序

时间过得真快。自1985年春，开始承担石油工业部的重点科研任务，渡江开展南方的岩相古地理研究及编图以来，5个年头已经过去了。头两年，即1985—1986年，主要是对下扬子地区中下三叠统青龙群进行岩相古地理研究及编图，《下扬子地区中下三叠统青龙群岩相古地理研究》这一专著就是这一阶段的研究成果的最终总结。后三年，即1987—1989年，又开展中下扬子地区二叠系及三叠系的岩相古地理研究及编图。现在，这一阶段的任务已经完成，本书《中下扬子地区二叠纪岩相古地理》就是这一阶段最终研究成果的一部分。和前一阶段一样，这一研究成果是在石油天然气总公司和我校的领导和支持下，和众多的协作单位的同志们以及我的学生们一起，志同道合，风雨同舟，共同奋战而取得的。在本书即将出版之际，我对他们，特别是总公司科技发展部及我校科研处的领导，本课题组领导小组成员王英华教授、李尚武高级工程师、刘焕杰教授、毕仲其副研究员、谌建国副研究员，各基干剖面及地层专题组的负责人徐安武副研究员、彭德堂讲师、陈家怀副研究员、杨振强副研究员、刘岭山高级工程师、刘国荣教授、覃兆松高级工程师、黄明康副教授、郭柏英副教授、齐敦伦高级工程师、龚祖兴工程师、叶舟工程师、罗璋高级工程师、迟元苓讲师、陈华成副研究员、柳祖汉副教授等，充满着感谢之情。

本书由两部分组成。

第一部分是“中下扬子地区二叠纪岩相古地理研究”，是本书的主要部分，主要是我和我的两位学生，何幼斌和吴胜和，共同完成的。他们两人，以事业为重，从高从严，顽强拼搏，精心钻研，开拓创新，为本项研究任务的彻底完成和本书的最终定稿出了大力，立了大功。他们风华正茂，前程无量。祝他们激流勇进，为我们伟大祖国的石油天然气勘探事业再立新功。

本书的第二部分是专题研究和基干剖面研究，包括一篇地层学的专题研究总结和12篇基干剖面的研究成果，主要是我的协作者之作。这些论文在此一同发表，既是他们对我的继续支持，也是我们合作共事友谊的留念。青山不老，祝我们之间的友谊长存。

从今年开始，在石油天然气总公司的继续支持下，整个南方二叠系及三叠系的岩相古地理研究及编图的任务又开始了。这是渡江后的第三个战役。拟再花四年时间，即从今年开始，到1993年底，继续采用“八项原则”，即以沉积学的理论为指导，以“单因素分析综合作图法”为方法论即技术路线，以自己实测的基干剖面为立脚点，以定量化的图件为主，以中比例尺的图件为主，以地台区为主，以碳酸盐岩地层为主，以找油气为主要目的，把我国南方，即西自“三江”，东至东海，北自秦岭，南至南海，包括川、滇、黔、桂、粤、湘、鄂、赣、皖、浙、闽、苏、沪等十三个省市自治区的广大地区的二叠纪和三叠纪的岩相古地理图编制出来，像对华北地台早古生代岩相古地理研究和编图一样，在南方也建立起一个岩相古地理研究及编图的样板，从而为南方的油气和其它沉积矿产的预测和勘探，提供科学的依据，进一步发挥促进和指导作用。

南方“五叠”好战场！这一战役正在逐步展开，我的学生们和战友们正在那里冲锋陷阵。我相信，到1993年底，一定会胜利完成任务。到那时，将有新的专著问世，再和广大读者共享这些新的成果。

