

83.5.25 99

吴仲强 主编

中国当代 自然科学 人物总传

湖南人民出版社



★
第四卷

吴仲强 主编

中国当代

自然科学

人物总传

湖南人民出版社

责任编辑：何新波

特约编辑：黄治正

装帧设计：贺 旭

中国当代自然科学人物总传

(第四卷)

主编：吴祖强

*

湖南人民出版社出版、发行

(长沙市银盆南路 78 号) 邮编：410006

湖南省新华书店经销 湖南省新华印刷三厂印刷

1998 年 12 月第 1 版第 1 次印刷

开本：850×1168 1/32 印张：23.75

字数：543,000 印数：1—1,300

ISBN 7-5438-1936-8

N·8 定价：36.50 元

《中国当代自然科学人物总传》

第四卷编辑委员会

主 编 吴仲强

副主编 尹恺德 王尚义 罗诗裕 蔡林书 严 峻

编 委 (按姓氏笔画为序)

李 科 李庆扬 李洪福 吴国全 吴望一 陈章良
范国华 孟广均 姚天白 黄治正 黄俊贵 景才瑞
雍桂良

《中国当代自然科学人物总传》第四卷编纂人员

总 纂 吴仲强

副总纂 郑晓华 何重兴 戴孝庆 刘忠朝 胡 仪

编 纂 王守炳 王继英 王大观 王成清 王俊德 王留师

吴仁敏 吴文奎 吴忠厚 吴宗荣 刘希澜 刘延章

朱晴方 李红梅 李景峰 陈 斌 张 驰 张惠惠

杨 洁 肖焕忠 梁灿云 汪育才 孔棣华 夏国栋

敖茂英 曹殿举 黄国昌 黄晓蕾 黄晓阳 黄海龙

黄健生 鲁忠明 温新莲 谢俊贵 姚庆黎

《中国当代自然科学人物总传》第四卷顾问

吴英恺 中国科学院学部委员，中国协和医科大学教授，《中华外科杂志》主编，国际外科学会中国代表副会长，世界卫生组织心血管病专家委员会委员，著名医学家

内 容 提 要

《中国当代自然科学人物总传》既是一部自然科学综合性人物传记著作，又是一部自然科学学术史著作。入传对象为中国当代自然科学领域具有学术贡献的高级知识分子。是我国第一部完整、系统、全面地记载中华人民共和国成立以来在自然科学界作出学术贡献的专家学者的总传。客观地记叙了入传学者的主要学术活动、学术思想和学术贡献。具有学术性强、信息量大、知识覆盖面宽等特点。

全书分 10 卷出版，各卷所含学科基本相同，入传人不同。本书为第四卷，共收入 601 位专家学者的传记。其中有杰出的或著名的科学家——中国科学院学部委员 81 名。按姓氏笔画为序，他们是：

数学家：王元、王湘浩、冯康、华罗庚、关肇直、江泽涵、许宝騄、苏步青、杨乐、吴文俊、谷超豪、陆启铿、陈建功、胡世华、柯召、段学复、姜伯驹、郭仲衡；

物理学家：于敏、王承书、方守贤、卢鹤绂、叶企孙、庄逢甘、冯端、朱洪元、严济慈、李正武、李林（女）、李荫远、肖健、吴式枢、吴有训、何泽慧（女）、何祚庥、汪德昭、沈元、张文裕、张宗燧、陆学善、陈彪、林同骥、金建中、周光召、周同庆、周培源、赵忠尧、赵忠贤、胡宁、胡济民、施汝为、钱三强、钱伟长、钱学森、钱临照、龚祖同；

化学家：江元生、赵玉芬（女）；

天文学、地球科学家：王绶琯、叶叔华、曲钦岳、刘宝珺、孙大中、李德生、张钰哲、苗永瑞；

生物学家：马世骏、方心芳、张新时、施立明、翟中和；

医学家：马文昭、陈可冀、黄家驷；

农学家：丁颖；

工业技术科学家：王启明、王选、孙钧、汪耕、欧阳予、蔡睿贤。

这里，有一批老一辈的科学家，如：著名应用力学、喷气推进与航天技术、工程控制论、物理力学、系统工程、系统科学家，我国国家杰出贡献科学家，世界级科学与工程名人，我国一级英雄模范奖章获得者钱学森；世界杰出原子核物理学家、我国原子能科学事业创始人钱三强；国际著名代数学、数论、多复变函数论、统筹学、优选学家华罗庚；等等。同时也有一批很有造诣的中青年科学家，如现年仅 44 岁的著名女化学家赵玉芬等等。

