



Powder Diffraction

*An international
journal of materials
characterization*

Volume 16 Number 1 March 2001

33-1161
SiO₂
Silicon Oxide

Quartz, syn
Rad. CuK α ,
Cut off
Ref. *Natl. Bur. Stand. (U.S.) Monogr. 25, 18 61 (1981)*

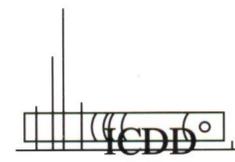
λ 1.40598 Filter Mono. d-sp Diff. I/I_{001} 3.6
Int. Diffractometer
Ref. *Natl. Bur. Stand. (U.S.) Monogr. 25, 18 61 (1981)*

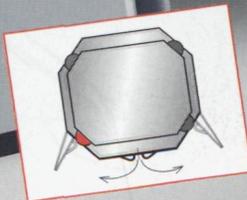
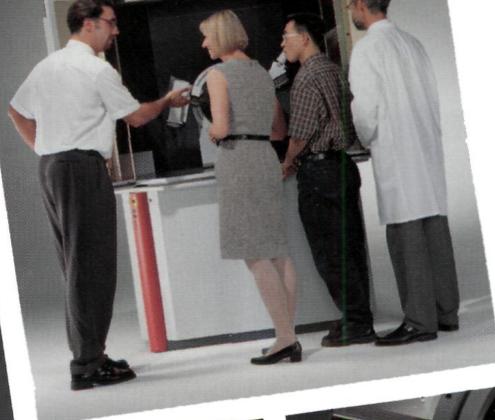
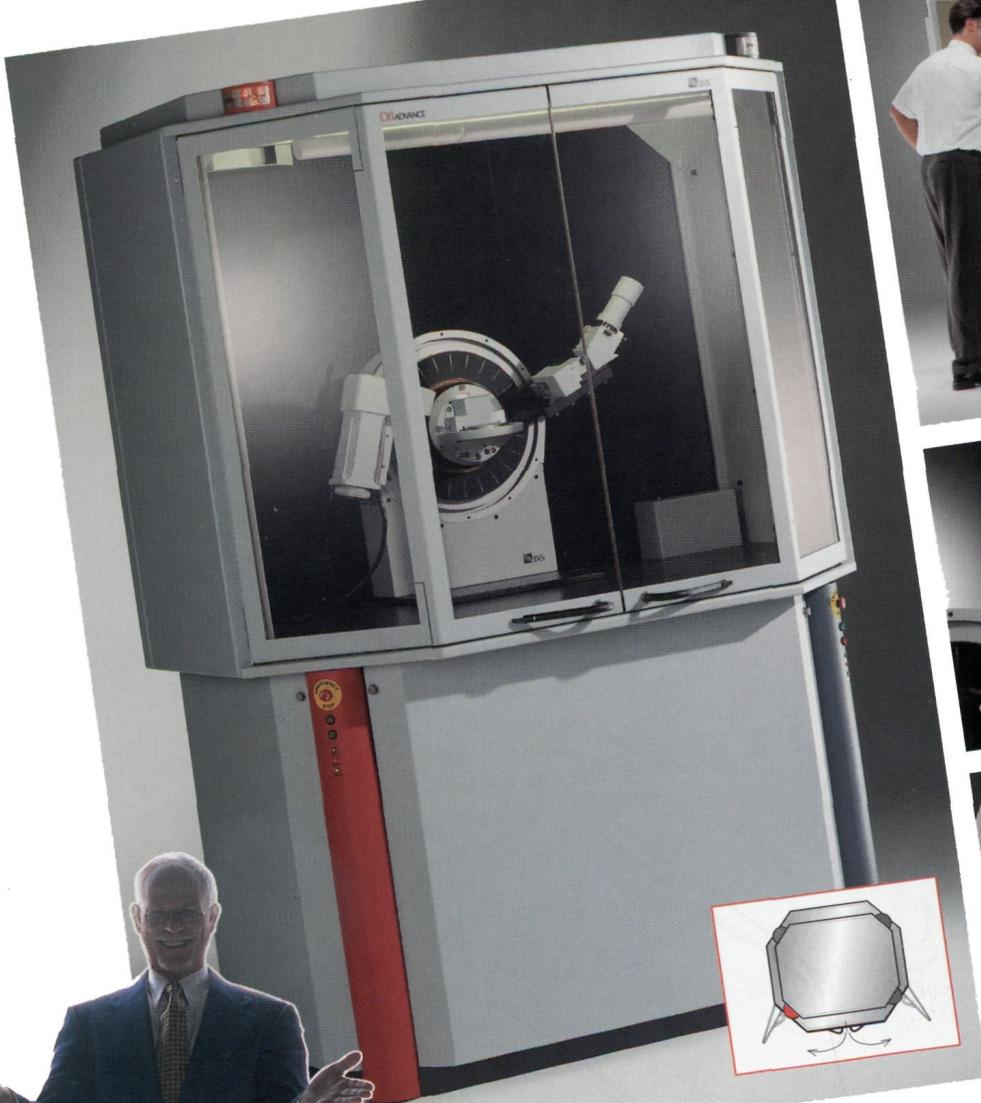
S.G. P3;21 (154)
c 5.4053(4) A Z 3 mp C 1.1001
 γ

