

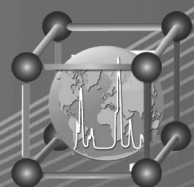
# Powder Diffraction PDJ

JOURNAL OF MATERIALS CHARACTERIZATION

## Special Issue on X-ray Diffraction Software

The figure displays four screenshots from the GSAS-II software interface:

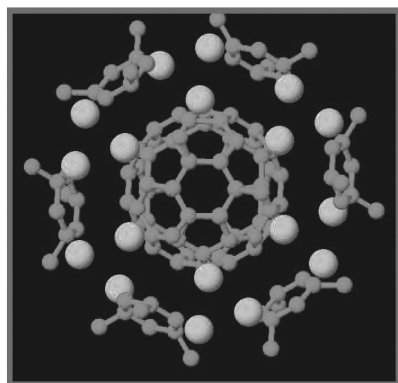
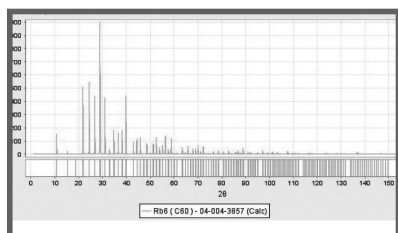
- GSAS-II data tree: STA3.gpx**: A hierarchical tree view showing loaded data, phases (CuCr2O4, CuO), and various refinement parameters like background, instrument, and sample parameters.
- GSAS-II data display**: A control panel for histogram data for CuCr2O4. It includes options for plot type (None, Mustrain, Size), checkboxes for showing data banks and using them, and fields for phase fraction (0.9730), size model (isotropic), and mustrain model (uniaxial).
- GSASII Plots**: A 3D plot titled "μstrain for CuCr2O4 uniaxial model". The plot shows a green, elongated ellipsoid representing the distribution of microstrain in the x, y, and z directions.
- Terminal window**: A Python terminal window showing the execution of the GSAS-II application and the output of the Python module versions loaded, including wxpython, matplotlib, numpy, scipy, OpenGL, and pillow.



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# Powder Diffraction

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On the Cover: The GSAS-II user interface. GSAS-II runs with four open windows. In the case shown here, two-phase sequential fits have been made to 17 measurements made as a function of temperature (Courtesy of Brian H. Toby and Robert B. Von Dreele).

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