除上述学部委员外，本卷还收入了一大批国务院学位委员会委员、国务院学位委员会学科评议组成员、国家级专家、博士生导师、一二级教授的学术传记。

《中国当代自然科学人物总传》的读者对象是：自然科学管理人员和研究人员，各类工程技术人员，大学有关学科师生，中专、中技、高中有关教师，以及广大自然科学求知者和爱好者。还可供各级各类图书馆、科技信息情报机构、档案馆重点收藏。

总 序

主编《中国当代自然科学人物总传》一书的想法，我在华中师范大学图书情报学系图书情报学专业读书的时候，就产生了。当时，除了完成学业之外，还担任了该校的校系学生负责干部和华中师范大学《大学生学报》杂志主编。可想而知，时间于我，便是“一寸光阴一寸金”了。同时，从学术水平来看，一个大学生，要主编这部书，也是很难的。所以，一直到大学毕业，离开武汉，也没有着手去做这件事。这是后话，又是历史。

光阴似箭，日月如梭。承蒙专家、学者们的厚爱，经过编者两年来的努力，现在，《中国当代自然科学人物总传》第一卷终于编辑完毕，即将出版了，本人有如释重负之感，借此机会，说几句话。

中华人民共和国诞生至今年已有四十个春秋。四十年来，我国自然科学界涌现出了一大批专家、学者。这些专家、学者，凭着冀民族兴旺、望祖国富强的赤子之心，在自然科学各个领域里进行了顽强的拼搏，他们中绝大多数人，始终探索真理、追求光明，“堂堂正正地做人，老老实实在地做学问”；他们为我国乃至全人类的发展与进步起到了巨大的推动作用；他们创造的成果既是本民族文化的瑰宝，又是人类智慧的结晶。因此，他们既是人类智慧的代表，又是中华民族的骄傲。在中国九百六十万平方公里的土地上，如果离开了这些人，离开了这些人的辛勤劳动，要想

民族兴旺、国家富强，是不可能的。正因为如此，邓小平同志才提出科学技术是第一生产力，并强调要依靠知识分子。实际上，这是对历史走向的一种马克思主义的观察和总结。

世界，是人创造的，是人的世界；人，是一切价值的尺度。人的问题是当代哲学研究的重要论题。是否研究人、关心人，这是当代哲学是否具有影响力、感召力和生命力的最根本的原因之一。因此，编写本书的目的之一除了传播文化、传播科学，为知识分子树碑立传外，也是为了给今人、后人深入研究入传人物提供史实依据。同时，为当代中国有学术贡献的高级知识分子立传，也是历史赋予我们这一代人的神圣使命。

上述看法，便是我所以主编《中国当代自然科学人物总传》一书的理由。

这里，我想就入传人的选择标准、也就是如何衡量和确定“人物”的问题，谈谈认识：所谓自然科学人物，是指在自然科学某一学科领域具有一定学术贡献的人。那么，一定学术贡献的衡量标准是什么？我认为，可以用一些客观的标准去衡量，诸如论文、专著的数量，获奖情况；学术界赋予的各种荣誉职务；国家授予的各种称号等等。通过这些客观标准的衡量，一般说来，是可以确定入传的“人物”的。当然，这里所提的客观标准也不一定构成完全科学的“入选标准”，例如论文、专著的量的多产并不一定是质的优产，等等。在这种情况下，编者就不得不用自己的判断力以作评价定取舍了，其中也就不可避免地会出现主观臆断的情况。但总的说来，本书还是以学术贡献的大小量人取人，严格编审，客观地反映当代中国高级知识分子生平、学术活动、学术思想及学术成就。读者通过本书可以看到专家、学者们在科学技术上对祖国的贡献。值得提出的是，我国人口众多，人才济济，以其学力事功足以入传者颇多，自然，各卷当陆续选入。

在入传的人物中，有的已经是科学家、甚至是海内外著名的科学家；有的即将跨入科学家的行列；有的虽然不是科学家，也可能终生进不了科学家的行列，但他们确实为祖国、为人类的科学研究事业作出了不可磨灭的贡献，他们入传是无愧于前人、今人和后人的。

本书的主要特点在于它的学术性、真实性和检索性。所以有学术性，是因为它客观地记载了入传人的主要学术活动、学术思想和学术论著；所以有真实性，是因为入传人的传略，健在者主要由本人提供（已故者主要由亲属、助手提供），所在单位一般还提供了证明；所以有检索性，是因为每篇传略字数不多，且编有学科分类目录和人名索引，这样，既可以按学科内容查找，又可以按姓氏笔画查找，实际上，它也是一部有用的工具书。