SS/FOM F₃₀=77(013.31)
ey 1.553 Sign + 2V
Ref. Swanson, Fuyat, *Natl. Bur. Stand. (U.S.), Circ. 539, 3 24 (1954)*

Color Colorless
Pattern taken at 25 C. Sample from the Glass Section at NBS,
Gaithersburg, Maryland, USA. Ground single-crystals of optical qual-
ity. Pattern reviewed by Holzer, G., McCarthy, G., 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. Silicon used
as internal standard. PSC: hP9. To replace 5-490 and validated by cal-
culated 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	402
1.9792	4	201	1.0438	1	105
1.8179	14	112	1.0347	<1	401
1.8021	4	003	1.0150	<1	214
1.6719	4	202	0.9898	1	223
1.6591	2	103	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			
1.3820	6	212			
1.3752	7	203			
1.3718	7	203			
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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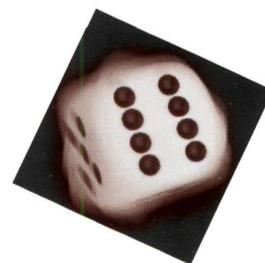
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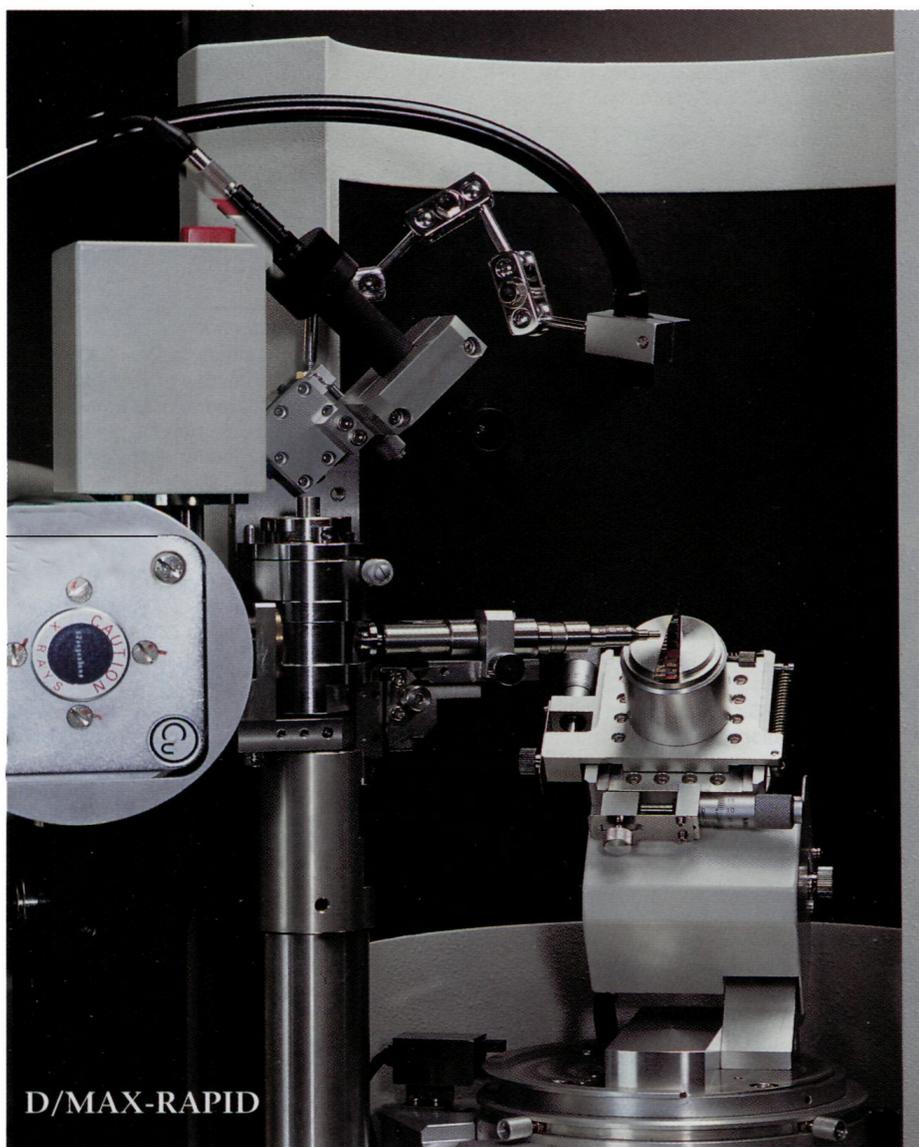
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Powder Diffraction (ISSN: 0885-7156) is published quarterly (4X annually) by the JCPDS-International Centre for Diffraction Data through the American Institute of Physics. 2001 Subscription rates: US\$105. POSTMASTER: Send address changes to *Powder Diffraction*, AIP Circulation & Fulfillment Division, Suite 1N01, 2 Huntington Quadrangle, Melville, NY 11747-4502. Periodicals postage paid at Huntington Station, NY 11746, and additional mailing offices.

