

## **ABSTRACT**

The report prepared by the author encompasses a discussion on the analysis of seismograph waves to determine the motion present in seismic waves. This study applies the method of temporal spectral analysis, also known as time spectrum analysis, to delve into deeper insights regarding seismic waves. The data source is derived from seismographs located in the West Java region, known to be prone to earthquakes. The aim of this research is to enhance our understanding of the characteristics of seismic waves and to provide more detailed information about the source and mechanism of earthquakes. Additionally, the results of seismograph wave analysis can be utilized to predict the potential earthquake risks in the future and can be employed in disaster risk mitigation planning. It is hoped that this research can make a significant contribution to the evolution of science and technology, particularly in the field of seismology and disaster mitigation. Furthermore, it is desired that the generated results of seismograph wave analysis serve as a valuable source of information for both the public and the government. This information is expected to be used in preparing for potential earthquake disasters in the future.