

## ***Abstract***

Nuisance in respiration system is a prime cause of morbidity and mortality. Air pollution, less of green plants, and unhealthy life style are some reasons of it. Less of people's knowledge about disease can cause victim of system nuisance increases. Because of that, expert system is made to diagnose disease from symptom that they obtain.

This expert system uses Variable-Centered Intelligent Rule System (VCIRS) to build knowledge-base, knowledge improvement, and inference process. Architecture's system is adapted from RBS and obtains advantages from RDR. This system organizes the rule base in a special structure so that easy knowledge building, powerful knowledge inferencing. The term "intelligent" in VCIRS stresses that it can "learn" to improve the system performance from user during knowledge building (via value analysis) and refining (by rule generation).

***Key Words:*** Variable-Centered Intelligent Rule System (VCIRS), Rule Based System (RBS, Ripple Down Rules (RDR))