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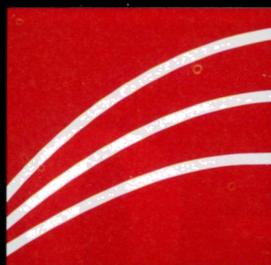
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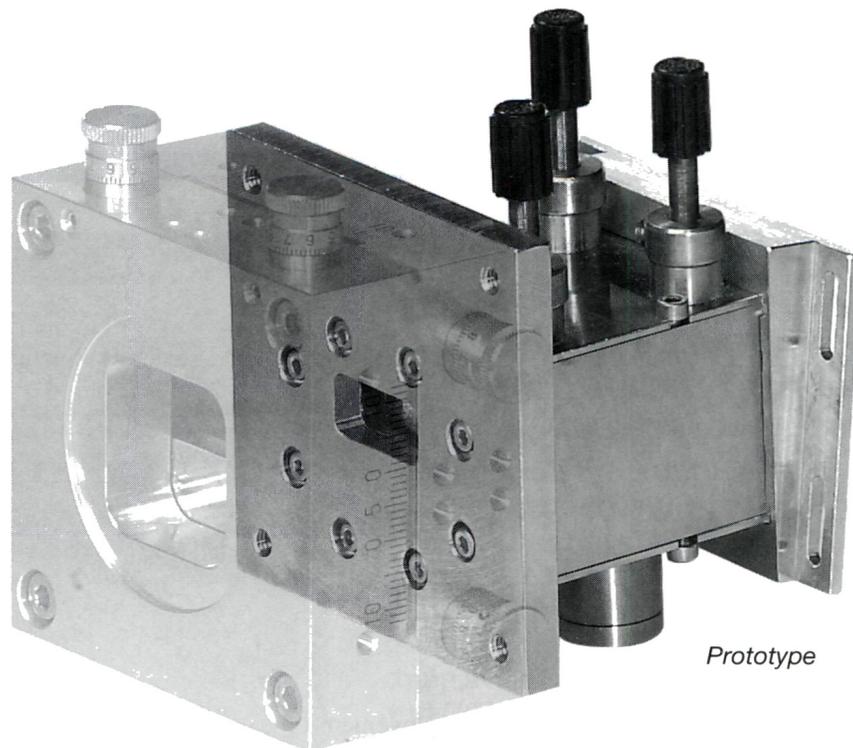
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