



Powder Diffraction

An international journal of materials characterization

Volume 12 Number 2 June 1997

33-1161
SiO₂
Silicon Oxide

Quartz, syn

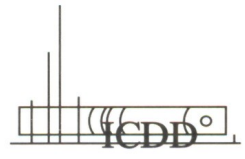
Rad. CuKα, λ 1.540598 Filter Mono. d-sp Diff.
Cut off Int. Diffractometer I/L₀ 3.6
Ref. Natl. Bur. Stand. (U.S.) Monogr. 25, 18 61 (1981)

Sys. Hexagonal S.G. P3₂1 (154) d-sp Diff. I/L₀ 3.6
a 4.9133(2) b c 5.4053(4) A Z 3 mp C 1.1001
α β γ

D₁ 2.65 D₂ 2.66
Ref. Swanson, Fuyat, Natl. Bur. Stand. (U.S.) Monogr. 25, 18 61 (1981)

Colorless
Pattern taken at 25°C. Sample from the Glass Section at NBS, Gaithersburg, Maryland, USA. Ground single-crystals of optical quality. Pattern reviewed by Holzer, University of North Dakota State University, Fargo, North Dakota, USA. ICDD Grant-in-Aid (1990). Agrees well with experimental and calculated patterns. O₂Si type. Quartz group. Also called: silica. Also called: low quartz. Silica used as internal standard. PSC: hP9. To replace 5-490 and validated by calculated pattern. Plus 6 additional reflections to 0.9089.

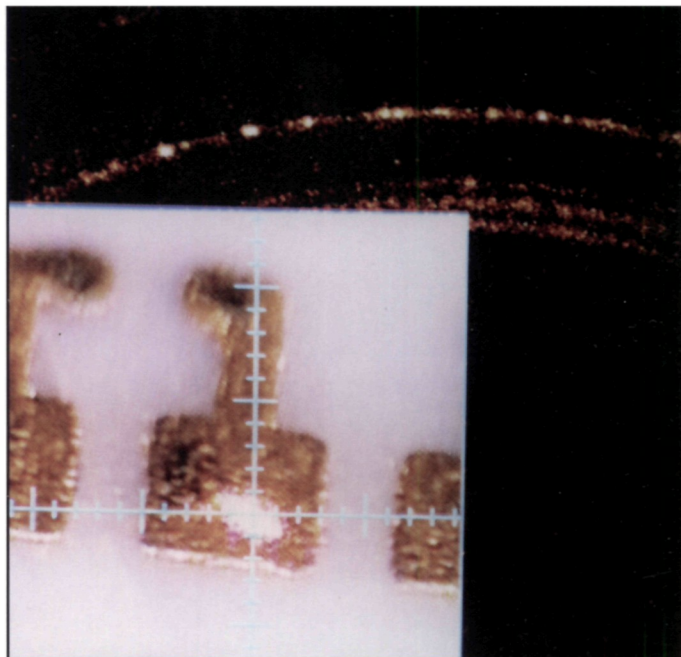
dÅ	Int	hkl	dÅ	Int	hkl
4.257	22	100	1.1532	1	311
3.342	100	101	1.1405	<1	204
2.457	8	110	1.1143	<1	303
2.282	8	102	1.0813	2	312
2.237	4	111	1.0635	<1	400
2.127	6	200	1.0476	1	400
1.9792	4	201	1.0347	<1	105
1.8179	14	112	1.0347	<1	401
1.8021	4	202	1.0150	<1	214
1.6719	<1	103	0.9898	1	223
1.6591	2	210	0.9873	1	402
1.6082	<1	210	0.9783	<1	313
1.5418	9	211	0.9762	<1	304
1.4536	1	113	0.9636	1	320
1.4189	<1	300		<1	205
1.3820	6	212			
1.3752	7	203			
1.3718	8	301			
1.2880	8	301			
1.2558	2	104			
1.2285	2	302			
1.1999	1	220			
1.1978	2	213			
1.1843	1	221			
1.1804	3	114			
	3	311			



