

# **Half-sweep modified successive Over Relaxation for solving two-dimensional helmholtz equations**

## **Abstract**

The main purpose of this article is to examine the effectiveness of the Half-sweep Modified Successive OverRelaxation (HSMSOR) in solving the sparse linear systems generated from discretization of the two-dimensional Helmholtz equations. In addition, the application and formulation of the HSGS iterative method also presented. Some illustrative examples are given to point out the efficiency of the proposed method.