## Abstract

In this final work, forecasting or prediction is done based on historical data such as stock price PT. Aneka Tambang (ANTAM) Tbk., the price of nickel which is the main commodity of ANTAM, a gold price which is the other commodities from ANTAM, Indeks Harga Saham Gabungan (IHSG) on Bursa Efek Indonesia (BEI) or Indonesian Stock Exchange (IDX) which describes the local market and the Dow Jones Index (DJI) of the New York Stock Exchange (NYSE) which describes the international market.

In this final work discussed the settlement forecastings or predictions based on historical data ANTAM stock price, the price of nickel, gold price, IHSG and DJI by using Support Vector Machine (SVM).

Of the observations that have been made, the system performance based on the accuracy of forecasting or predictions produced by the test scenario using a combination of input features that have been mentioned previously. Best accuracy without the use of the kernel, for training data is 38.8889% and 20.3822% of data testing, by a combination of input features are ANTAM stock price, the price of nickel and DJI. On this prediction system, it was found that Polynomial kernel has better performance than RBF/Gaussian kernel. Best accuracy with the use of the Polynomial kernel, for training data is 90.2778% and data testing is 48.4076%, with a combination of input features are ANTAM stock price, the price of nickel, gold price, IHSG and DJI.

**Keywords** : *Stock price, forecasting or prediction, Support Vector Machine* (SVM), *input feature, kernel and performance.*