## **Abstract**

The semantic web enables the data can be understood not only by humans as readers but also to be processed and understood by the machine or komputer. The technology on the semantic web which allows it can happen is by using ontology. Ontology describing data on the web and the connectivity between the data on the web, Heterogeneity is the most common problems occur in the ontology of semantic web, for example, there are two ontology with a different name, the ontology has a different structure or defined in a different way when both ontologies ontology that describes the same domain of knowledge. Ontology matching is a process for comparing two ontologies and find the relations between both of them. Ontology matching aims to reduce the problem of heterogeneity in ontology. One of the technique that usually used in ontology matching to solve the problem of heterogeneity is the semantic-based ontology matching.

**Keywords:** semantic web, ontology, ontology matching, heterogeneity, ontology-based semantic matching.