工程地质学报 JOURNAL OF ENGINEERING GEOLOGY

工程地质学报 » 2013, Vol. 21 » Issue (4): 481-486 DOI:

工程地质领域当前值得关注的两个科学问题

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TWO CHALLENGING ISSUES WORTH OF ATTENTIONS IN ENGINEERING GEOLOGY NOWADAYS

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- 摘要
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全文: PDF (1248 KB) HTML (KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 进入21世纪后,随着我国国民经济的持续发展,岩石工程建设越来越多、规模越来越大、地下工程埋深也越来越大,工程地质研究者面临着新的挑战:在对一些建在前所未有深度的岩石地下工程(如深达2500m的锦屏Ⅱ级电站输水隧洞)进行工程地质条件评价时,岩体结构是否仍起制约作用?对一些重大岩石工程的长期(如长达200a以上)稳定性问题,应如何预测?本文将就上述两个科学问题进行讨论,为相关岩石地下工程的设计和研究者提供参考。

关键词: 岩体结构控制论 岩石地下工程 深埋 古地下工程 长期稳定性

Abstract: In the 21 century, many higher-speed, larger-scale, deeper buried rock engineering constructions are developed with the development of national economy in China. Therefore, there are two new challenging issues for the researchers of engineering geology. Whether do the rock structures still control the behavior of the rock mass when the engineering construction is buried 2500m below ground surface? an example is the water convey tunnel in Jinpin II power station. How do we predict the long-term stability of important rock engineering constructions? This paper examines and discusses the two issues. Some useful data are provided for the designer and researcher of deep rock underground engineering as references.

Key words: Rock structure control theory Rock underground engineering Deep buried Ancient underground engineering Long-term stability

收稿日期: 2012-10-20;

基金资助:

成都理工大学地质灾害防治与环境保护国家重点实验室课题(SKLGP2011K007);中国科学院特别资助项目(KZZD-EW-05-02);国家自然科学基金项目(40972198 41172269);国家重点基础研究发展规划(973)项目(2010CB732001)资助

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