**Target Search Problem**

**Problem Statement:**

Collective mobile robots have become increasingly popular for target search applications. One of the main reasons for this is the ease of removing human intervention. By using swarm intelligence for these applications, low cost, dispensable robots can be used to accomplish tasks that would otherwise be impossible by humans or extremely expensive. The single target and the multiple target searches can be studied using the optimized PSO algorithm.

**Problem Solution:**

The PSO particles are considered are as mobile robots and the guiding of these individual robots towards the target is carried out using the PSO algorithm.