

**Abstract**

**PCOS (polycystic ovary syndrome) or polycystic ovary syndrome is a condition of impaired ovarian function in women in childbearing age. This condition causes female hormones that suffer from PCOS to become unbalanced because of things that are not known. This study aims to make a classification system using data in the form of a microarray because it is useful to analyze thousands of samples at the same time which can help analysis and diagnosis of PCOS disease. The classification system will consist of three stages, namely pre-processing data with normalization, feature extraction using Principal Component Analysis, and classification using the Artificial Neural Network method, namely Backpropagation, and the results are 50%-100%.**