

Powder Diffraction Authors

The journal now welcomes the submission of a disk for your final draft.

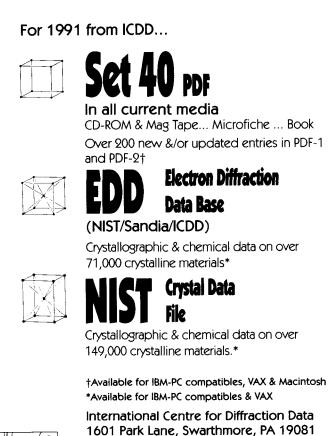
When you use a word processor in the preparation of your article, please follow the journal style. In particular ...

- a. Use bold face for the title of the article and for section titles (use italic for subtitles for the sections).
- b. Do not use underlining.
- c. Use italic for: e.g., i.e., et al.
- d. Do not indent first paragraph following a section heading.
- e. Please follow Reference format with care.
- f. Please follow Table formats with care (Note: *Powder Diffraction* does not use rules in tables).

When the disk is submitted it should be accompanied by a printout of the article and a note indicating the program used by the computer for the word processing.

Use of disks helps insure accuracy in composition and also significantly reduces composition costs.

Thank you. The Editors.



(215) 328-9400 Telex: 847170

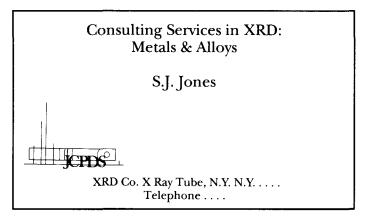
PD23



USA

XVIII https://doi.org/10.1017/S0885715600016766 Published online by Cambridge University Press

Consultants Directory



Use this space to describe your organization and the services you offer. For example:

- Your field or fields of expertise
- Type of instrumentation you have available
- Types of analyses or investigations you would perform
- Description of staff and staff disciplines
- Typical response times (for sample analyses)
- Geographical restrictions, if any, for locations in which you would be available.

Powder Diffraction makes this page available for brief announcements of services offered by its readers or by other interested persons.

- Space Cost \$150 (no agency discount). This space will permit the display of a business card or other similar size text. The business card will be reproduced at no charge.
- Free space: Up to 12 lines of text immediately below the announcement.

A charge of \$15.00 will be made for typesetting of 12 lines of text. (If complex typesetting is required, e.g. use of a formula or table, the composition cost will be higher.)

Photographs. A charge of \$10.00 will be made per photograph.

Apply soon for space in the forthcoming June issue – to be distributed at PICXAM, the Pacific-International Congress on X-Ray Analytical Methods.

Write or call Mary M. Rossi, Advertising Manager, *Powder Diffraction*. ICDD, 1601 Park Lane, Swarthmore, Pennsylvania 19081 215-328-9403 FAX 215-328-2503

Advertisers in Powder Diffraction March 1991 Volume 6 Number 1

Company	Page	PD
	Number	Number
Charles Supper Company	X	PD11
Charles Supper Company	XVII	PD21
Dapple Systems	XIV	PD17
Fein-Marquart Associates	I	PD2
Gem Dugout	XIV	PD18
IC Laboratories, Inc.	XII	PD15
inel Instrumentation Electronique	IV	PD4
Ital Structures	VIII	PD9
ICDD - For 1991	XIX	PD23
ICDD - PC-PDF CD-ROM	XV	PD19
ICDD - Sets 35-36	Х	PD12
ICDD - Schools	XVII	PD22
Kevex Instruments	XIII	PD16
Materials Data, Inc.	VII	PD7
McCrone Research Associates, Ltd	. XII	PD14
Philips	Back Cover	PD25
PICXAM – 2nd Announcement	IX	PD10
Radix Instruments	VI	PD6
Rigaku, U.S.A.	Inside Back Cover	PD24
Scintag, Inc.	V	PD5
Seifert X-Ray Corporation	XVI	PD20
Siemens	Inside Front Cover	PD1
Sietronics Pty. Ltd.	XI	PD13
SPEX Industries, Inc.	II	PD3
Steuerungstechnik	VII	PD8
8	·	