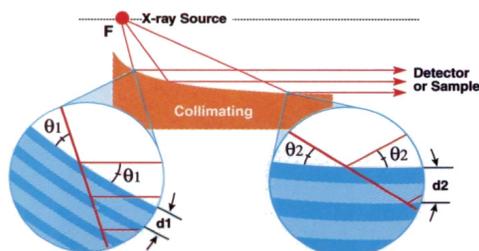
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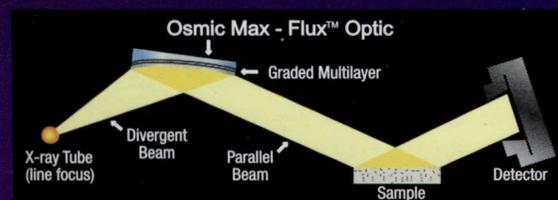
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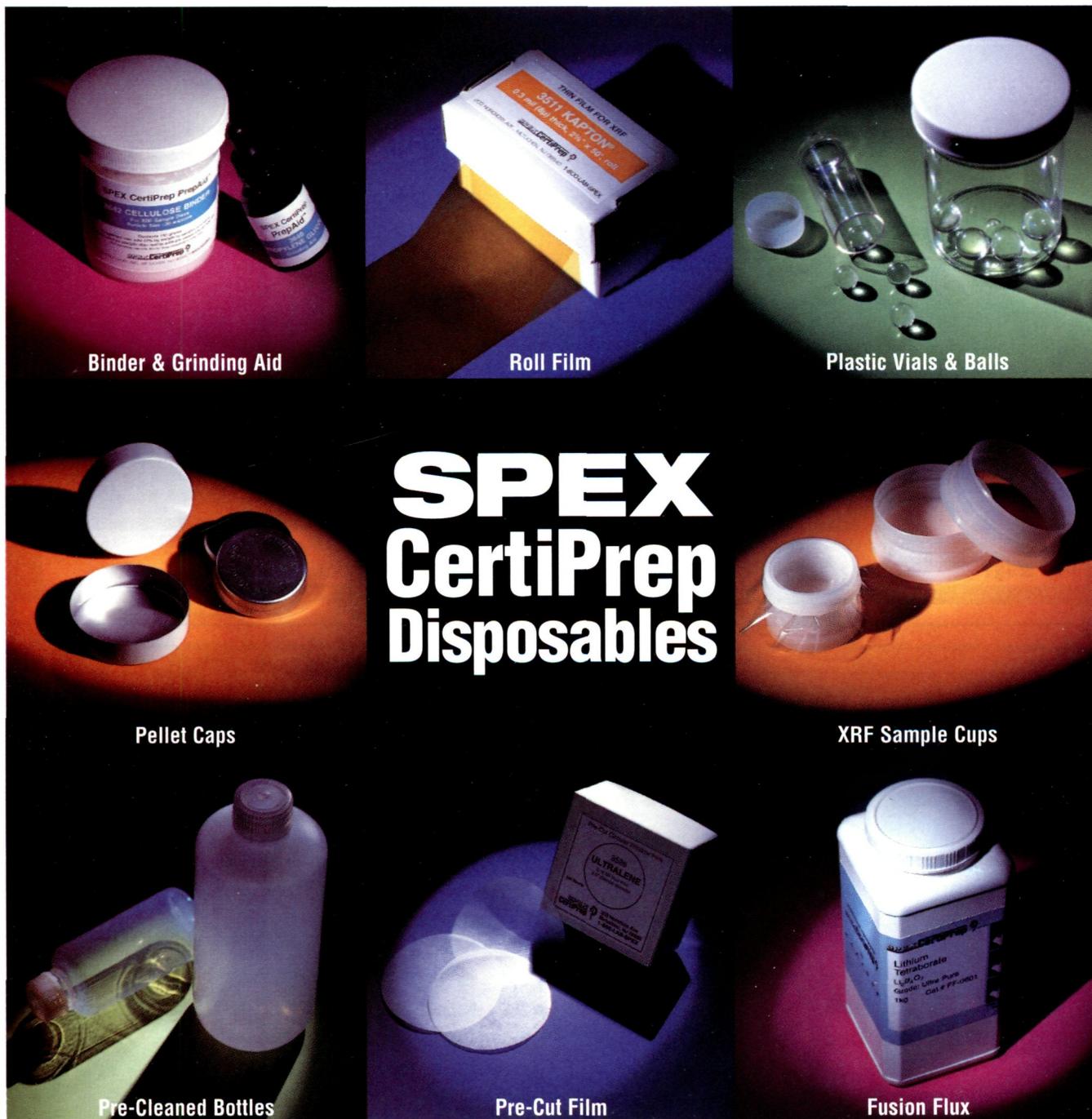


