# RADIOISOTOPES AND THE AGE OF THE EARTH

# RESULTS OF A YOUNG-EARTH CREATIONIST RESEARCH INITIATIVE

Edited by

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#### Radioisotopes and the Age of the Earth Results of a Young-Earth Creationist Research Initiative

Published by Institute for Creation Research PO Box 2667 El Cajon, California 92021

Creation Research Society and 6801 N. Highway 89 Chino Valley, Arizona 86323

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First Printing 2005

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Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Library of Congress Control Number: 2005929150 ISBN 0-932766-81-1

Cover Design by Janell Robertson

#### Dedication

Scientists' wives need to be understanding. They must forgive the absent stare of a husband when he tries to solve an equation in his head while eating a candlelit dinner. They must endure enthusiastic descriptions of new scientific discoveries couched in foreign terms not even found in *Webster's Dictionary*. They must abide multiple stops at geological road cuts during family vacations to collect rock samples and fill suitcases with chunks of granite.

The wives of the RATE group were particularly understanding. They allowed us to travel to San Diego once a year to meet with our colleagues while they stayed at home and waited by the phone. They permitted us to spend hours on the Internet sending emails to one another. They encouraged us when we were depressed. They calmed us when we were overly optimistic. They provided the encouragement and balance we so desperately needed. We wish to dedicate this book to our wives who made it possible for us to practice our science to the best of our abilities. Thanks to all of you—the wives of the RATE group.

- Brenda Austin
- Mary Baumgardner
- · Janette Boyd
- Pamela Chaffin
- Sally DeYoung
- Bonita Humphreys
- Kym Snelling
- Jeannette Vardiman

We also wish to remember Jean, John Baumgardner's first wife, who went to be with the Lord part way through the RATE project. She touched our hearts deeply a few weeks before her death from cancer when she emailed us a beautiful testimony of her faith in the Lord and her confidence in seeing all of us in Glory. iv

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**The RATE Group** 

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*Middle row (left to right)*: Dr. Andrew A. Snelling, Dr. Steven A. Austin, Dr. Donald B. DeYoung

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#### John D. Morris, Ph.D.\*

Evolution and deep time go hand in hand. Eons of time are required to generate and accumulate rare beneficial mutations into the vast array of life we see today. Natural selection cannot produce them, it only selects from the various mutants present. As the late George Wald, former Harvard biology professor, has said:

Time is in fact the hero of the plot ... Given so much time, the "impossible" becomes possible, the possible probable, and the probable virtually certain. One has only to wait: time itself performs the miracles

(The origin of life, Scientific American, 191(2), p. 49, 1954).

It's as if time heals all wounds. Time shrouds all the problems of evolution from view. But, what if the eons of time are a myth?

The authors of this book are convinced that evolution does not happen today, did not happen in the past, and could not happen ever. In fact, the more time available, the more deterioration of the genome occurs, and extinction will prevail. In reality, time is the enemy of evolution, not its hero. But without deep time, evolution can't even be entertained.

Concepts speculating on the long ago past don't occupy the same tier of credibility as present day observations. The historical sciences may be legitimate exercises, but they are not the same as the science of observable processes.

For instance, we know how a clam lives, assimilates its food, moves around, reproduces and dies. Furthermore, we observe an impressive variety of clams, and in many cases we even know ancestral relationships among some of the varieties, for they developed in observable time. But what non-clam evolved into a clam in the unobserved past? How did it happen? These historical questions can't be answered with certainty

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in the present. How can we investigate the long-ago past?

Geology students are taught to approach a rock outcrop or laboratory experiment with multiple working hypotheses in mind. Predict the data expected from each hypothesis, and then put them to the test. Gather the data. Gather **all** the data. Then see which hypothesis is best supported by the data. That hypothesis is the one most likely correct.

But time questions differ from others. Lacking a time machine, we can't scientifically observe the past. Today we can only observe and test the remnants of past processes preserved in the present. Thus the past, especially the long-ago past, is inaccessible to science. Even so, deep time has achieved immunity from comparison to any other model. To many, the reality of immeasurably long ages has become such a dogma it never gets questioned at all. The investigator may try to fine tune a date—is the rock 1.35 or 1.37 billion years old?—but no totally different hypothesis merits consideration. Until now, that is.

In 1997 an eight year research initiative to investigate this very issue was launched. Entitled Radioisotopes and the Age of The Earth (RATE), and staffed by experts qualified in relevant fields, it attempted to test the validity of radioisotope dating of rocks, source of the main evidence for deep time. In the true spirit of multiple working hypotheses, these scientists determined to put the basic concept to the test. They determined to gather data heretofore ignored or censored by adherence to only one idea. They purposed to run experiments never before conceived. They demanded that the deep time way of thinking be put to the test, and results compared to the expectations of both old and young earth models. They were intent on seeing which of the two schools of thought was more likely correct.

It would be inaccurate to claim that the RATE scientists had no bias. All are dedicated Christians and all hold the Bible as correct in all its teachings, even in matters of science and history. They have become convinced that belief in the Bible is a reasonable position, well supported by facts and logic. While scientists often make pronouncements contrary to Scripture, no verified fact of science contradicts any of its teachings, even as it relates to the unobserved past. The Bible doesn't give all the details, but it does provide the overall framework within which historical and scientific data can be interpreted in a robust and intellectually satisfying manner.