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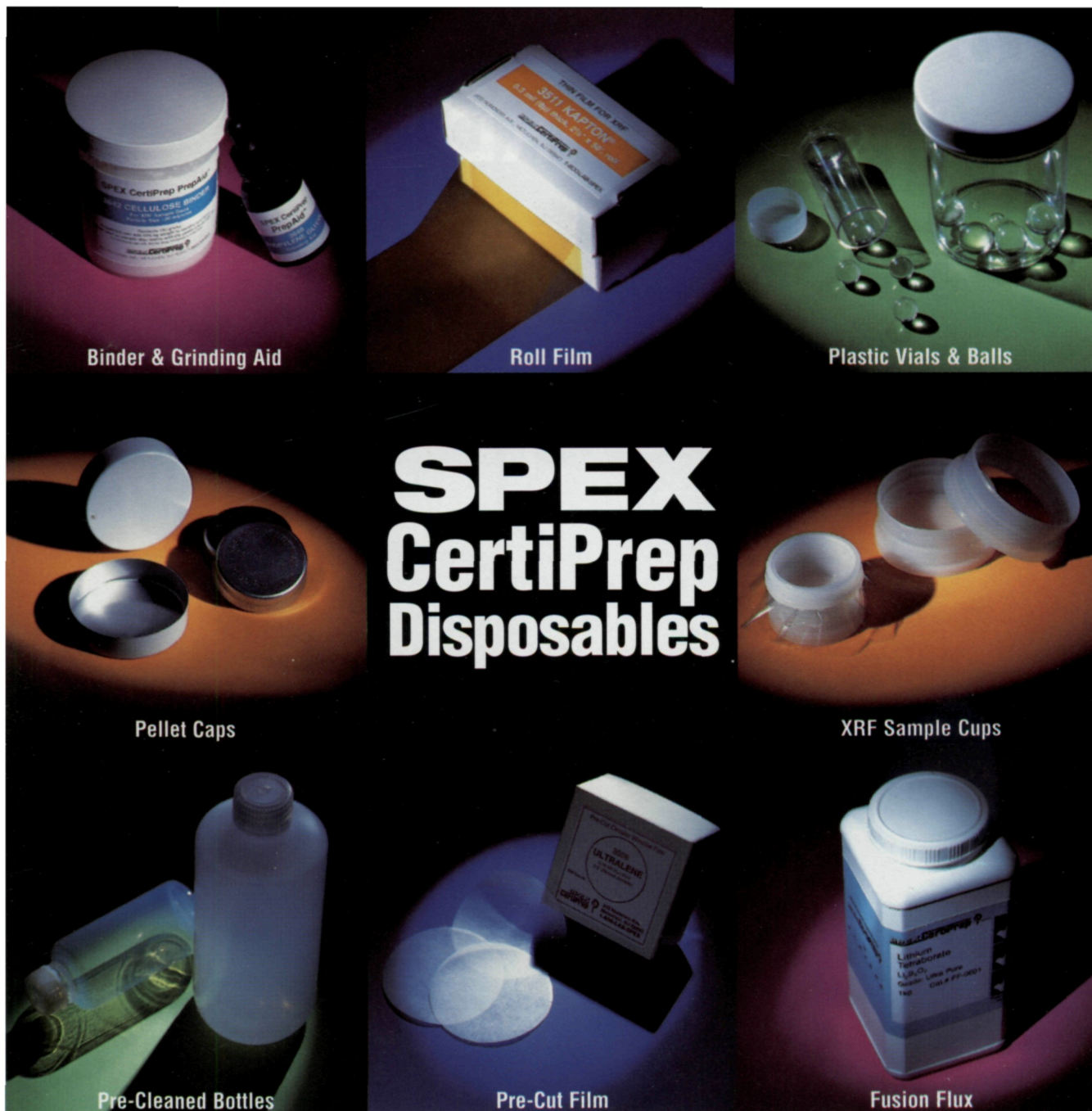
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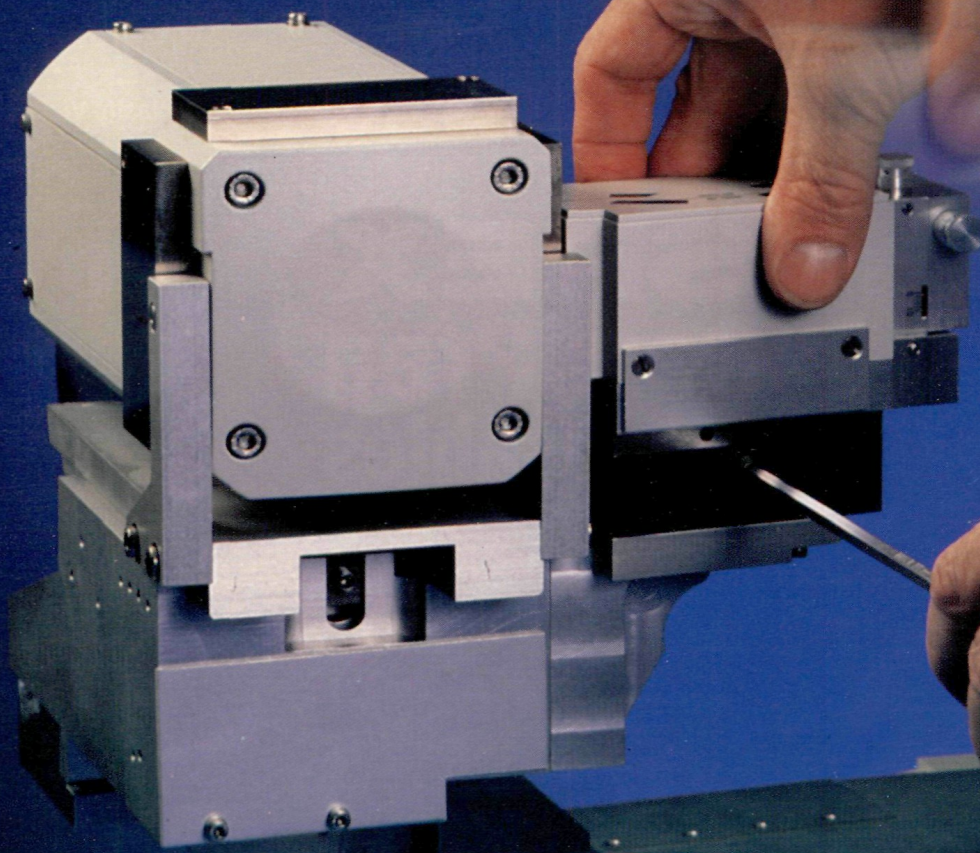
