## The Research of Rail Transit Engineering Third-Party Monitoring Junjie Ge, China, PR

The third party monitoring is aim to improving the orbit transportation construction quality and ensure safety, which forecasts and monitors potential dangerous timely, accurately to prevent major accidents occurrence. This paper takes the third-party monitoring first bid project of Kunming metro rail transit construction as instance, combined with the engineering practice, this paper discusses the main content of the third party monitoring, monitoring methods and technical requirements. Finally, it discussed the processing and analysis of data.

Due to the different geological condition between Kunming Beijing, Shanghai, Shenzhen and other places, it is more complex. So it uses different monitoring methods to conduct third party monitoring of the first phase project of Kunming rail transit project bid. It monitors pile (wall) of the foundation ditch deformation, pile (wall) top horizontal displacement, ground subsidence, building inclined it can be monitor subway construction surroundings timely. In the construction critical period or abnormal situation, it adds frequencies appropriately. At abnormal situations, it adjusts and strengthens monitoring plandynamically. Monitoring solution improves engineering quality and safety of subway construction, which ensures the subway construction smoothly. Therefore, it plays a guiding role and significance to research and summary third party monitoring rail transit project technology methods and data processing and analysis.