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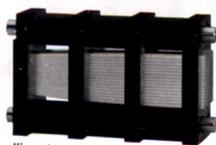
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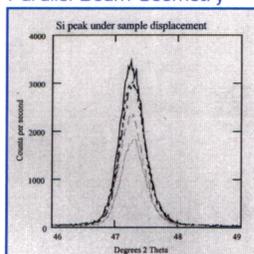
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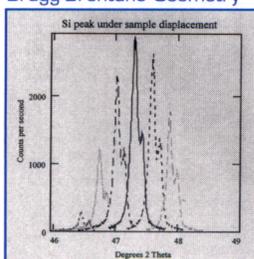


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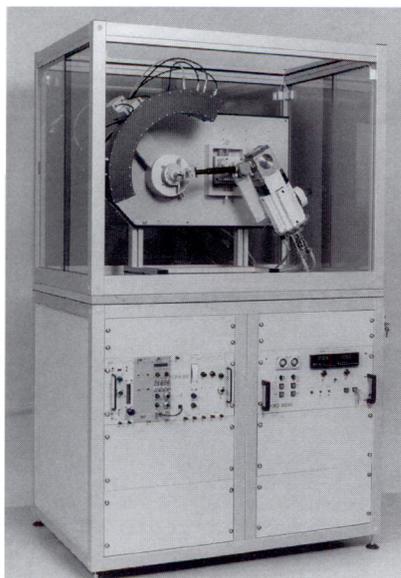
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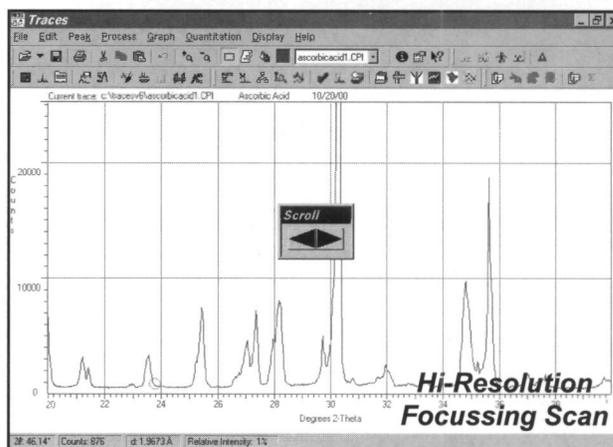
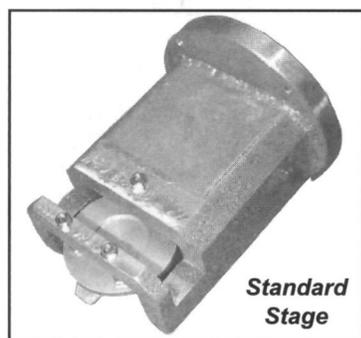