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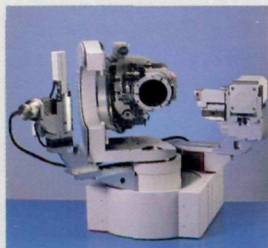
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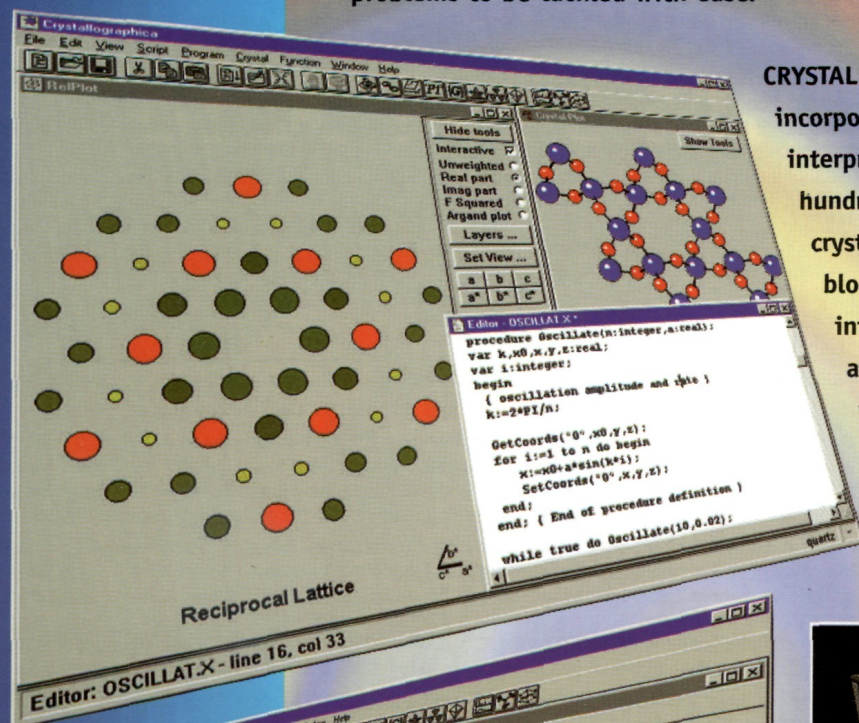
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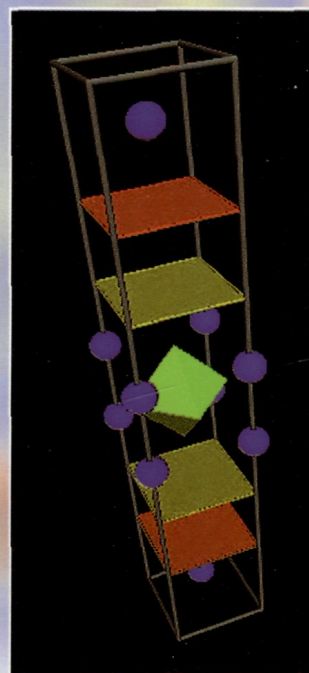
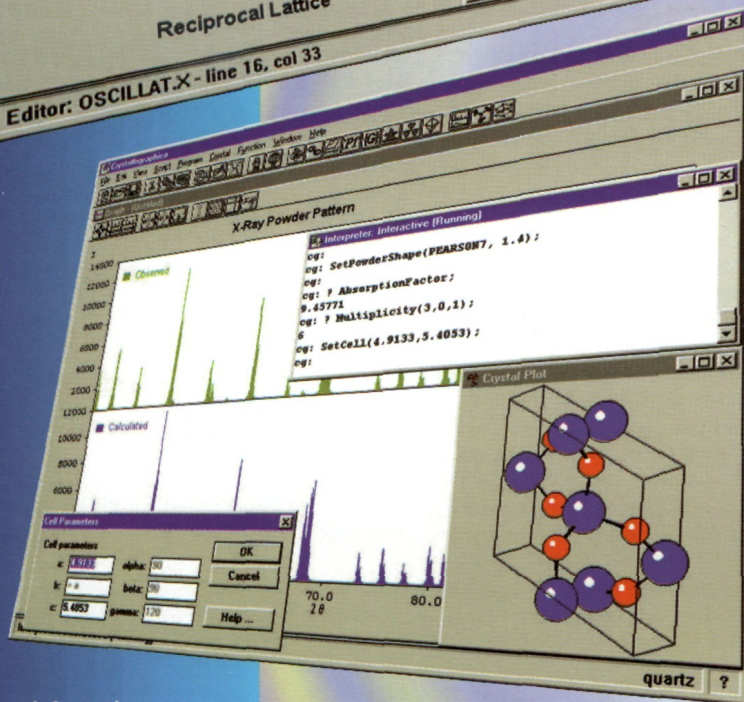


