

A STUDY OF THE EFFECT OF THE 3.10-MEV STATE
OF F^{17} ON THE $O^{16}(p,\gamma)F^{17}$ REACTION

Thesis by

John J. Domingo

In Partial Fulfillment of the Requirements

For the Degree of
Doctor of Philosophy

California Institute of Technology

Pasadena, California

1963

ACKNOWLEDGMENTS

The author would like to express his gratitude to the staff of the Kellogg Radiation Laboratory for their assistance during the course of this work. He is especially indebted to Dr. Neil Tanner now of the Clarendon Laboratory, Oxford, England for suggesting the problem, and to Professor T. Lauritsen for his constant interest and guidance. The author would also like to thank Dr. T. Tombrello for providing the computer program for the computation of the capture matrix elements, and to Barbara Zimmerman for her help in the analysis of the experimental data. It is a pleasure to acknowledge the assistance of Mr. J. D. Pearson without whose unflinching aid during the weary months of accelerator maintenance this experiment could never have been brought to fruition.

The author is also grateful for the graduate fellowships received from the National Science Foundation and for the financial support of this research project by a joint program of the Office of Naval Research and the U.S. Atomic Energy Commission.

