I3.	Plastics Division, Imperial Chemical Industries Ltd., Bessemer Road, Welwyn Garden City, Herts.	Chemical Kinetics. Phase Equilibria. Particularly with respect to fluid systems containing organic high polymers at pressures up to a few kilobars.	Autoclaves with fittings for stirrers, electrodes and windows, for temperatures to 300°C and pressures of a few kilobars. Supporting gas compression equipment.
I4.	Research Dept., Imperial Metal Industries (Kynoch) Ltd., Witton, Birmingham 6. Tel. Birchfields 4848.	Research Director. Cold forming of metals - extrusion, wire making, deep drawing, upsetting. Compaction of metal powders into electrodes for arc melting or electron beam melting. D.E. Yeomans L.R. Hawtin	Experimental hydrostatic extrusion apparatus (room temperature). Max. pressure 17 kb. Max. back pressure 5.5 kb. Container dia. 1½". Max. billet length 4".
K1.	University of Kent at Canterbury, Canterbury, Kent. Tel. Canterbury 66822 ext. 234	Investigation of the nuclear magnetic resonance relaxation time of liquids (using a pulsed method) to see how this varies with temperature and pressure. Mark C. Gough S.G. Powles (Prof.)	The N.M.R. equipment consists basically of a permanent 5000 gauss magnet, and electronic apparatus which produces pulses 600 volts in amplitude. The pressure range is 0 - 2 kb and the temperature range is from 0°C to 250°C.
K2.	Kenewe Research Press Co., 91 South Street, Greenock, Renfrewshire. Tel. Greenock 23027.	Design and manufacture of high tonnage presses with Towler Hydraulic Equipment. Research into compaction of the known abrasive powders and construction of appropriate high pressure devices. K.D. Cochran E.M. Haldane	500 ton press. Cold compression of powders in steel devices to 25 kb.
L1.	Dept. of Geology, University of Leeds, Leeds 2. Tel. Leeds 31751.	Geochemical studies :- The melting behaviour of rocks at high pressures, and especially the composition of the liquid phase. The solubility of H_2O and CO_2 in silicate melts. P.G. Harris D.W. Williams	Hydrothermal equipment - 4 kb and 1000°C or 1 kb and 1200°C. Internally-heated pressure vessel - 3 kb and 1500°C.
L2.	Dept. of Physics, University of Leeds, Leeds 2. Tel. Leeds 31751.	Study of the transport properties (electrical resistivity, thermo-electric power etc.) of simple metals and alloys under pressure. J.S. Dugdale (Prof.)	Pressures up to 4 kb in the temperature range from 2 to 300°K. Helium gas, and at the lowest temperatures, solid helium are used as the pressure transmitting medium.

	Organisation	Field(s)	Equipment
L3.	School of Chemistry, University of Leeds, Leeds 2. Tel. Leeds 31751.	Equipment design. Hydrothermal systems and phase studies, electrical studies, phase equilibria, and solid state reactions at pressures above 2 kb. X-ray studies. R.S. Bradley D.C. Munro	Hydrothermal reaction vessels up to 4 kb and 900°C. Uniaxial Bridgman anvil presses up to 80 kb and 800°C. Internally heated piston cylinder apparatus up to 100 kb and 2000°C. Diamond cylinder X-ray apparatus up to 12 kb (room temperature).
L4.(a)	Dept. of Chemical Engineering and Chemical Technology, Imperial College, Prince Consort Road, London S.W.7. Tel. KENsington 5111.	(a) Pressure Measurement to 15 kb. (b) P-V-T Properties and Phase equilibria. (c) Transport Properties (thermal conductivity, viscosity). K.E. Bett	Pressures up to about 15 kb, temperatures mainly in range 25 to 250°C although in some applications may be as high as 2000°C.
(b)		Thermodynamic and transport properties of gases at high temperatures and pressures. K.E. Bett G. Saville	Temperatures of up to 1800°C, pressures up to 1 kb. Volume of hot zone ~ 500 cm³.
L4.(c)	Dept. of Chemical Engineering and Chemical Technology, Imperial College, Prince Consort Road, London S.W.7.	Physical studies on liquids. E. McLaughlin.	Viscosity measurements in range 1 - 10 kb and temperatures in the range 25 - 100°C. Thermal conductivity measurements in range 1 - 7.5 kb and temperatures in the range 25 - 250°C.
(d)	Tel. KENsington 5111.	Chemical reactions (kinetics and equilibria), with emphasis on polymerisation reactions. Some measurements of related physical properties (e.g. melting curves, electrical conductances). K.E. Weale	Steel vessels pressurised via hydraulic intensifiers. Max. pressure 15 kb, usual temperature range 25° - 125°C. Some exploratory work with tetrahedral anvil equipment on chemical reactions (to ca. 50 kb, 200° - 600°C).
L5.	Dept. of Geology, Imperial College, Prince Consort Road, London S.W.7. Tel. KENsington 5111	Hydrothermal synthesis (usually 3 or 4 component silicate systems) and stability relations of common rock-forming minerals. J. Nolan G. Borley	Tuttle cold-seal pressure vessels (Haynes# 25, & R.41.). Pressure 0 - 5 kb. Temperature 0 - 900°C. Higher pressure equipment is being obtained. At present equipment in the Geology Dept., Manchester University is used for higher pressure work