

Table of Contents

Introduction	vii
1. Neutron Irradiation of Uranium, and Questionable Evidence for the Production of Element 93	1
<i>Laura Fermi, Atoms in the Family, Selections from Chapter 9, "Work"</i>	
<i>Enrico Fermi, "Possible Production of Elements of Atomic Number Higher than 92"</i>	
<i>Ida Noddack, "On Element 93"</i>	
2. Radiochemistry Experiments (1935-1939)	21
<i>O. Hahn and L. Meitner, "Concerning the Induced Transmutations of Uranium by Neutrons"</i>	
<i>O. Hahn and L. Meitner, "Concerning the Induced Transmutations of Uranium by Neutrons (2nd Communication)"</i>	
<i>O. Hahn and L. Meitner, "Some Further Observations Concerning the Induced Transmutation Products of Uranium"</i>	
<i>L. Meitner and O. Hahn, "New Transmutation Processes from Neutron Irradiation of Uranium"</i>	
<i>L. Meitner, O. Hahn, and F. Strassmann, "Concerning the Series of Transformations of Uranium which are Produced by Neutron Irradiation"</i>	
<i>O. Hahn, L. Meitner, and F. Strassmann, "A New Long-lived Radioactive Transmutation Product Belonging to the Transuranic Series"</i>	
<i>I. Curie and P. Savitch, "Concerning the Nature of the Radioactive Element with 3.5-Hour Half-Life, Formed from Uranium Irradiated by Neutrons"</i>	
<i>I. Curie and P. Savitch, "On the Radioelements Formed in Uranium Irradiated by Neutrons—Part II"</i>	
<i>O. Hahn and F. Strassmann, "Concerning the Creation of Radium Isotopes from Uranium by Irradiation with Fast and Slow Neutrons"</i>	
<i>O. Hahn and F. Strassmann, "Concerning the Existence of Alkaline Earth Metals Resulting from Neutron Irradiation of Uranium"</i>	

O. Hahn and F. Strassmann, "Verification of the Creation of Radioactive Barium Isotopes from Uranium and Thorium by Neutron Irradiation; Identification of Additional Radioactive Fragments from Uranium Fission"

3. Confirming the Fission Hypothesis (January to March, 1939) 49

L. Meitner and O. R. Frisch, "Disintegration of Uranium by Neutrons: A New Type of Nuclear Reaction"

O. R. Frisch, "Physical Evidence for the Division of Heavy Nuclei under Neutron Bombardment"

E. McMillan, "Radioactive Recoils from Uranium Activated by Neutrons"

D. R. Corson and R. L. Thornton, "Disintegration of Uranium"

P. Abelson, "Cleavage of the Uranium Nucleus"

N. Bohr, "Disintegration of Heavy Nuclei"

4. From Nuclear Fission to Chain Reaction (1939-1942) 67

E. T. Booth, J. R. Dunning, and F. G. Slack, "Energy Distribution of Uranium Fission Fragments"

H. Von Halban, F. Joliot, and L. Kowarski, "Liberation of Neutrons in the Nuclear Explosion of Uranium"

N. Feather, "Fission of Heavy Nuclei: A New Type of Nuclear Disintegration"

E. Segrè, "An Unsuccessful Search for Transuranic Elements"

E. Fermi, "Experimental Production of a Divergent Chain Reaction"

5. The Decision to Build and Use the Atomic Bomb 91

A. Einstein, Letter to President F. D. Roosevelt

The Franck Report, with an Introduction

A. H. Compton and F. Daniels, "A Poll of Scientists at Chicago, July, 1945"

"Alamagordo: Selections from an Interview with Brigadier General Thomas F. Farrell"

H. L. Stimson, "The Decision to Use the Atomic Bomb"

For Further Reading 114

On Scientific Developments

On the Works of Individual Scientists

Books on the American, German, and British Wartime Projects

Books on Post-war Developments

Index

