“The Making of the Indian Bomb: Science, Secrecy and the Postcolonial State”, by Itty Abraham, Orient Longman, 1998, Rs. 300/-.

“The Italian navigator has reached the New World”. This is how the news of the world’s first controlled nuclear chain reaction was relayed in December 1942. The Italian in question was the famous Italian émigré physicist, Enrico Fermi who at the University of Chicago had demonstrated how natural uranium could be split and the reaction sustained. And this one discovery would arguably be rated as one which was as important as the “discovery” of the New World by another Italian some four and half centuries ago. Just as the Americas were “conquered” by the Europeans, so too the unbelievably powerful forces locked up in the atomic nucleus were unleashed by the scientists. The world got a gruesome demonstration in the form of Hiroshima and Nagasaki in 1945 and we were ushered into a new era, the “atomic age”.

The importance of this new development was not lost in the newly independent India. In the Constituent Assembly and in other fora, the intimate link between science and development and the use of atomic energy for peaceful and military purposes was debated. Nehru was a firm believer in the use of science for modernisation and development. In his address to the Indian Science Congress in 1947, he stated that .[he].” Firmly believed that it is through the method and spirit of science that we can ultimately solve our problems. “He also believed that “... it is difficult to draw a line between scientific work for peace and for war. This great force, atomic energy, may be used for peace or for war. ...we shall develop it, I hope, in co-operation with the rest of the world and for peaceful purposes”.

The culmination of this process was the establishment of the Atomic Energy Commission and the monopolising of all work related to nuclear energy by the Atomic Energy establishment. Research reactors were set up, the scientific and manufacturing infrastructure required was developed and a whole generation of scientists was trained. And finally, in May 1974, in the simmering heat of the desert in Rajasthan, the Buddha smiled. We detonated a nuclear device, thus joining the elite nuclear club. The explosion was of course “peaceful” and we continued with this charade for more than two decades, till in May 1999, we carried out nuclear explosions for development of nuclear weapons. Of course, in the meantime, Nehru’s utopian and somewhat naive hope that atomic energy will serve peaceful purposes was belied. The record of nuclear power generation in India is pathetic, despite grandiose plans. And the reactors have a dismal safety record.

Itty Abraham’s book under review is a fairly detailed account of the saga of Atomic Energy in India. The actors are well known: Nehru, Bhabha, Saha, Sehtna, Sarabhai and Ramanna among others. The author develops a theoretical framework to understand the seemingly puzzling course of events in India’s relationship with Atomic Energy. The question really is: what were the factors responsible for the decisions which led to the explosions in 1974 and in 1998? Of course, one could argue that the domestic compulsions forced the government of that time to undertake this exercise. But that is obviously not the complete answer. What explains the unbelievable, almost universal endorsement of India’s position regarding the nuclear tests among the general public, politicians and even to a loge extent the intellectuals? Abraham contends that a major factor in going nuclear was the need to establish the legitimacy of the nation state. He develops this thesis in the book with the help of material gathered from public sources and not interviews, since as he himself states in the preface, he feels that given the

secrecy surrounding anything to do with Atomic Energy, interviews will not be a reliable source.

The book is a useful resource if one wants to understand the history of the Atomic Energy establishment. This in itself will make the book very useful since, as the author himself points out, there is a great paucity of material on the subject. Whatever material exists, is either official propaganda put out by the Atomic Energy Commission itself, or hagiographic written on or by some of the key actors in the story. For instance, the official line on Homi Bhabha was that he was a patriotic, brilliant scientist who returned to India to serve the motherland. But as the author notes, the reality was somewhat different. Bhabha, was regarded as a charlatan and as being too opinionated and unruly by his supervisor and his peers in England. He came back to India in 1939, waiting to get a position in England which he never got! In fact, in his own words," provided proper appreciation and financial support are forthcoming, it is one's duty to stay in one's country...". All this is a far cry from the kind of patriotic genius that he is made out to be in the official hagiographies.

The book is well researched and there is an extensive bibliography at the end. It is, as I mentioned before, a very useful resource book. But, personally I would have liked the author to have taken a clear stand on the issue and then developed arguments in support of them. The theoretical framework is fine, but a moral argument would have added a lot of weight. That would have made the book a bit less "academic", and maybe more convincing.