

### 著作类成果

## 岩质边坡稳定分析——原理、 方法、程序

#### 【创新性】

本专著由陈祖煜院士牵头编写,是作者课题组在以往十余年内参加国家"八五"、"九五"科技攻关、国家自然科学基金等一系列重大项目中,取得的科研和工程应用系统的总结,体现了当时岩质边坡稳定分析方面的研究水平,全书共1334千字。书中全面阐述了岩质边坡稳定分析的原理和方法,并介绍了有关程序和使用说明。主要内容包括:边坡工程地质和总体稳定性评价方法,确定岩体抗剪强度的理论和方法,边坡稳定极限分析方法的理论和二、三维分析方法,确定临界滑动模式的最优化方法以及边坡楔体和倾倒分析的原理和方法。书中还介绍了含115个边坡工程的"水利水电边坡工程登录"数据库和具有788组岩体试验资料的岩体抗剪试验参数数据库的查询系统。

主要完成人:陈祖煜、汪小刚、杨 健、贾志欣、王玉杰受奖单位:岩土所

#### 【影响力】

自 2005 年出版至今,本书共印刷 3500 册,已销售一空。百度学术检索和 CNKI 中国引文数据库中,自2005 年至今不完全统计,引用量分别达642 次和 955 次。潘家铮院士在《土质边坡边坡稳定分析一原理.方法.程序》的序中,对中国水科院在岩质边坡稳定方面取得了研究成果给与了高度肯定。

# nis book, with 1.334 m

Compilation of this book, with 1.334 million Chinese characters, was led by Academician Chen Zuyu. This book is a systematically summary of the research achievements and engineering applications acquired in a series of key projects, including Eighth Five—year Plan and Ninth Five—year Plan key technology projects and National Natural Science Foundation of China projects etc., that the author's research team took part in during the past decades and exhibits the research level of stability analysis of rock slope at that time. This book expounds the theory and methods of rock slope stability analysis, and introduces relevant programs and instructions of use. Main content includes: methods of geological and overall stability assessment in slope engineering, theory and methods of determining the shearing strength of rock masses, theory of slope stability limit analysis method and two and three—dimensional analysis methods, optimal method of determining critical slip modes and theory and method of wedge and toppling analysis. This book also introduces the inquiring systems of the water resources and hydropower slope project registration database inventory that contains 115 slope projects and the rock shearing test parameter database that contains 788 groups of rock test data.

**ROCK SLOPE STABILITY** 

METHODS AND PROGRAMS

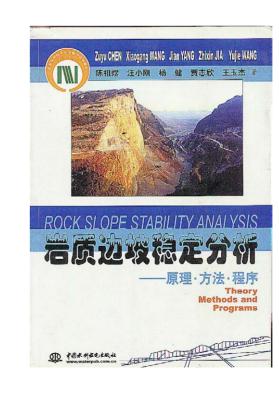
ANALYSIS--THEORY.

#### [ Influence ]

[Innovation]

Since it was published in 2005, 3,500 books have been printed and sold out. According to incomplete statistics upon 2005, this book has registered 642 citations in Baidu Academic Search and 955 citations in CNKI's Chinese Citation Database. In the preface of this book, Academician Pan Jiazheng affirms highly the research achievements that IWHR obtained in rock slope stability.

Main Contributor: Chen Zuyu, Wang Xiaogang, Yang Jian, Jia Zhixin, Wang Yujie Award-winning Unit: Department of Geotechnical Engineering



本 英 季 年

本日本社市分から事か被したの研究事体、を12日下を今日では同意を担ける場合に共産機能を2位で、商者的研究事体、化では同じため、自分の行政を対象を2位に、中で今年機能で
対象が無力を対象を2位で、商者的関係を1位では同じため、中心を2位に、通じたが1分を表がし、現立の方式を2位に、1分を2位に、現立の方式を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が表が、1分を2位に対象が

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