

水工岩石力学研究的基本思路

董学晟, 邬爱清

(长江科学院 岩基研究所, 湖北 武汉 430010)

收稿日期 2005-6-14 修回日期 2005-8-29 网络版发布日期 2007-3-28 接受日期 2005-6-14

摘要 综合多年来岩石力学在大量大中型水利水电工程中的研究和应用实践, 提出一些在开展水工岩石力学研究时应当掌握的基本思路, 包括水利水电工程中岩石力学研究的特点、任务, 认识岩体、利用岩体和加固岩体3个组成部分, 和它们之间的关系。概述了水工岩石力学中有关岩石工程中的不确定性及对策、岩石力学研究的阶段性问题、水工岩石力学研究的主要内容、水工岩石力学中的三大工程问题、岩石力学研究与地质及设计相互关系问题、工程岩体的性状监测以及岩石力学中有关环境保护和维护生态平衡等方面的观点和看法。

关键词 [岩石力学](#); [水利水电工程](#); [基本思路](#)

分类号

SOME ESSENTIAL CONSIDERATIONS OF ROCK MECHANICS IN HYDRAULIC ENGINEERINGS

DONG Xue-cheng, WU Ai-qing

(Rock Foundation Division, Yangtze River Scientific Research Institute, Wuhan 430010, China)

Abstract

Based on the experience of rock mechanics study accumulated in the past 50 years in the fields of hydraulic and hydropower engineerings, some essential considerations including the purposes and the distinctive characteristics of these studies are studied. It is emphasized that the three parts of rock mechanics study in hydraulic engineerings, i.e., reconnaissance of rock mass, utilization of rock mass and reinforcement of rock mass, are closely related to each other. In addition, some attitudes associated with rock mechanics study in hydraulic engineering in aspects of uncertainties of rock mass and the corresponding strategies, phasic problems in rock mechanics study, the main contents of rock mechanics study, characteristics related to the three kinds of rock engineerings (dam, rock slope, and underground openings), relationship with engineering geology and engineering design actual behavior monitoring of engineering rock mass, and general comments considering the environmental protection and the maintenance of ecological equilibrium are presented and summarized.

Key words [rock mechanics](#); [hydraulic and hydropower engineering](#); [essential considerations](#)

DOI:

通讯作者

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(226KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含 “岩石力学; 水利水电工程; 基本思路” 的相关文章](#)

▶ [本文作者相关文章](#)

· [董学晟](#)

· [邬爱清](#)