



刘洛夫简介

刘洛夫，男，广东台山人，1958年11月生。博士、教授、博士生导师，中国石油大学（北京）地球科学学院党委书记、教学指导委员会主任、中国石油大学（北京）品牌课教师、《古地理学报》编委会委员、《Petroleum Science》编委会委员、河北省资源勘测研究重点实验室学术委员会委员、教育部科技查新工作站咨询专家。1982年毕业于江汉石油学院勘探系，获工学学士；1985年在中国科学院兰州地质研究所获理学硕士，同年留所参加工作；1992年在英国Bristol大学化学学院获博士学位，随后从事博士后研究工作。1993年至今在中国石油大学（北京）任教，历任讲师、副教授、教授、《Petroleum Science》编辑部副主任、主任、副主编、中国石油大学（北京）图书馆馆长（其间于2004年8月至11月在挪威Bergen大学化学系和石油研究中心任高级访问学者、客座教授）。主要从事油气地球化学、沉积学、储层地质学和石油地质学的教学和科研工作。发表论文（第1、2作者）190多篇(其中被SCI和EI收录52篇

), 独著或合著专著4部; 先后参加过国家级、省部级和局级科研项目44项; 获国家科技进步奖二等奖1项、省部级一等奖6项、省部级二等奖1项、“中国高等学校十大科技进展”奖1项、中国石油和化学工业联合会创新团队—中国石油大学(北京) 油气成藏研究创新团队成员。给本科生、硕士生、博士生、培训生、留学生等讲授过英语口语、石油地质专业英语、稳定同位素地质学、应用石油地球化学、油藏地球化学、地球化学研究专题、有机地球化学原理、沉积地球化学、沉积盆地流体矿产及矿床学、沉积—成岩地球化学、沉积储层研究进展、地质学研究新进展、Petroleum Geochemistry (硕士生全英语国际班, 校级品牌课)、Physical Geology (本科生全英语教学)、地质学学科前沿课、油气地质导论、工程硕士讲座课等各类课程共20门。

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Introduction to Physical Geology

Geology uses the scientific method to explain natural aspects of the Earth—for example, how mountains form or why oil resources are concentrated in some rocks and not in others. Physical Geology explains in detail how and why Earth's surface and interior are constantly changing. It relates this constant change to the major geological topics of interaction of the atmosphere, water and rock, the modern theory of plate tectonics and geologic time. That is, Physical Geology is the division of geology concerned with Earth materials, changes in the surface and interior of the Earth and the dynamic forces that cause those changes. The whole course includes the following chapters:

Chapter 1 Introduction to Physical Geology

Chapter 2 Atoms, Elements and Minerals

Chapter 3 Igneous Rocks, Intrusive Activity and the Origin of the Igneous Rocks

Chapter 4 Volcanism and Extrusive Rocks

Chapter 5 Weathering and Soil

Chapter 6 Sediments and Sedimentary Rocks

Chapter 7 Metamorphism, Metamorphic Rocks and Hydrothermal Rocks

Chapter 8 Time and Geology

Chapter 9 Lake and Wetland

- Chapter 10 Streams and Floods
- Chapter 11 Ground Water
- Chapter 12 Glaciers and Glaciation
- Chapter 13 Deserts and Wind Action
- Chapter 14 Waves, Beaches and Coasts
- Chapter 15 Geologic Structures
- Chapter 16 Earthquake
- Chapter 17 Earth's Interior and Geophysical Properties
- Chapter 18 The Seafloor
- Chapter 19 Plate Tectonics

Requirements of the course

In this course, students will be taught to manifest the fundamental concepts, basic principles and general characteristics of the material composition of the Earth, and interior geologic and exterior geologic actions. Experiment aspect is especially important and students are required to recognize common minerals and rocks. Students will discuss important issues with the teacher on the practical examples of Physical Geology. Last but not the least, students need to remember the common specialty English words in the teaching material.

Reference Book

Plummer, McGeary and Carlson. Physical Geology (ninth edition). A business unit of The McGraw-Hill, Inc. 2003.