

Thesis Title	Optimization of Solar Tracking System Using Genetic Algorithm and Numerical Method
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ABSTRACT

Renewable energy with have important role in the present is solar energy. As Thailand locates in topical zone, Solar tracking is an excellent choice in aiding generate of electric current from solar energy. The objective of study, “ Optimization of Solar Tracking System Using Genetic Algorithm (GA) and Numerical Method (NM) ” are to design the patterns solar tracking system to feedback control using by GA for finding Altitude angles and Azimuth angles, giving electric energy to be the best solar cell, and using by NM for adjust optimize GA. And to compare efficiency to solar tracking system, compare by GA and NM electric energy.

The results show that, the development of solar tracking system using GA to optimize of the factor are : Population Size (Pop), Probability Mutation (PM), Probability Crossover (PC) for the best of control using GA and NM to continuous characteristic, the results show high efficiency system (10.37% of mean of electric energy) to increase more and more 17% of close-loop solar tracking system.