Radiogenic and stable isotopes are used widely in the Earth Sciences to determine the ages of rocks, meteorites, and archeological objects, and as tracers to understand geological and environmental processes. Isotope methods determine the age of the Earth, help reconstruct the climates of the past, and explain the formation of the chemical elements in the Universe. This textbook provides a comprehensive introduction to both radiogenic and stable isotope techniques. An understanding of the basic principles of isotope geology is important across a wide range of sciences: geology, astronomy, paleontology, geophysics, climatology, archeology, and others.

Claude Allègre is one of the world's most respected and best-known geochemists, and this textbook has been developed from his many years of teaching and research experience.

Isotope Geology is an invaluable textbook for all undergraduate and graduate courses on the topic, and an excellent reference text for scientists. There are student problems at the end of each chapter, with solutions at the end of the book.

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CONTENTS

The color plates are situated between pages 220 and 221.