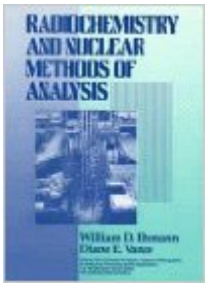
Radiochemistry And Nuclear Methods Of Analysis



Synopsis

From nuclear dating methods to nucleosynthesis in stars. it’s all here. The first practical, comprehensive guide to the science of radiochemistry. Radiochemistry and Nuclear Methods of Analysis is the first thorough and up-to-date look for the nonspecialist at the fundamentals of radiochemistry as well as the full range of advances currently made possible by the applications of radioactivity. Without an emphasis on high-level mathematics or abstruse theoretical physics, the book provides a clear, fundamentals-first look at radioactivity, the principles of radioactive decay, and nuclear reactions, as well as: * Modern radiochemical instrumentation * Nuclear dating methods * Methods for the production of radionuclides * The use of tracers and nuclear methods of analysis * The origin of the chemical elements * The biological effects of radiation The book’s user-friendly instructional format, designed for both beginning and advanced students, includes numerous end-of-chapter problems ranging from the simple to complex which familiarize the reader with equations and concepts in the text. References to recent monographs, available in most college and university libraries, provide direction to more specialized literature. Invaluable to both students and professionals in search of a practical grasp of the subject, Radiochemistry and Nuclear Methods of Analysis is a clear introduction to radioactivity and radionuclear chemistry’s principles, methods, and applications.

Book Information

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Customer Reviews

Radiochemistry and Nuclear Methods of Analysis is a book based on lectures on that subject. It has been written in a way that is understandable and easy to follow by the Chemistry or Physics student but also by the reader who has never been exposed to this subject before. It is well organized providing the reader information of the discovery of radioactivity and the contributions in this field, the concepts, the applications and the instrumentation used. The text is clear and concise. The text also provide additional reference for the reader who wants to continue reading more about a particular topic given that this book is a survey of the applications of radiochemistry. The tables, illustrations, graphs are easy to follow and the equations are well explained. This book is recommended for those who are interested in this area of Chemistr that usually is briefly mentioned during a General Chemistry course.

Although this text was written 1991 it still contains many relevant topics to the field of radiochemistry. Broad topics from nuclear dating methods to nucleosynthesis in star are covered. The text is written for the beginner or "non-specialist" within this field and provides a wide survey for the reader. There is not an emphasis on high-level mathematics or first principles of theoretical physics, the book does provides a clear, "first look" at radioactivity, the principles of radioactive decay, and nuclear reactions, as well as:* Modern radiochemical instrumentation* Nuclear dating methods* Methods for the production of radionuclides* The use of tracers and nuclear methods of analysis* The origin of the chemical elements* The biological effects of radiationIt could be said that although many of the areas addressed are redressed in other relevant texts of its kind, it still provides a useful addition to any serious scientist within the field of radiochemistry.

My favorite radiochemistry book. Just at the perfect level for an upper division class. Flexible enough to use for classes with varying focus.

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