The concept of biased scientists may come as a surprise to some, but in reality all investigators have a bias before starting their studies and all experiments are chosen and conducted within that bias. One's thinking can be dominated by generally uniform processes over long ages or by rapid and catastrophic processes over a comparatively short timescale. Since all scientists are locked into the present, studying data and running experiments in the present, limited by their present knowledge, skills and logic, accurately reconstructing the past is virtually impossible. Without a guide, without the big picture provided by a capable and reliable observer of the past, we will all fall short of absolute truth. The RATE scientists are convinced that the Bible's picture of the past is the proper one to inform our present investigation.

The Bible tells of an orderly progression of six 24-hour days only thousands of years ago during which all things were created. Each step was necessary before the next until the earth was fully prepared for animal life and finally man. The oceans, the atmosphere, the continents, the plants, the Sun, Moon, and stars, the animals—each formed by creative processes quite unlike processes of today—each in its place and each accomplishing its purpose. Finally, with man as its steward, it was all "very good" (Genesis 1:31) from the Creator's perspective. But man then chose to reject God's authority over him, immediately precipitating the ruination of creation, followed by a world-restructuring flood in Noah's day. Today we live and do our science in the cursed, flooded, remnant of a once "very good" world, making historical investigations difficult.

If we deny the historicity of these great world-changing events, we have little chance of discerning earth's true past. Without the certainty of a fully-functional earth created by God in the beginning, we might misinterpret that functional maturity for age. Without factoring the great Flood into our thinking, we might assign great time spans to things formed very rapidly in that high energy environment. If we limit our thinking to the processes happening today, at only the rates, scales and intensities we observe today, we cannot arrive at the truth about the earth's past and how it came to be in the state it is in today. With the Bible's big picture as our framework, we have a chance of properly reconstructing the earth's history and understanding its present condition.

During the first three years of the RATE initiative radioisotope dating methods and theory were put to the test. The results of those methods were shown to be discordant, inconclusive and sometimes bizarre. Only by selective reporting of the results, and blind adherence to the underlying unprovable assumptions involved, do they even appear to point in the direction of deep time. In short, it was conclusively shown that the radioisotope dating methods do not unequivocally yield the accurate ages of the items tested. But they were doing something. What were they really showing? Is there a better understanding of them which can replace the failed one? The RATE book published after the first three years revealed the questionable state of the radioisotope dating methods and proposed experiments which could shed some light in the darkness.

The next five years were occupied by conducting those experiments and analyzing the data and theory. This book presents the results. Of course, not every question was asked, thus much more remains to be done. But every investigation attempted yielded a positive result for the Creation/Flood/young earth model. Numerous other investigations were suggested.

Does this work prove the young earth model? Of course not, as no historical reconstruction can be fully proved. But it does show that of the two viewpoints the young earth model is better supported and more consistent with **all** the radioisotope evidence.

Thus this book opens a new chapter in the origins controversy. As never before it calls into question the deep time model and places the Biblically compatible young earth model on a level of scholarship never before achieved and archived. Its pages contain many profound thoughts, which will shake current scientific orthodoxy to its core. It deserves careful consideration by all who value truth.

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#### Acknowledgments

In the acknowledgments to the first RATE book, **Radioisotopes** and the Age of the Earth: A Young-Earth Creationist Research Initiative, the RATE group expressed the following hopes:

Over the next five years we hope to answer some of the questions which have been raised in this book. At a minimum, we hope to advance our understanding about the age of the earth and possibly resolve the apparent dilemma regarding radioisotopes. We request your continued prayers on our behalf.

This book reports on the findings of the five-year research effort to answer a series of questions about the age of the earth. It is obvious that the supporters of this project have prayed and the Lord has fulfilled the hopes expressed far above our expectations. Not only were the financial needs for this research fully met but the scientists involved in this work were inspired to new heights of creativity and accomplishment. We were provided answers to most of the questions raised in the first book and we made incredible progress toward answering others. The evidence which came from our experimental and theoretical work thrilled us time and again as we reported to one another at our annual meetings. It was exciting being part of a project which honors the Lord and discovers new information about how His world operates. We want to thank our Creator God for all that He has provided and done in making the RATE project possible and in giving us the answers we were seeking.

The RATE group would like to thank the Institute for Creation Research (ICR) and the Creation Research Society (CRS) for supporting and publishing this work. We recognize that some of the statements we have made may not necessarily represent the positions or viewpoints of ICR or CRS. Thank you to Dr. John Morris for his encouragement and support for this effort. Although Dr. Don DeYoung is part of the RATE group, we wish to thank him for his extra work in writing the "Lay Translation" of the RATE book and coordinating with CRS. Thank you to Dr. Kenneth Cumming, Mr. Don Rohrer, and Mr. Mark Rasche and the staff of ICR for all their support and help behind the scenes. Thank you to ICR for the investment of about \$250,000 of indirect costs over and above the direct donations received. Thank you to The Master's College for allowing Dr. Steven Boyd to participate in the RATE project. Thank you to Bill Hoesch for his work as field geologist and laboratory technician in collecting and preparing many of the rock samples. Thank you to Mark Armitage for his help in the work on radiohalos and for contributing photomicrographs of zircons from his electron microscope and of some radiohalos from his optical microscopes. And, we thank Laurel Hemmings for her diligence and accuracy in typesetting this book

Thank you to over 400 donors who supported this project with their prayers and finances. We believe your funds (over \$1 million) were wisely and carefully spent in the service of the Lord. We were amazed as time after time the necessary funds arrived just as they were needed. Over forty technical reviewers read and commented on this book. Our reviewers were very busy people who served us well by providing thorough and helpful reviews that improved the presentation of the research results. In accordance with our policy to maintain the identity of our reviewers in confidence, in contrast to releasing them in our first book, we have chosen not to reveal their names here. However, you and the Lord know who you are. Thank you.