

## Table of Contents

Chapter 1 – Radiation Sources	1
Chapter 2 – Radiation Interaction Problems	3
Chapter 3 – Counting Statistics Problems	7
Chapter 4 – General Properties of Radiation Detectors Problems	21
Chapter 5 – Ionization Chamber Problems	30
Chapter 6 – Proportional Counter Problems	35
Chapter 7 – GM Counter Problems	38
Chapter 8 – Scintillation Detector Problems	40
Chapter 9 – PM Tube and PD Problems	45
Chapter 10 – Spectroscopy with Scintillator Problems	50
Chapter 11 – Semiconductor Diode Problems	54
Chapter 12 – Germanium Gamma-Ray Detector Problems	58
Chapter 13 – Other Semiconductor Devices	60
Chapter 14 – Slow Neutron Detectors	63
Chapter 15 – Fast Neutron Detectors	66
Chapter 16 – Pulse Processing and Shaping	69
Chapter 17 – Pulse Shaping, Counting, and Timing	71
Chapter 18 – Multichannel Pulse Analysis	76
Chapter 19 – Miscellaneous Detectors	80
Chapter 20 – Background and Detector Shielding	82