本书的出版，得到了湖南人民出版社编审黄治正同志的鼎力相助，得到了各位编委及各位入传学者的通力合作。在此，表示由衷的谢意！

如果本书入传人的学术思想、学术道路有助于启迪历史的后继者于万一，我将感到无比的宽慰；如果书中存在某些缺点、错误的话，望海内外贤达不吝赐教。

1989年5月15日于重庆渝州路132号

吴仲强

Preface

I have been thinkihg of editing a book of Who's Who in Natural Sciences in Contemporary China ever sinec I majored in library and information in the Department of Library and Informa tion Sciences of Central China Teachers University. In addition to my regular studies at that time I did some work for my fellow students in my department as well as in my university and at the same time served as the editor of Students Journal of Central China Teachers University. You can imagine how precious time was to me. Moreover , it was not an easy job for a college student to edit such a book judging fsom the academic level. That is why I did not start editing the book until I left Wuhan after my graduation. This is only a belated statement and history too.

How time flies .Thanks to the kindness of some specialists and scholars and with the efforts of the compilers in the past nearly two years, the first volume of Who's Who in Natural Sciences in Contemporary China has now been compiled and will be published. So I feel as if relieved of a heavy load. I would like to take this opportunity to say a few words.

Forty years have passed from October 1, 1949, the birthday

of the People's Republic of China, to October 1, this year. In the forty years large numbers of specialists and scholars in natural sciences have emerged in China. Cherishing a patriotic feeling of hoping to make our nation prosperous and our country powerful these specialists and scholars have gone all out in every field of natural sciences determinedly. In most cases theirs is a weather beaten, truth-seeking and light-pursuing life. a life in which "they have conducted themselves openheartedly and engaged in scholarship honestly". They have greatly promoted the development and progress of the whole human race as well as of our nation. Their achievements in scientific research are the treasure of their national culture and the fruit of human wisdom. Therefore they are both the representatives of human wisdom and the pride of the Chinese nation. It is impossible for us to make our nation prosperous and our country powerful without them and their hard work in China, a land of 9.6 million square kilometres. Precisely because of this Comrade Deng Xiaoping advocates that science and technology are the primary productive forces and points out emphatically that we must rely on the intellectuals. This is actually a Marxist view to historical trend.

The world was created by man and in the world of man. Man is the measure of all the values. The issue of man is the important issue of present-day philosophy. Whether man is studied and cared for or not is one of the most cardinal reasons of whether present-day philosophy is influential, inspiring and vital. Therefore, one of the aims of compiling this book is not only to spread culture and science and to build up the public image for the

intellectuals, but also to provide historical basis for the people chosen as entries in the book so that the people of our era and later generations can make a thorough study of them. Furthermore, It is also a sacred task entrusted to us by history to build up the public image for the senior intellectuals with scholastic attainments.

What is mentioned above is the reason why I wanted to edit the book Who's Who in Natural Sciences in Contemporary China.

Now, I would like to say something about the criteria of choosing the entries, that is how to judge and select the "figures". By the figures in natural sciences we mean those who have made certain scholastic contributions in a certain branch of learning in natural sciences. What are the criteria of certain scholastic contributions then? I believe we can judge them with objective criteria, such as the quantity of their academic theses and monographs or whether they have won any prize and all kinds of honourable duties vested by the academic circles, the posts they hold in the learned society and various titles conferred by the state. Generally speaking, the "figures" may be chosen as entries in the book after the judgement with these criteria. Naturally, what is called objective criteria here is not necessarily the complete scientific criteria in choosing the entries. For example, the large quantity of the academic theses and monographs does not mean high quality. In such case the compilers have to exercise their judgement so as to make evolution and choice, in which there would be inevitably subjective assumption. But on the

whole, on the basis of choosing figures by their academic contributions and after strict reading and editing, this book is the works of academic history that objectively mirrors the life, academic activities, scholastic thinking and attainments of the senior intellectuals in contemporary China. By reading this book the readers can come to see the fact that the specialists and scholars have made great contributions to their motherland in science and technology. What is worth mentioning is that people whose academic attainments, dedication and contributions are sufficient to be written in this book will be surely chosen in every volume one after another, since China has a large population and a galaxy of talent.

Some of the figures who have been chosen as entries in this book are already scientists well-known at home and abroad. Others will join the rank of scientists. Still others have really made indelible contributions to their motherland and to the cause of human scientific research, although they are not yet scientists and are not likely to step into the ranks of scientists. They are called "figures" who worth the names given by the predecessors of our era and the coming generations.