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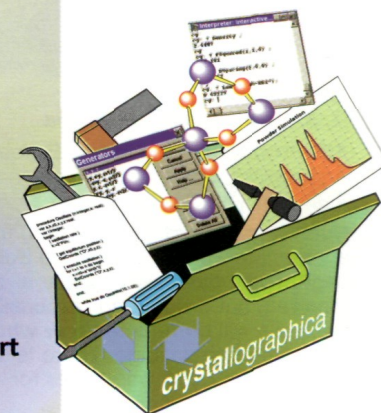
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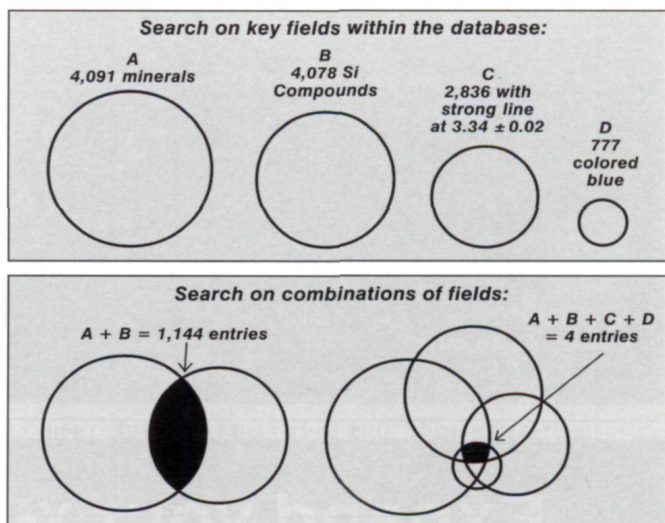
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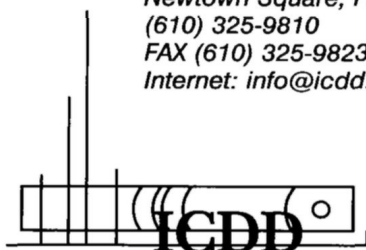
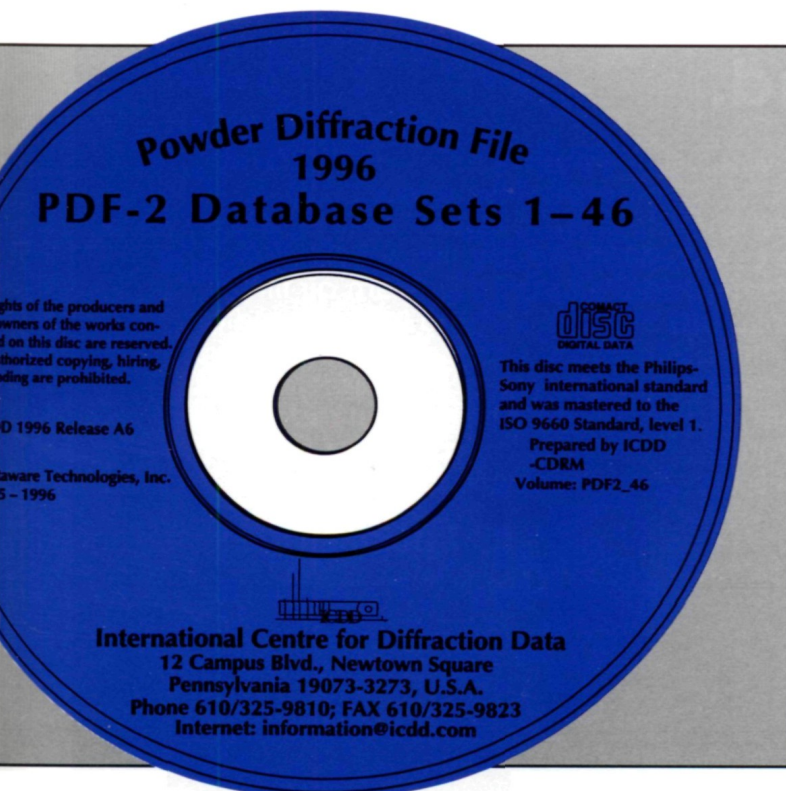


