference patterns to identify the phases that are present. For this, Match! offers an **innovative profile fitting search-match** (PFSM) functionality, in addition to the proven peak-based search-match.
Additional knowledge about the sample (like elements) can be applied easily. In addition to this **qualitative analysis**, a **quantitative analysis** can be performed, using RIR, Rietveld, DOC or internal standard method.

As reference database, you can apply the included **free-of-charge COD database** and/or any **ICDD PDF** product and/or **your own diffraction patterns** or crystal structure data.
You can quickly setup and run **Rietveld refinements** and **pattern decomposition** from within Match!, with the calculations being performed using the well-known program **FullProf** (by J. Rodriguez-Carvajal) in the background.
More information and **free-of-charge test version**:
https://www.crystalimpact.de/match



Features

- Fast multiple phase identification from powder diffraction data
- Runs on Windows, macOS and Linux
- Use free-of-charge reference patterns calculated from the COD (incl. I/I_c), any ICDD PDF database, and/or your own diffraction or crystal structure data in phase identification
- Qualitative analysis using innovative profile-fitting search-match or classical peak-based search-match
- Quantitative analysis using reference intensity ratio (RIR), Rietveld refinement, degree-of-crystallinity (DOC) and/or internal standard method; results shown as table and pie charts
- Indexing (using Treor or Dicvol)
- Crystal structure solution (using Endeavour)
- Rietveld refinement and pattern decomposition (Le Bail method) calculations, using the well-known FullProf in the background
- Instant usage of additional information (known phases, elements, density, colour etc.) using perpetual restraining
- Automatic raw data processing
- Comfortable background definition/modification using the mouse
- Convenient editing of peaks (add/shift/delete/fit) using the mouse
- Improved zooming and tracking using mouse or dialog
- 3D-like display of multiple diffraction patterns e.g. for comparison
- Crystallite size estimation based on Scherrer approach

System requirements

- **Windows** 7, 8, 10 or 11; **macOS** (Apple Silicon Mx) 11 “Big Sur” or higher; **macOS** (Intel) 10.13 “High Sierra” or higher; **Linux** (Intel 64-bit) with glibc >=2.27
- 2 GB of RAM
- 2.5 GB of free disc space
- **Supported diffraction data file formats (automatic recognition)**: Bruker/Siemens, DBWS, DRON-3, G670, Inel, GNR (formerly Ital Structures), Jade/MDI/SCINTAG, JEOL Export, PANalytical/Philips, Rigaku, SCINTAG, Seifert, Shimadzu, various text files (profile or peak list data), Siemens, Sietronics, Stoe, TXRD export, XPowder, XRDML

Prices for new licenses*

	non-profit org.	profit org.
Semiannual license (6 months)	162.50 €	325 €
Annual license (1 year)	325 €	650 €
Single license (permanent)	649 €	1,298 €
Site licence (permanent)	1,298 €	2,596 €
Campus licence (permanent)	2,596 €	5,192 €

* Prices do not include taxes which may be due.

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