The distinguishing feature of this book lies in its learnedness, truthfulness and retrievability. The reason why there is learnedness in the book is that we have objectively recorded the major academic activities, academic thinking and treatises of those who are chosen as entries. The reason why there is truthfulness in it is that the brief biographies of those in the book are provided mainly by those who are still living and in good

health, or by their relatives or assistants if they are dead. In both cases their units have also given proof for them. The reason why there is retrievability is that there are not so many words in every brief biography and there are classified catalogue of subjects and name index. So you may consult it according to either subjects or the number of strokes of the surnames. In fact it is also a full-length reference book.

I am extremely grateful to Mr Huang Zhizheng, the senior editor and president of Hunan Publishing House, for his great help on the publication of this book.

I am especially appreciative of the full cooperation of the members of the editorial board and the scholars chosen as entries.

I would like to say that I shall feel very much pleased if the successors in history would be enlightened by the academic thinking and the way of learning of those who have been chosen as entries in the book. If there are some shortcomings and mistakes in the book, I hope that the prominent scholars at home and abroad will not stint their criticism.

Wu Zhong qiang
132 Yuzhou Road
Chongqing, China
May 15, 1989

编辑说明

一、《中国当代自然科学人物总传》是一部连续出版的多卷书（拟出10卷），一部自然科学综合性人物总传。是自然科学研究人员、大学师生和自然科学爱好者阅读的学术史著作和人物传记著作。

二、编辑本书的目的是为自然科学战线上努力进取、奋力拼搏的高级知识分子树碑立传，促进自然科学的发展，给后人留下一份珍贵的学术史料。

三、本书拟收中国（含台湾、香港、澳门地区）当代自然科学各学科领域中有一定学术贡献的人物传略。学科领域包括：（1）自然科学总论（含系统学、科技情报学）；（2）数学；（3）力学；（4）物理学；（5）化学；（6）天文学；（7）测绘学；（8）地球物理学；（9）气象学；（10）地质学；（11）海洋学；（12）自然地理学；（13）生物学（含人类学）；（14）医学、药学、卫生学；（15）农业科学；（16）工业技术（含矿业、石油、天然气、冶金、金属、机械、仪表、武器、动力、原子能、电工、无线电电讯、自动化、计算、化工、轻工、手工、建筑、水利等工业技术）；（17）交通运输；（18）航空、航天科学；（19）环境科学；（20）自然科学新兴学科、交叉学科、边缘学科等各门学科。欢迎上述学科从事教学工作、研究工作并具有一定学术贡献的高级知识分子将其自传或为已故者（1949年10月1日后已故

者)撰写的传略惠寄给《中国当代自然科学人物总传》编辑委员会(重庆渝州路132号,邮政编码630041)。《传略》稿文责自负。《传略》内容包括:简历、学术贡献、治学经验等。本《传略》既不像一般传记著作那样洋洋数千言,甚至上万言,也不像有的辞典、名录那样,只有一两百字,而是介于两者之间。

四、本书按收稿先后分卷出版,各卷内按学科先后顺序排列(学科先后顺序以《中国图书馆图书分类法》为分类依据),各学科内再以姓氏笔画为序。为方便读者检索,书后附有人名索引。

五、本书的征稿、编辑工作,得到有关高等学校、科研机构、出版单位及广大专家、学者的热情支持,在此一并致谢。

由于我们水平有限,编辑工作中的错误在所难免,敬请专家、学者和读者指正。

《中国当代自然科学人物总传》编辑委员会

1989年3月10日

Note to the Readers

1. Who's who in Natural Sciences in Contemporary China will be published in succession in 10 Volumes. This work is the valuable material for academic research and the favorite reading to natural researchers, college teachers and students, and those who are fond of natural science.

2. Our intention to compile the work is to glorify the hard working and selflessly-rendering higher intellectuals who have been keeping forging ahead in the fields of natural science, to bring about an advance in natural science, and to leave for the later generations some precious historical materials.

3. Concoluted in the work are biographies of those who have made academic contributions in the subjects of contemporary natural science in China (including Taiwan, Hongkong and Macao). Subjects in this field are general theory of natural science (including systematic philosophy, information of science and technology); mathamatics; mechanics; physics; chemistry; asronology; survey and drawing; geophysics; meteorology; geology; oceanology; physical geography; biology (including anthropology); medical science; materia medica; hygienics; agricultural science; industrial technology (including