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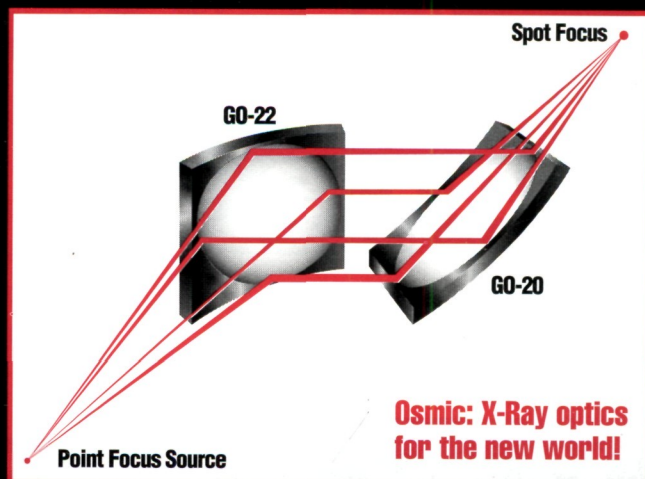


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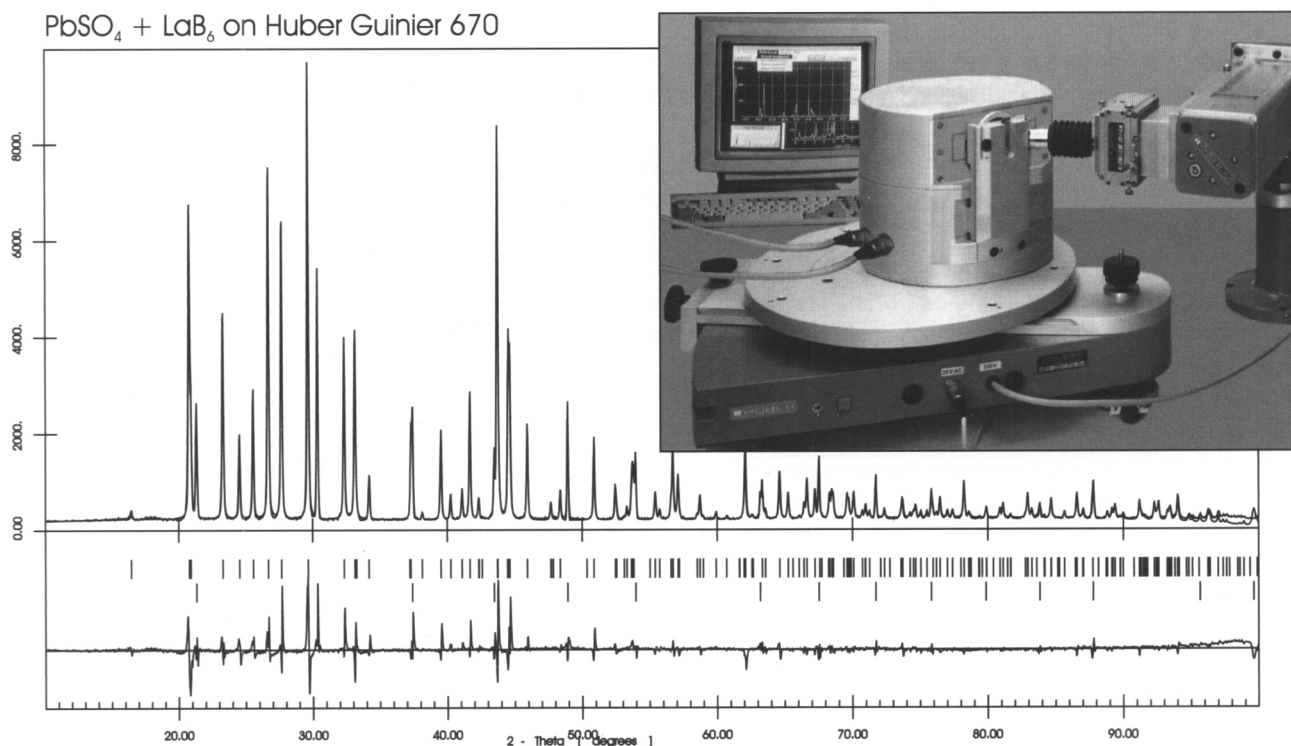


