Laser Isotope Separation and the Future of Nuclear Proliferation

By Ruben M Serrato

DISSERTATION.COM, United States, 2010. Paperback. Book Condition: New. 213 x 137 mm. Language: English . Brand New Book ***** Print on Demand *****.Laser isotope separation (LIS) is an emerging technology that uses relatively small, widely-available lasers to achieve civilian or weapons grade concentration of fissile material to fuel nuclear reactions. To date only a few, limited proliferation risk analyses of LIS technology have been conducted. This paper provides a historically and technically informed update on the current state of LIS technology and it explains the high likelihood of increased global LIS adoption. The paper also explains how international rules governing nuclear energy are ill-equipped to handle such new technology. It traces the current limitations to broader issues in international relations theory, especially the incomplete accounts of the role of technology in the proliferation dynamic in the dominant neorealism and social construction of technology approaches. The paper introduces the concept of international technology development structure, a framework for understanding how technology-related opportunities and constraints at the international system-level influence state nuclear weapons choices. The paper provides a thorough update of recent international laser innovations relevant to laser isotope separation and it explains how the spread of laser-related knowledge expands state nuclear...

READ ONLINE
[2.11 MB]

Reviews

An exceptional pdf and the typeface utilized was fascinating to read through. It can be writter in straightforward words and phrases instead of confusing. I am just quickly could possibly get a delight of looking at a written ebook.
-- Prof. Arlie Bogan

It in a single of the best book. This is for those who statte there had not been a well worth reading through. Once you begin to read the book, it is extremely difficult to leave it before concluding.
-- Dr. Barney Robel Jr.