

©

“The Many Phases of Matter”, by G. Venkataraman. Universities Press, (1991). Price Rs. 30.

Down to Earth, October 30, 1992.

This slim book is a maiden attempt by a famous physicist to write a popular science. It is a part of a series, Vignettes in Physics, which seeks to convey the excitement of physics to the student of science. This volume focusses on Phase transitions in different physical systems. In the last few decades, physicists have come to realize that a variety of physical phenomenon, from the freezing of water to Liquid Crystal displays to the birth of the universe can be understood using similar techniques. These techniques pioneered by solid state physicists, have now become an essential part of physics. The book tries to give an idea of the diverse fields in which such techniques are being used. It attempts to bring out the linkages which are by no means evident.

The book is written in a very readable style, with a lot of illustrations which are useful in understanding the concepts involved. There are also several snippets from the lives of famous scientists, which make interesting reading. Although the book is by no means comprehensive, the author needs to be complimented in trying to communicate very advanced and difficult topics to the student of physics. It would have been nice if he had attempted to include the informed lay person in his audience too.

[Shobhit.mahajan@gmail.com](mailto:Shobhit.mahajan@gmail.com)

October 1992.