

Department of Scientific and Industrial Research.

Grant for the construction of a Large Hydrogen Bubble Chamber.

Statement of Grant and Expenditure (including forward Commitment)
as at 23rd March 1961.

Revised to include expenditure claimed by Liverpool University.

	<u>Estimate</u>	<u>Expenditure inc-</u> <u>cluding commitment</u>	<u>Balance.</u>
	<u>£.</u>	<u>£.</u>	<u>£.</u>
1. <u>Capital Cost of Chamber.</u>			
i) Electromagnet and Mounting	107,000	106,022	978
ii) Vacuum Tank pumping equipment	32,000	31,386	614
iii) Three main forgings (Chamber vessel and window flanges) finish machined	26,000	25,361	639
iv) Expansion pipes and suspension of Chamber	6,500	4,058	2,442
v) Hydrogen and Nitrogen shields fabricated and machined	5,500	4,684	816
vi) Instrumentation inside Vacuum Tank	1,000	159	841
vii) Two glass windows and 3 inflatable gaskets.	13,000	11,437	1,563
viii) Optical System - Condenser Lenses (including spares) lens mounting cameras lamps etc.	12,000	8,581	3,419
ix) <u>Hydrogen Refrigerator and Transfer Lines</u>			
(a) Main Unit including hydrogen purifier from Cryenco Ltd.	29,000	28,992	8
(b) Transfer lines.	500	331	169
x) Expansion system outside Vacuum Tank, pipes, tanks, compressors, control equipment	34,500	31,569	2,931
xi) Test plant including coating plant, test vessel, and assembly and testing of components.	13,000	10,840	2,160.
xii) Spares (other than glass) e.g. gauges, valves etc.	650	90	560.
2. <u>Consumable Supplies 1959, 1960, 1961.</u>	21,000	3,222	17,778
3. <u>Spare optical parts, gaskets, etc.</u>	19,500	-	19,500
4. <u>Helium leak detector and tools</u>	6,500	4,328	2,172
5. <u>Phase two of Control system</u>	7,000	-	7,000
6. <u>Modifications to Chamber</u>	10,000	-	10,000
7. <u>Travel</u>	9,000	6,001	2,999
8. <u>Staff.</u>	61,250	56,731	4,519
9. <u>Administration costs.</u>	4,350	4,350	-
	<u>£419,250</u>	<u>£338,142</u>	<u>£81,108.</u>