## 《弹性力学与地质力学研究新进展 2022 年线上研讨会》

报告题目: 水力插板桩基技术及其工程应用

报告人: 许国辉

报告人单位: 中国海洋大学环境科学与工程学院,青岛

摘要:

在1990年代,水力插板桩基技术由胜利油田何富荣高级工程师发明,其后经过不断改进发展,已成为一项成熟的桩基技术。该桩基技术的优点在于:利用水力切割地层实现插桩,进桩速度快;工厂预制桩基,在现场实现桩与桩之间的连接固定,桩基形成整体连接;依托于水力切割地层的进桩技术,可实现各种形式桩体的积木式组合;研发的水力插板桩基施工机具,实现了在滩涂与浅水环境的预制桩基低成本施工。水力插板桩基技术已经被应用在100多项工程中,尤其在堤坝建设工程中,具有明显的质量好、成本低的优势。

## The Jetted Precast Concrete Sheet Pile Foundation Technique and Its Application in Engineering

XU Guo Hui

College of Environmental Science and Engineering, Ocean University of China, Qingdao, P. R. China

Abstract:

The jetted precast concrete sheet pile foundation technique was invented in the 1990s by He Furong, a senior engineer of Shengli Oilfield. Since then, it has been continuously improved to become a mature technology. The pile foundation technique has numerous advantages. The use of hydraulic stratum cutting enables fast pile insertion. The pile foundations are prefabricated in the factory then connected and fixed on site to form an integrated connection. Another advantage is that the building block combination of various types of piles can be realized by the pile driving technique of hydraulic stratum cutting. In addition, the construction equipment of jetted precast concrete sheet pile foundations allows for the low-cost construction of prefabricated pile foundations in tidal flats and shallow water environments. Due to the appealing low cost and great quality of the jetted precast concrete sheet pile foundations, this technique has been applied in more than 100 projects, especially in dam constructions.