

# **Analytical Study of Heat Transfer and Melting Front in a Spherical PCM Capsule**

*A.Z.A. Salfullah*

## **Abstract**

An analytical method has been proposed considering uni-directional heat conduction to estimate the temperature field, motion of the phase-front and heat flux during heat storage in the Phase Change Material contained in a spherical capsule. The analysis is based on the time-dependent surface temperature variation as boundary condition, and can be used with reasonable accuracy.