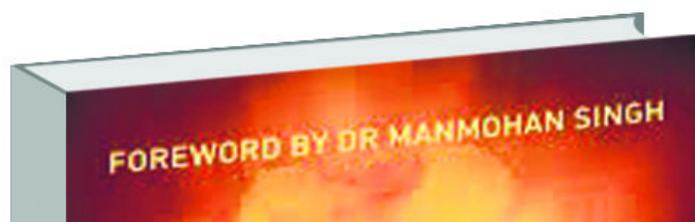
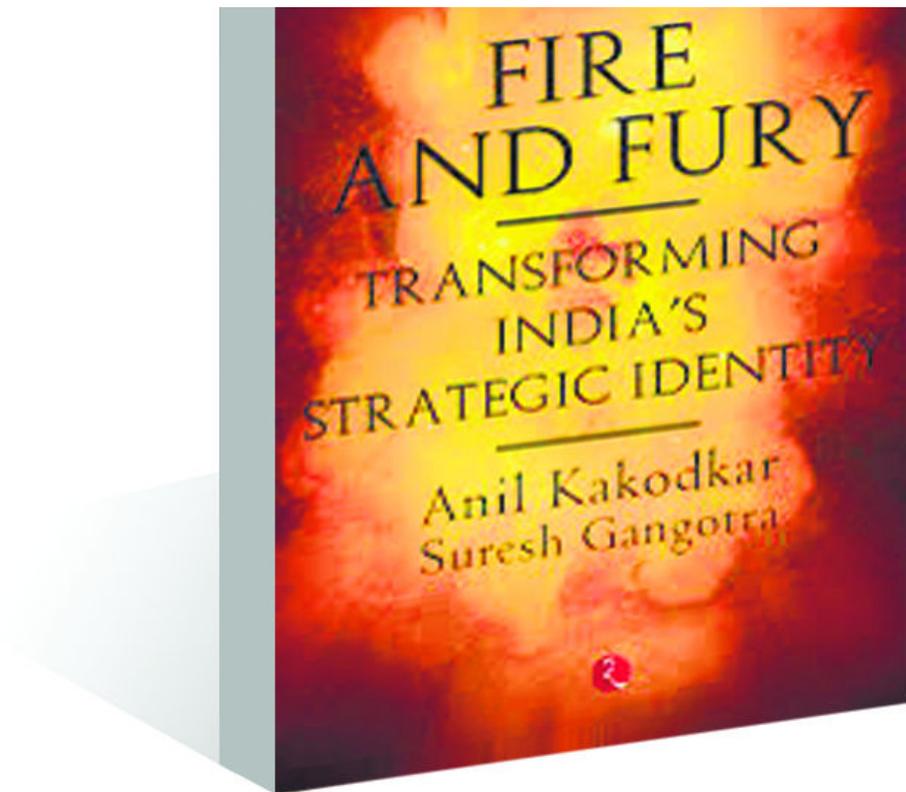


Performers in a First World game

www.tribuneindia.com

3 mins read





Fire and fury: Transforming India's strategic identity by Anil Kakodkar and Suresh Gangotra. Rupa. Pages 194. Rs500

Book Title: Fire and fury: Transforming India's strategic identity

Author: Anil Kakodkar and Suresh Gangotra

Gaurav Kanthwal

What is it that draws our respect for the nuclear and space scientists of the country? The answer lies in their achievements in building the strategic image of the country in the world. Admirably, these feats have been achieved by exercising extreme financial prudence. The fact that they have been unstoppable in what is conventionally the First World game makes them even more endearing.

Anil Kakodkar, former chairman of the Atomic Energy Commission, secretary to the Department of Atomic Energy (2000-2009) and director of Bhabha Atomic Research Center (1996-2000), is a typical

product of this Indian tradition. The top nuclear physicist and mechanical engineer, who had a big role in India's nuclear tests in 1974 and then in 1998, has come out with his recollections of five decades in *Fire and Fury*, co-authored by Suresh Gangotra.

The book is also brief recap of India's atomic energy programme and a lowdown on what needs to be done to replicate this success in future. Kakodkar has been forthright in listing out the shortcomings and solutions to keep the good work going.

Being a part of India's both nuclear tests and an incumbent of high offices during which he interacted with top national and international leaders, it is to Kakodkar's credit that he has not indulged in any controversy before the launch of the book. Scientists indeed are a different breed.

India's atomic energy programme has evolved after surmounting challenges of domestic technology development and international embargos. "It is for this reason only that our problem-solving capabilities are far better than our capabilities in design and operation of these plants," he explains.

Recounting an incident in the run up to India's first successful nuclear test at Pokhran on May 18, 1974, Kakodkar says he and his colleague had to travel on a dilapidated jeep which just had tin sheets for seat. During one such journey, the jeep broke down. Upon examining the engine, it was found that the fan belt had ripped apart. To save time, Kakodkar made a rope from the shrubs around to serve as fan belt and reached the site.

The 194-page book effectively sums up the philosophy behind India's successful nuclear programme which was to make the world realise that imposing embargos on India would be counterproductive to their own interests. The US embargos were such that any Indian manufacturer in collaboration with US firms was forbidden to sell common bathroom fittings to any Indian nuclear establishment which could be used as a component.

Narrating an incident from 2006, a time when there was a serious crunch of nuclear fuel, he says it was decided to recycle the depleted uranium from research reactors CIRUS and DHRUVA. “All scrap lying around in Nuclear Fuel Complexes, including in the ventilation ducts, was scrubbed and recovered to make fuel.”

During the 1998 nuclear tests, Kakodkar played a big role in the design, fabrication, testing and planning of the tests. He remembers the phase as “hectic”. The negotiations for the Indo-US Agreement for Civil Nuclear Cooperation (2006) were very stressful, says Kakodkar. While it was important for the deal to go through, the strategic interests of the country had to be safeguarded too. Kakodkar already had the reputation of a tough negotiator but the US media, one step ahead, likened the top scientist to “a 600-pound gorilla who talks logic but refuses to budge”. He, of course, had complete trust of the then Prime Minister Manmohan Singh, who has endorsed Kakodkar’s recollections in the book with a foreword.

In his suggestions for India’s ongoing three-stage nuclear programme, the 76-year-old scientist feels that to realise self-reliance in nuclear technology, it is important to pursue comprehensive research, starting from basic research, and full scale qualification of technology and equipment. He believes that the world will collaborate with you only if you show unique core strength in a field.

Talking about future challenges, Kakodkar foresees a big role for nuclear energy in countering the threat of climate change. The cleanest source of energy will eventually become a weapon to protect peace around the globe, rather than just being a nuclear deterrent in the service of national security.