Powder Diffraction, Vol. 6, No. 1, March 1991

Powde	er Diffra	action Re	eader Re	ply Caro	d — Vo	lume 6, 🤇	Number	1, Marc	h 1991
Adverti	ser's Info	rmation: (Circle Nun	nber					
PD1	PD2	PD3	PD4	PD5	PD6	PD7	PD8	PD9	PD10
PD11	PD12	PD13	PD14	PD15	PD16	PD17	PD18	PD19	PD20
PD21	PD22	PD23	PD24	PD25	PD26	PD27	PD28		
	APD Type Common Elect	Data Base Phases Sea	Check to arch Manua	l h/Match	Book Forn Education	n X-ray Da 1al Package Microco	es omputer Se		SI Index ch
Name/	Title								
montan	-								
Address									
			State_						
Country					·			_	
Pow	vder I	ubscription Diffra ion rate: 19	ction				Credit Ca	ards now a	ccepted
 Library Rate \$85.00 (U.S. dollars) Far East Rate Write Sanyo Information System Corp., Taiyo Bldg. 7-7, Tomizawa-cho Nihonbashi, Chuo-ku, Tokyo 103, Japan for subscriptions for Japan, China, Taiwan, Malaysia, the Philippines, Indonesia and Korea. Other annual subscriptions: 1991 \$65.00 (U.S. dollars) Library Rate \$\$85.00 (U.S. dollars) Type of subscription: Academic Government Manufacturing Personal Other 									
,								·	
	s	, ,							
							ne		
City							Z		
			terCard						
Numbe	r						Exp. I	Jate	
Please e	enter my s	ubscriptior	ı for				Credit C	ards now a	ccepted
	-	Diffra							r
Annual U.S. Libra Far I Niho the I	subscripti & Canada ary Rate East Rate onbashi, C Philippine	on rate: 19 a \$45.00 \$85.00 Write huo-ku, To cs, Indones	91 (U.S. dollar (U.S. dollar Sanyo Info okyo 103, Ja ia and Kore	rs) rmation S pan for su					
🗆 \$65.	00 (U.S. d	-		brary Rate	e 🗆 \$85.0	00 (U.S. do	ollars)		
Acad		Governm	ent 🗆 M		0		Other		
	-								
Address									
<u></u>									
			terCard						
							Exp. 1	Date	

TRUE MICRO DIFFRACTION IN 3 ~ D

Down to 11 μ m Dia. or 5 μ g Quantity

X-ray diffraction analysis of extremely small areas or extremely small samples can now be done with ease with the Rigaku PSPC/MDG. Three axis (ω , χ and ϕ) sample oscillation solves the problem of spotty patterns from only a few crystal grains of micro samples. The curved position sensitive detector allows simultaneous measurement of a 2 θ range of 0 to 150 degrees. This minimizes the time required for data collection and produces high detection sensitivities for micro samples. A few highlights:

- **3** axis (ω , χ and ϕ) oscillation
- Simultaneous 0 to 150 degrees data collection

Published online by Cambridge University Press

Easy sample alignment

https://doi.or

- Selection of x-ray sources
- Selection of computer processing

- Motorized X-Y-Z sliding stage (optional)
- 35 mm camera kit (optional)
- TV camera for remote viewing (optional)

2 Rigaku

PD24

Can be added to an existing x-ray diffraction unit

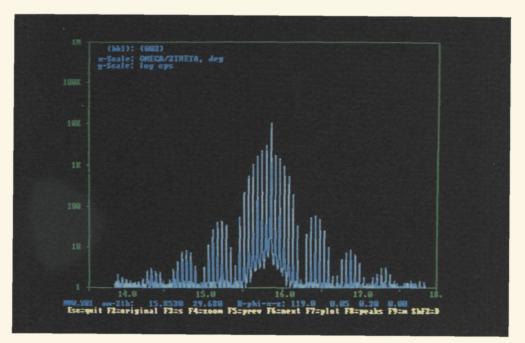
Rigaku's expertise in the design and manufacture of x-ray sources and accessories is unsurpassed. For more information — give us a call !

X-ray... our only business !

Rigaku

Rigaku/USA, Inc., Northwoods Business Park, 200 Rosewood Dr., Danvers, MA 01923 Phone (508) 777-2446 ■ FAX (508) 777-3594

There's only one way to bring High Resolution X-ray Diffraction into your lab.



The Philips MPD1880/HR.

This is the X-ray diffractometer that can do more for your research than any other system on the market today. It brings you that rare combination of engineering excellence in a rugged, high-performance four-crystal optical configuration that can stand up to the demands of a working lab.

The five-crystal diffraction capability provides a choice of goniometer configurations and sample cradles. That gives you more versatility in the sel-

ection of sample material to be examined or scattering geometries your protocols require. Together with the high-dynamic range sealed-xenon proportional counter, you can count on extremely sensitive measurements. And the automated sample stage allows independent theta, 2-theta, chi and phi rotation, as well as automated X-Y translation.

One of the unique features that makes the MPD1880/HR so accurate and so flexible is the Philips four-crystal monochromator. The dislocation-free, dual <440> cut germanium crystals provide a wavelength definition range so small that instrumental broadening of the sample Bragg peaks is effectively removed from your analytical considerations. The user-selectable beam is the highest quality commercially available anywhere.

The choice of horizontal or vertical goniometers allows the



MPD1880/HR to be configured as a stand-alone system, with a dedicated X-ray tube, or as part of a multi-goniometer installation – sharing a common source with a powder, texture, or stress goniometer for complete microstructural characterization. A step size of one arc second is standard.

For fast alignments during rocking curve measurements, peak search and centering is computer controlled. A complete range of software, including

rocking curve simulation, is available so your MPD1880/HR comes with massive capability built-in.

Features:

- Patented Philips four-crystal monochromator.
- Vertical or horizontal configurations.
- Computer-controlled sample cradles.
- X-Y stage for sample mapping.
- DOS-based software library.

For additional information contact: Philips Electronic Instruments Company, 85 McKee Drive, Mahwah, NJ 07430. Telephone (201) 529-3800.



