

- C4. Materials Division,
Berkeley Nuclear Laboratories,
Central Electricity Generating
Board,
Berkeley, Glos.
Tel. Berkeley 451.
ext. 24
- Properties of materials which have had krypton 85 incorporated into them by diffusion techniques.
- D.A. Hilton
J.H. Buddery
- Nimonic pressure vessel, working volume 3 cc.
Pressures up to 3.5 kb at 500°C.
- C5. Central Electricity Generating
Laboratories,
Cleeve Road,
Leatherhead, Surrey.
Tel. Leatherhead 4488.
- Aqueous corrosion of iron and steel under supercritical conditions.
Electrochemical measurements (electrode kinetics, emf measurements, diffusion studies).
- Properties of water (solubilities of salts and oxides, ionic equilibria, crystallisation phenomena, P-V-T studies, spectroscopic studies).
- Hydrothermal deposition of salts on metal surfaces from super-critical fluid.
- H.G. Masterson.
- A large range of autoclave equipment is in use enabling corrosion, electrochemical and solubility measurements to be made. In addition, a Nimonic unit capable of producing 20 lbs/hr of super-critical fluid up to 700°C and 1 kb is under construction.
- Also used is a model boiler rig capable of studing corrosion of steel tubes under heat transfer conditions.
- C6. Chas. W. Cook and Sons Ltd.,
97 Walsall Road,
Perry Bar,
Birmingham 22B.
Tel. Birmingham 4223.
- Design and manufacture of high pressure apparatus.
- Autoclaves and pressure vessels working to pressures of 500 bars and temperatures up to 500°C.
- Ageing bombs for rubbers, etc.
- Bomb calorimeters for fuel determinations.
- D1. Engineering School,
Trinity College,
Dublin 2,
Republic of Ireland.
Tel. Dublin 72941.
ext. 433, 437, 438.
- Investigation of dielectric properties of liquids and solids under high pressures. In particular (i) Dielectric properties of n-alkanes, CS₂, Water, Glycerol, Eugenol, Ether, Alcohols (methyl, ethyl, etc.) (ii) Dielectric constant of Alkali Halide Single crystals.
- W.G.S. Scaife
B.K.P. Scaife
- Pump (designed and built by Prof. B. Crossland) giving pressures up to 8 kb. Temp. range -30°C → 100°C. Working volume, cylindrical, length 10 cm., dia. 2 cm. Frequency range 20Hz → 10MHz.

<u>Organisation</u>	<u>Field(s)</u>	<u>Equipment</u>
E1. ✓ School of Biological Sciences, University of East Anglia, Wilberforce Road, Norwich. Tel. Norwich 52651.	High pressure physiology. Deep sea biology. A.G. Macdonald	0-1000 bars. Several small cylinders in use or ordered. 0-30°C.
E2. School of Mathematics and Physics, University of East Anglia, Wilberforce Road, Norwich, NOR 77H. Tel. Norwich 52651.	Physical studies of liquid metals. N.E. Cusack (Prof.) School of Mathematics and Physics, University of East Anglia. R. Ross, Dept. of Physics, Birkbeck College, Malet Street, London W.1.	Two steel pressure vessels with internal furnaces for 1,000°C and 1,000 bars. Vessel for 1,700°C and 2,000 bars in design stage. Working volumes about 30 cc.
E3. ✓ Geology Department, University of Edinburgh, (Grant Institute of Geology), Westmains Road, Edinburgh 9. Tel. NEWington 1011. ext. 3571.	Phase equilibria in silicate systems. M.J. O'Hara G.M. Biggar	Unit planned for 1967-1969 with capacity for ~ 10-50 mg. charges up to 1500°C, 30 kb. At present work is limited to atmospheric pressure.
E4. Ether Limited, Caxton Way, Stevenage, Herts. Tel. Stevenage 3040	Manufacture of pressure transducers. R. Moores E.H. Nicholson	A variety of pressure transducers up to 3,500 bars.
E5. ✓ Electricity Council Research Centre, Capenhurst, Chester. Tel. Hooton 3791 ext. 5.	Electrical properties of material at high pressures and temperatures. ✓ I.W. Jones	Piston - Cylinder (0 - 50 kb (0 - 2000°C.