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建立矿山水文地质专家系统几个问题的探讨 [点此下载全文](#)

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摘要:

专家系统作为一种人工智能技术, 日益广泛地应用于各类专门问题的解答及技术咨询领域。矿山水文地质问题多, 故引入专家系统是可行的。从专家系统知识库知识, 矿山水文地质实例及理论分析成果等三方面知识为专家系统提供知识。矿山水文地质调查资料及制做有色金属矿山水文地质评价专家系统(MHGEES)的实践, 本文阐述了两类专家系统推理框架,

关键词: [矿山](#) [水文地质](#) [专家系统](#)

SOME PROBLEMS ON THE ESTABLISHMENT OF THE MINE HYDROGEOLOGY EXPERT SYSTEM [Download](#)

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Abstract:

The more knowledge the expert system has, and the stronger its ability to resolve problems with time, the knowledge of the expert system commonly came from human experts. However, there may probably be some knowledge in experts' experience. If the knowledge from theoretical analysis and data from case history are added to the knowledge repository, the knowledge capacity of the system will be increased. There are many hydrogeological problems for different types of mines, and these problems cannot be resolved only by human experience. On the other hand, the available hydrogeological data in a mine are a valuable wealth, which should be fully utilized. The system's ability of resolving problems will be raised greatly when drawing the experience of hydrogeologists and hydrogeological workers, relevant contents of rules and specifications in operations, theoretical analysis and data from the operations of numerous mines as the knowledge source of the expert system. The nonferrous metal mine hydrogeological evaluation expert system (MHGEES) is developed with the transformation of groundwater migration as the trunk of the physical model, the transformation of different kinds of hydrogeological conditions as the core of the analysis model and the knowledge application technique based on levels and analogy analysis made in four steps to construct the facts and rules. Based on the practice of constructing the MHGEES system. The author discusses the techniques of constructing the second kind of expert system and discusses the techniques of constructing the second kind of expert system.

Keywords: [mine](#) [hydrogeology](#) [expert system](#) [discussion](#)