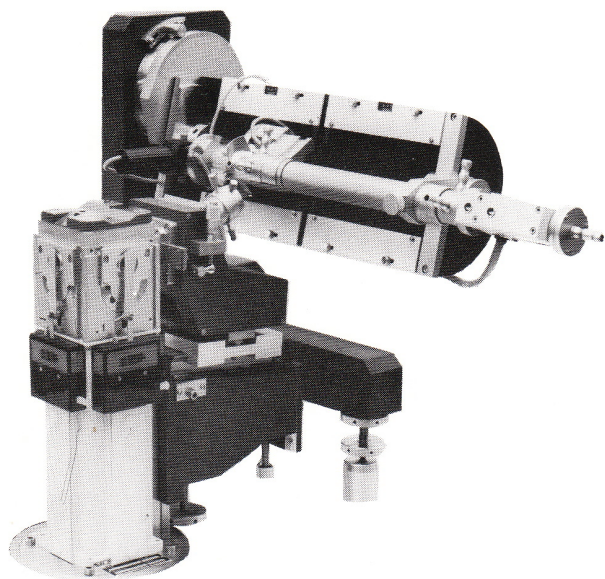


High temperature experiment

The sample was investigated in a temperature range of 100°C to 500°C. After it is brought inside the camera the temperature is raised to 100° and kept constant for 1 h. Now the temperature is increased during 4 h. to 200°C and kept constant for 1 h. Hereafter it is raised to 500°C at a rate of 37.5°C/h. When 500°C was reached the temperature was kept constant for 1.5 h. after which the sample was cooled down to 100°C during 12 h.



Guinier-Simon camera for high temperature work

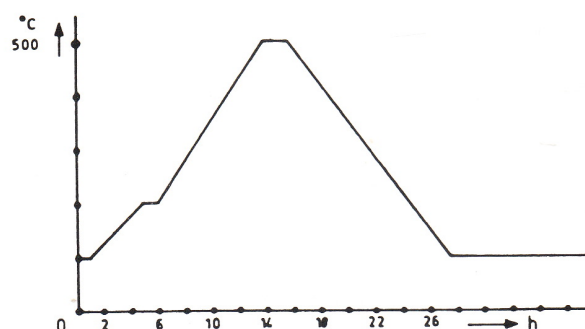
The setting for the high temperature experiment is:

Temperature regulator 4000
Span potentiometer 4

Program step	1	2	3	4	5	6	7	8	F R Δ
	4	//	999						
	1	99	099						
	3	62	250						
	1	99	099						
	3	94	750						
	1	66	099						
	2	83	999						
	9	//	///						

/ means any value is allowed as these numbers are irrelevant.

The high temperature experiment



OPERATION REQUIREMENTS

Focus	: horizontale line focus image 8 × 0.04 mm or 8 × 0.02 mm fine focus	Mains	: 220V, 50 Hz/110V, 60 Hz 1.5 kVA
Tubeshield	: vertical, for adaption kits see below	Cooling water	: 4 l/min. (high and low temperature systems)
Monochromator support bracket	: according ACA speci- fications; height adjustable between 160 and 190 mm above table top.	Compressed air	: 14 l/min. for high temperature systems only
Monochromator	: nominal height incident beam entrance above track 100 mm. nominal focus mono- chromator distance 90 mm nominal focussing distance 220 mm	Liquid nitrogen	: 1.5 l/h independent on gas stream temperature (for low temperature systems only)
Camera	: sample axis horizontal only	Table top	: when the monochromator support bracket cannot be attached to the tubeshield, the table top must be stable enough to make sure that the relative monochromator focus position does not change
		Film size	: 180 × 170 mm