Abstract

The diffusion convection equation is a mathematical model of transport event that occurs in the fluid. The equation can be solved numerically by using finite element method and in this research use Least Square finite element method. This method is based on minimizing second cube residue and on its application, it will produce a symmetric system and definite positive linear equations. This research will present a numerical simulation on the diffusion convection equation in two dimensional space use linear interpolation.

References

Advection-Diffusion Equation with Variable Coefficients in Finite Domain, Banaras Hindu University, India.


Index Terms

| Computer Science | Control Systems |

Keywords

finite element method, least square, convection, diffusion.