PLACE, DATE	MATERIAL	DIMENSION	TEMP. °C	ENERGY MeV	INTENSITY mAh	SPOT cm^2	RESULT
SIN 7-80	GRAPHITE	3 MM ø 20 MM	1000-1200	600	20	0·2	OK ON INSPECTION
SIN 8-80	PYRO-GRAPHITE	6 MM ø 20 MM	1500-2000	600	80	0·2	UNKNOWN
LAMPF 11·80	SUPER-PYRO	6 MM	~1500	800	~200?	1	TEST IN PROGRESS
LAMPF 81	AL, Fe REFR. MATL. METALLIC GLASS		200 1500 800	800 800 800		1? 1? 1?	PLANNED
TRIUMF	AL 6000 AL 6000 AL 6000	3 MM 3 MM 3 MM	100 100 100	450 450 450	50 100 350	30 30 30	OK ON INSPECTION WINDOW WORKS PLANNED

TABLE 3 WINDOWS, RADIATION DAMAGE TESTS

N. Watanabe

A Comment on Energy Deposition in the KENS Cold Moderator

We would like to revise the estimate that was reported at ICANS-IV of the energy deposition in the KENS solid methane moderator, as we have found our earlier measurements to be somewhat misleading. On checking these measurements we found that the position of the electrical heater used to simulate the nuclear heating was quite different from that anticipated and we have therefore since performed a new measurement without using this heater.

In this new measurement, the temperature of the moderator was monitored as a function of time after a sudden halt of the proton beam. The temperature was measured by a hydrogen vapour-pressure thermometer installed inside the moderator chamber. The thermal energy deposited by radiation was calculated from the measured rate of temperature decrease using known values for the heat capacity of the solid methane and the moderator vessel. The new value was found to be 1.2 Watt for a proton beam current of 1.3 μA. The moderator volume was 900 cm^3 (12 cm^W x 5 cm^T x 15 cm^H), and the distance between the target center and bottom of the moderator was 4.55 cm, Cd decoupled. The tungsten target was irradiated by 500 MeV protons. The average value of the nuclear heating is therefore 1 m Watt/cm^3,μA. The present result is thus in reasonable agreement with that of ANL if the differences in the target and moderator materials and the different coupling efficiencies of target-moderator systems are taken into account.