冯增昭

1990年10月　于石油大学（北京）

PREFACE

How fast the time goes! Five years have passed since we started to undertake the key task of scientific research of Petroleum Industry Ministry, and crossed Yangtze River to carry on the lithofacies paleogeographical study and mapping of South China in the spring of 1985. During the preceding two years, i. e. 1985—1986, we principally conducted the lithofacies paleogeographical study and mapping of Qinglong Group of Middle to Lower Triassic of Lower Yangtze Region. The treatise, «Study on Lithofacies Paleogeography of Qinglong Group of Lower-Middle Triassic in the Lower Yangtze River Region», was the final summarization of research results in this stage. During the latter three years, i. e. 1987—1989, we carried out the lithofacies Paleogeographical study and mapping of Permian and Triassic of Middle and Lower Yangtze Region. Now the task of this stage has been accomplished and this book, «Lithofacies Paleogeography of Permian of Middle and Lower Yangtze Region», is a part of the final research reseults. The same as the former stage, this research result was obtainned under the leadership and support of Petroleum Industry Ministry and our University, with many comrades of cooperating units and my students, having common goal, in the same boat regardless of rain and wind, fighting bravely. At the time this book is to be published, I would like to express my heartful thanks to them, particularly to the leaders of Science Technology Department of Petroleum Industry Ministry and Science Research Unit of our University, the members of Leadership Commitee of the project, i. e. Prof. Wang Yinghua, Senior Engineer Li Shangwu, Prof. Liu Huanjie, Associate Fellow Bi Zhongqi, Associate Fellow Chen Jianguo, and the principals of each primary section and special group on stratigraphy, i.e. Associate Fellow Xu Anwu, Lecturer Peng Detang, Associate Fellow Chen Jiahuai, Associate Fellow Yang Zhenqiang, Senior Engineer Liu Lingshan, Prof. Liu Guorong, Senior Engineer Qin Zhaosong, Associate Prof. Huang Mingkang, Associate Prof. Guo Baiying, Senior Engineer Qi Dunlun, Engineer Gong Zuxing, Engineer Ye Zhou, Senior Engineer Luo Zhang, Lecturer Chi Yuanling, Associate Fellow Chen Huacheng, Associate Prof. Liu Zuhan, etc.

This book consists of two parts.

Part I, "Lithofacies paleogeography of Permian of Middle and Lower Yangtze Region", is the principal part of this book. It is mainly completed by me and two students of mine, He Youbin and Wu Shenghe. They two have been putting the work on first position, fighting tenaciously, studying meticulously, opening out and bringing forth new ideas. They put forth great strength and made great contributions to the perfect accomplishment of the research task and the finalization of this book. They are at life's

full flowering and have boundless prospects. May they march boldly forward against the rapids to make new contributions to the oil and gas exploration of our great country.

Part Ⅱ of this book is"specific research and study of primary sections", including one paper about specific research summary on stratigraphy and 12 papers about research results of primary sections, which is mostly writen by my cooperators. The co-publication of these papers is their continuous support to me as well as the memorial of our friendship for cooperating and working together. I wish the friendship between us would live forever, like the green hills always young.

From this year, under the continuous support of Petroleum Industry Ministry, the task about lithofacies paleogeographical study and mapping of Permian and Triassic of the South China is to be initiated. This is third campaign after crossing Yangtze River. We plan to spend another four years, i. e. from this year to the end of 1993, continuously adopting "Eight Principles", (i. e., the guidance is sedimentological theories, the methodology or technical line is "Single Factor Analysis and Comprehensive Mapping Method", the foothold is on primary sections measured by ourselves, the maps are mainly quantitative, the maps are mainly medium scale, the object of study is mainly platform regions, the object of study is mainly carbonate rocks strata, the principal goal is to look for oil and gas), to compile the lithofacies paleogeographical maps of Permian and Triassic of South China, i. e. the huge area that is from "Three Rivers" in the west to the East Sea in the east, from the Qinling Mountains in the north to the South Sea in the south, including thirteen provinces, municipalities and autonomous regions, i. e. Sichuan, Yunnan, Guizhou, Guangxi, Guangdong, Hunan, Hubei, Jiangxi, Anhui, Zhejiang, Fujian, Jiangsu and Shanghai. We will establish another model for the lithofacies paleogeographical study and mapping in South China, like we did in Early Paleozoic of North China Platform, so as to provide scientific evidence, to further give promoting and guiding play to the forecast and exploration of oil and gas and other sedimentary ore deposits in South China.

What a good theatre the Permian and Triassic in South China is ! This campaign is now unfolding step by step. My students and comrades-in-arms are charging forward there. I am sure the task would be successfully carried out by the end of 1993. Then some new treatises will come out. I would like to share these new fruits together with the reading public atthat time.

Feng Zengzhao
University of Petroleum (Beijing)
October, 1990