increases by a factor between 3 and 4. It is expected that such large variations of the cross sections for neutrons of very low energy will have a considerable bearing on the discussion of the dependence of the reproduction factor on the temperature of the pile. The details of these investigations are given in the reports of Zinn, Weil, Anderson and Marshall.

Exponential Piles

Mr. Morrison's group has completed the exponential piles for the test of the reproduction factor in the "W" lattice with and without water in the pile. A test has also been conducted to determine the effect of adding some small amount of boron in the water in order to obtain a direct measurement of the migration length of the neutrons in this lattice.

Cyclotron Group

The time of the Cyclotron Group has been primarily taken by irradiations for the Chemistry and Health groups. Besides this work an investigation has been conducted of the absorption cross section of argon and the comparison of the global decay curves of thorium and uranium fission products has been extended to a longer interval of time.