

graph shown. Extensive formatting and other setup options are available.

To change the graph, it is necessary only to update a parameter and push "Enter." All necessary calculations are carried out automatically and the graph is updated accordingly.

The entire contents of a window can be printed by clicking on the "Print Document" line within the "File" option. The example for this review was output to a Hewlett Packard Laser-JetIIIp ® printer.

The following system requirements are those given in the user's manual.

**Hardware:** An 80286-, 80386-, or 80486-based IBM or compatible computer. A math coprocessor is not required, but its presence will significantly improve performance.

At least 2 megabytes of memory. All memory above 640 K should be configured as extended memory.

A hard disk with at least 7 megabytes of free space.

A monitor and graphics card compatible with Windows.

A mouse supported by Windows.

Any printer supported by Windows.

**Software:** MS-DOS or PC-DOS version 3.0 or later.

Microsoft ® Windows™ version 3.0 or later.

Many other features are available, such as matrix manipulation, table generation, iterative calculation, etc. Mathcad ® thus is a quite comprehensive package. It is available for \$495 U.S. from MathSoft, Inc., 201 Broadway, Cambridge, MA 02139-9873 U.S.A.

Reviewed by Harlan E. Clark

$$i = 0..64 \quad d_i = 43.16 + .01 i \quad a_i = \text{READ}(x) \quad b_i = \frac{43.48 - d_i}{.135} \quad c_i = 581 \exp\left[-(b_i)^2\right]$$

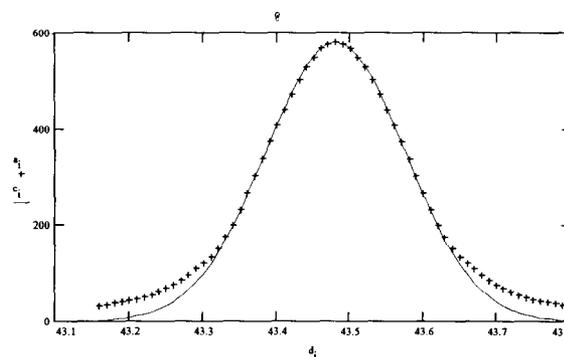


FIG. 1.

### About Computer Comments

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## Commercial Announcements

**Materials Data, Inc., (MDI), is pleased to announce that Radix Instrument has merged as a Division of MDI.**

Radix Instruments makes the widely accepted DATABOX, a computer-controlled module for automation of X-ray diffraction and fluorescence instruments. MDI will assume responsibility for all marketing, sales and service of the DATABOX. Dr. Douglas Whiting, founder of Radix Instruments, will continue his association with the Radix Division as Technical Director.

MDI produces a complete line of PC software for the X-ray powder diffraction laboratory. In addition to data analysis codes to process raw data from diffractometers equipped with a DATABOX or other automation units, MDI routines provide search/matching using the JCPDS-ICDD CD-ROM or subfiles, profile fitting, pattern simu-

lations as well as cell indexing and refinements. Quintin Johnson, President of MDI, said, "MDI has plans for further offerings. For example, this quarter we began shipping a new code for full pattern refinement using the Rietveld method, complete with a database handler for crystal structure information.

MDI and Radix have worked in close alliance for over five years, meeting with great success in marketing their products. The merger will permit a focus of more resources on enhancing the product line to meet the needs of a wider segment of the analytical X-ray community.

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