M1.	Charles S. Madan and Co. Ltd., Vortex Works, Atlantic Street, Broadheath, Altrincham, Cheshire. Tel. ALTrincham 2702.	Equipment design and manufacture for isostatic pressing for powder metallurgy and ceramics. J.T. Shepherd R.L. Alexander	Pressures up to 7kb. Ambient temperature. Equipment has been designed and manufactured for maximum vessel operating temperature of 150°C and pressures of 1.7 kb. Working volumes range from 50 cu. ins to 8,000 cu. ins.
M2.	Geology Dept., Manchester University, Manchester 13. Tel. ARD 3333	(a) Hydrothermal synthesis. (b) Phase equilibrium studies in silicate systems, particularly those containing alkalies, alumina and lime. W.S. Mackenzie (Prof.) W.S. Fyfe (Prof.) D.L. Hamilton R.N. Thompson C.M.B. Henderson A.C. Dunham	Externally heated vessels 1000°C, 2 kb. 12" long, 1¼" O.D., ¼" I.D. Internally heated vessels 1300°C, 7 kb. 2" I.D. vessel 11" O.D. 9/16" I.D. furnace 2" O.D. - 12" long. Vessels for 15 kb under construction.
M3.	Mitchell Craig Pumps Ltd., Glenburn Road, College Milton, East Kilbride. Glasgow. Tel. East Kilbride 25461	Design and production of high pressure pumping equipment. M.D. Craig J. Winstanley A. Wallace	Sealed glandless (canned) pumps for system pressures to 350 b and temperatures to 555°C. Metering pumps to discharge against pressures to 525 b.
M4.	Molins Machine Co. Ltd., 2 Evelyn Street, Deptford, London, S.E.8. Tel. BERmondsey 4581.	Design and manufacture of medium and high pressure fluid machinery. G. Orloff	Continuous rotary intensifiers, pressures to 1 kb. temperatures to 200°C, system flows up to 0.5 in^3/sec.
M5.	Research Dept., Monsanto Chemicals Ltd., Hythe, Southampton, Hants. Tel. Blackfield 3221.	Chemical and physical aspects of polymerisation of ethylene and other monomers.	Reactors for temperature range - 50 to + 400°C, pressures to 4 kb.

	Organisation	Field(s)	Equipment
N1.(a)	National Engineering Laboratory, Fluids Division, East Kilbride, Glasgow. Tel. East Kilbride (OEK 52) 20222.	Measurement of the velocity of sound in hydraulic fluids and other liquids.	Pressures to 2 kb and temperature 200°C. Interferometer.
		Viscosity of lubricants and other liquids.	Pressure of 12 kb and 100°C. (1) Falling cylinder viscometer. (2) Thin film, high rate of shear apparatus (feasibility study in progress.)
		Measurement of the compressibility of liquids.	Water and other liquids to 4 kb at 100°C and it is hoped to reach 6 kb and 200°C. Mercury and water to 12 kb and 100°C. Piston-and-cylinder (hydraulic fluids.) Piezometer (mercury and water).
		A.T.J. Hayward	
(b)		Measurement of viscosities of gases and gas mixtures.	Pressures up to 500 b and temperatures up to 300°C. (It is hoped to push both these limits higher in due course). Oscillating disc viscometer.
		J.R. Sutton	
(c)		Measurement of thermal conductivities of gases and gas mixtures.	Pressures up to 1 kb and temperatures up to 600°C. Concentric cylinder apparatus.
		J.T.R. Watson	
(d)	National Engineering Laboratory, Plasticity Division.	Cold forming by liquid pressure (mainly extrusion). Tension, torsion and compression testing under pressure, associated equipment design and manufacture.	
		M.T. Watkins A.H. Low E.F. Chandler	

	Pressure	Temperature	Working Volume.	Other
1. Extrusion	14 kb	Atmospheric	25 in^3	12 kb back pressure
2. Extrusion	28 kb	Atmospheric	0.5in^3	"
3. Extrusion	14 kb	0-200°C.	0.5in^3	"
4. Tension torsion and compression tests.	14 kb	-12°C to+80°C.	11 in^3	Cross bore container

N2.(a)	Advanced Instrumentation Unit, National Physical Laboratory, Teddington, Middx. Tel. TEDdington Lock 3222	Near and far infra-red absorption measurements to 50 kb (spectral ranges 1 - 10μ and 50 → 1000μ) on semiconductors and polar liquids and solids. C.C. Bradley

Multianvil devices: tetrahedron 0 - 80 kb 2000°C. Cube 0 - 60 kb 1000°C. Hydrostatic optical cell 10 kb. Opposed diamond anvil X-ray device 350 kb. Piston and cylinder devices. Carbide 50 kb 1000°C.
Sapphire, Al-Zn alloys: 10 kb - 196°C → 200°C.
Low temperature clamp device (30 kb).