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Man and Nature in  
the Renaissance

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# Man and Nature in the Renaissance

A L L E N G . D E B U S

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*To my mother and father*

## Contents

Preface	<i>page</i> ix
I Tradition and Reform	1
II The Chemical Key	16
III The Study of Nature in a Changing World	34
IV The Study of Man	54
V A New World System	74
VI New Methods and a New Science	101
VII The New Philosophy – A Chemical Debate	116
VIII Epilogue and Indecision	131
Suggestions for Further Reading	142
Sources of Quotations	153
Index	155

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[More information](#)

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## Preface

No period in scientific history has been studied in greater detail than the Scientific Revolution, and yet it remains an enigma even as to its chronological limits. Some speak of a three-hundred-year time span stretching from 1500 to 1800 whereas others consider only the dramatic developments of the seventeenth century. The relation of the Renaissance to the Scientific Revolution is a crucial factor in any such dating, but in this volume we will speak of a scientific Renaissance dating roughly from the mid-fifteenth through the mid-seventeenth centuries. In this time span we will be able to follow the long-lasting and varied effects of humanism on medicine and the sciences and note also the continuing debate over a mystical view of nature espoused enthusiastically by alchemists and Hermeticists alike.

A work on Renaissance science might draw from many sources and it surely could reflect many viewpoints. It is frequently approached in terms of the progress of the exact sciences of mathematics and astronomy. Such studies in the past have generally paid little attention to the broader social and intellectual context of the period. Those authors who have emphasized the latter frequently downplay the importance of the technical scientific developments. In this volume our approach will be traditional in emphasizing the actual science of the period, but there will be frequent references to religion and to philosophical concepts that play little part in the science of the twentieth century. Thus we intend to discuss at some length the impact of alchemy and chemistry on the development of modern science and medicine, as these subjects have not yet been properly integrated into accounts of the scientific revolution. In fact the chemical debates of the early modern period generated more polemical literature than did those related to astronomy and the physics of motion. Because of this we must give

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[More information](#)

## X MAN AND NATURE IN THE RENAISSANCE

proper attention to these debates as well as to those that lead more directly to Galileo – and eventually, to Isaac Newton's *Principia mathematica*.

Certainly no attempt has been made here to present an exhaustive study of the period from 1450 to 1650. This is a volume in a series aimed at the student in Western civilization and our goal has been to produce a general survey, examining a number of key problems and themes. Our attention will be directed most frequently to the impact of humanism on the sciences, the search for a new method of science, and the continued dialogue between the proponents of a mystical-occult world view and those who sought a new kind of mathematical-observational approach to nature.

The author is particularly grateful to the Newberry Library and the National Endowment for the Humanities for making it possible to complete this work in Chicago during the year 1975–1976 as the first step toward a more detailed treatment of the subject. The holdings of the Newberry Library are particularly valuable for the student of all aspects of Renaissance intellectual history, and William Towner, Richard H. Brown, and John Tedeschi have always been helpful in my quest for books, information, and such a variety of assistance that it would be hopeless to try to be more specific. The University of Chicago allowed me to take a leave of absence for the year – and, as always, I have received generous support from the Morris Fishbein Center for the Study of the History of Science and Medicine. Both editors of this series, George Basalla of the University of Delaware and William Coleman of the University of Wisconsin, have made helpful suggestions and the author acknowledges a special debt to William R. Shea of McGill University for the valuable comments he made on the first draft of this manuscript. In the final stages of preparation John Cornell and Russell H. Hvolbek prepared the index and read the text with care.

*Deerfield, Illinois*  
*May 1978*

*Allen G. Debus*