

About the Book

Thermal energy storage has received considerable attention in recent years. With a range of application that include renewable energy systems, research on this topic has been interdisciplinary. Understanding thermal process of freezing/melting in latent heat thermal energy storage using phase change material (PCM) requires basic of fluid mechanics and heat transfer. The required fundamental aspects are presented in this book with a final overview of recent literature and conclusions.

Contents:

1. *General introduction*
2. *Basics of fluid mechanics*
3. *Basics of heat transfer*
4. *Mathematical aspects of freezing melting*
5. *Phase change processes in packed beds and finned tubes*
6. *Theoretical and experimental aspects of latent heat storage with PCM*
7. *Conclusions*