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INTERNATIONAL CENTRE FOR DIFFRACTION DATA CRYSTALLOGRAPHY SCHOLARSHIP AWARDS

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Qualifications for the applicants: The applicant should be a graduate student seeking a degree with major interest in crystallography e.g. crystal structure analysis, crystal morphology, modulated structures, correlation of atomic structure with physical properties, systematic classification of crystal structures, phase identification and materials characterization. There are no restrictions on country, race, age or sex. The term of the scholarship is one year. Application for one renewal may be made by the recipient at the end of the first year. Because a limited number of scholarships are awarded, renewal applications will be considered on a competitive basis in conjunction with all applications that have been submitted up to the closing date.

Submit:

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- b. A one-page proposal by the graduate student describing the type of crystallographic research to be partially supported by scholarship.
- c. A supportive letter from the sponsoring professor of an accredited university or an institute of technology on institution letterhead.

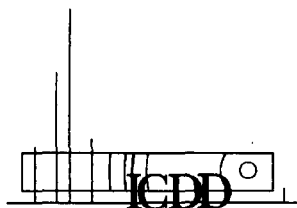
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- b. No more than one scholarship will be awarded to applicants at any one accredited institution per year.
- c. The funds of the scholarship are not to be used for travel.

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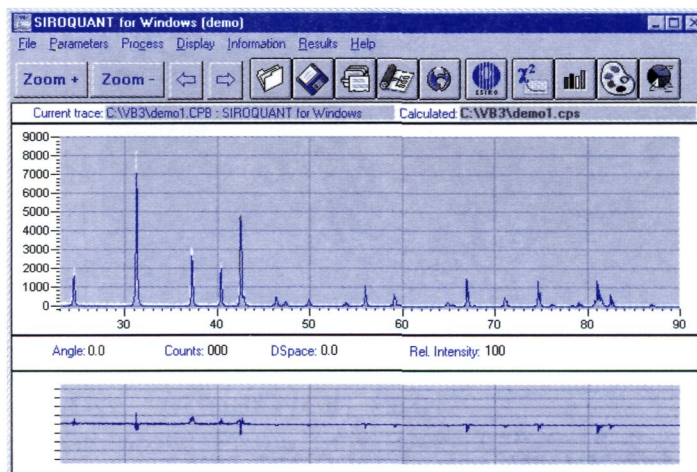


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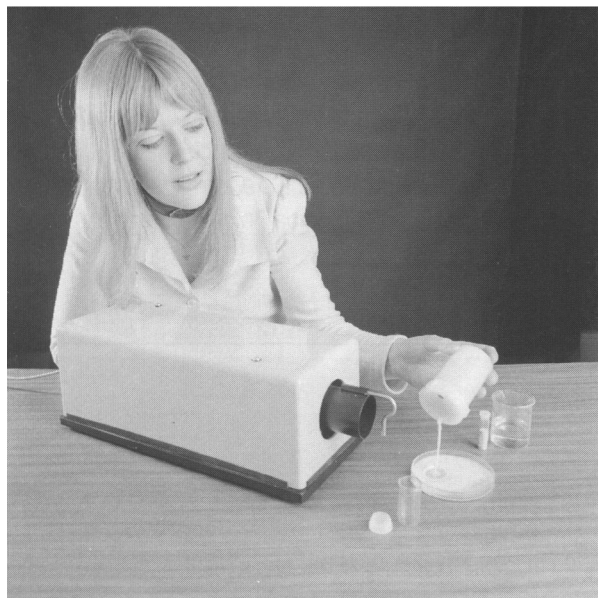
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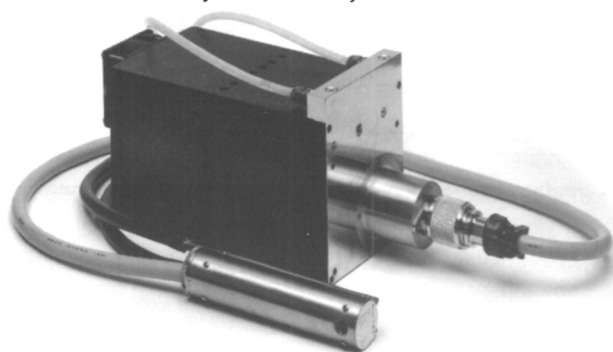
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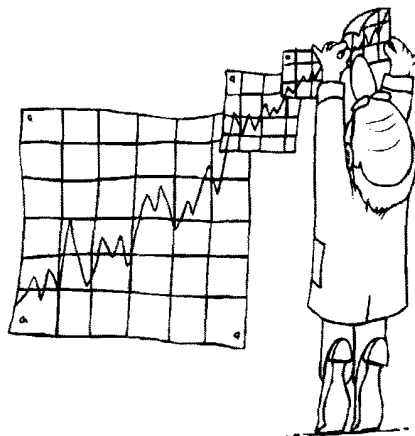
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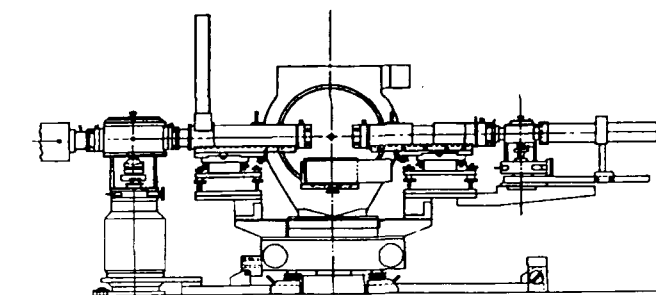


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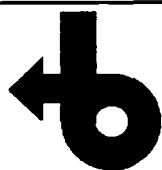
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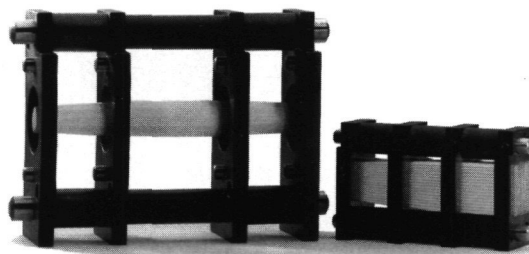
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