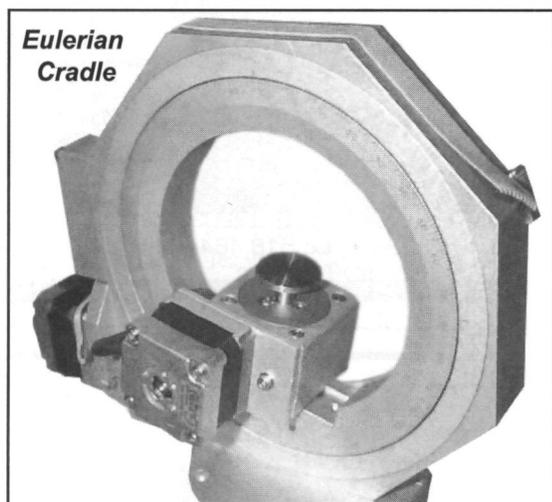
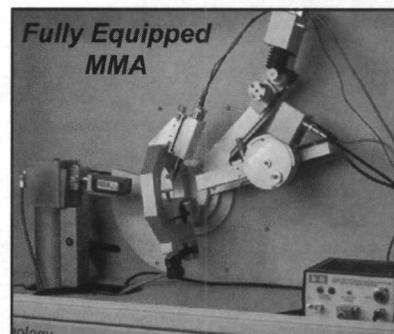
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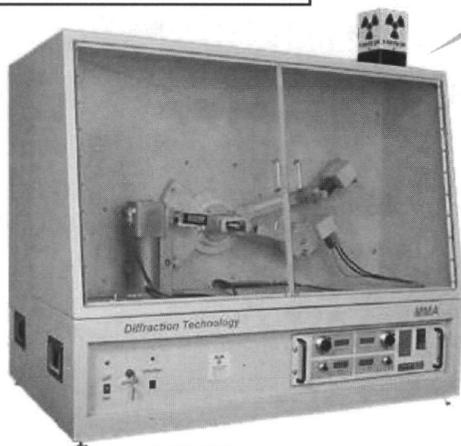
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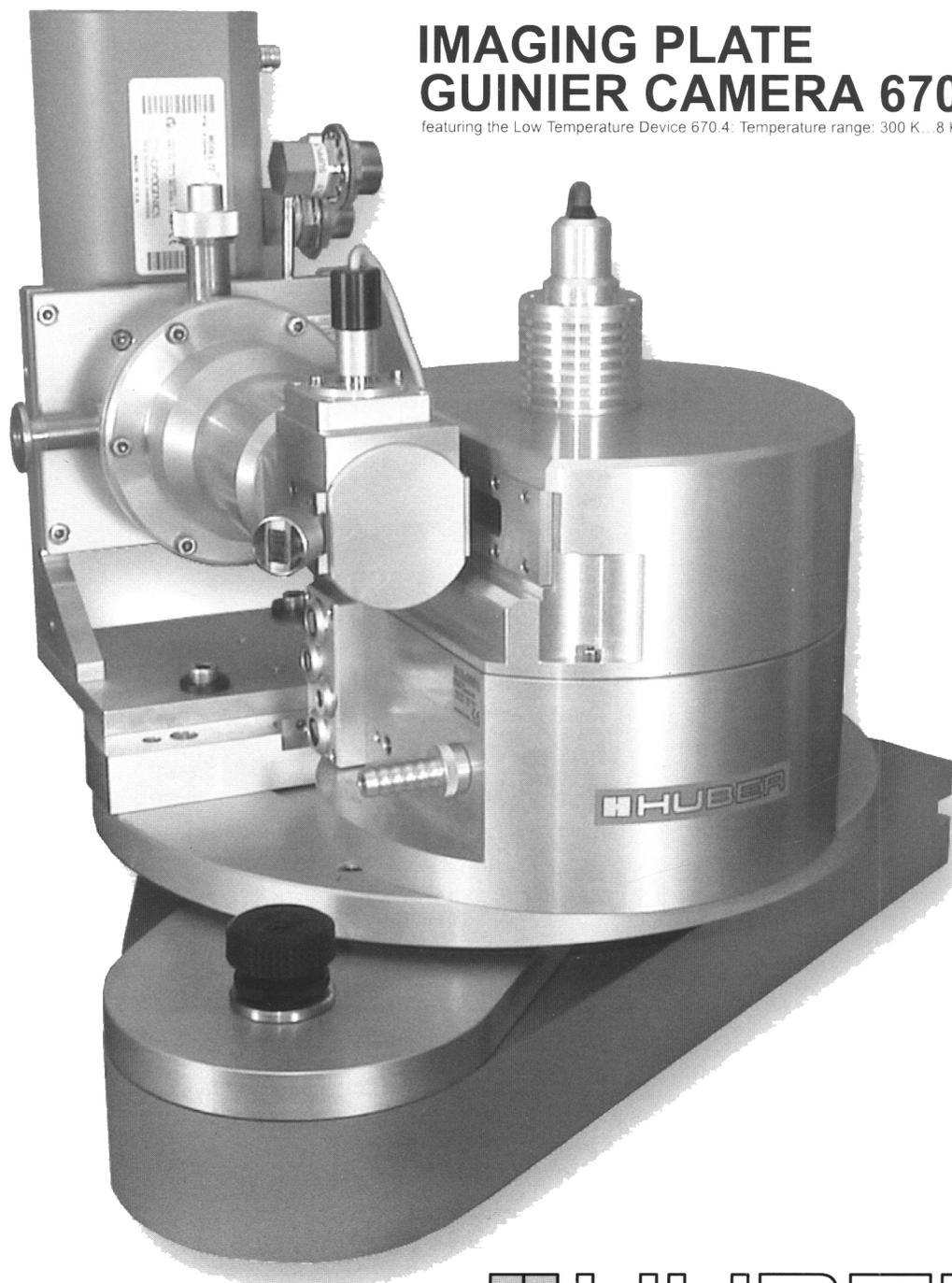
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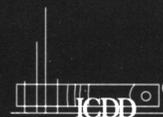
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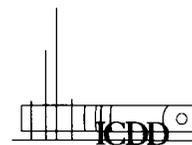
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