

Title:

Engines Of Creation (Book Reviews)

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412

Summary:

Despite a massive assault by its critics, Engines of Creation is a truly revolutionary work, and Eric Drexler should be commended for launching a worldwide discussion on the topic of molecular manufacturing (MM), or molecular nanotechnology (MNT), as some refer to it. First of all, this is a book that needs to be updated, as the opening chapters deal in-depth with protein design and a later chapter tries to paint a picture of a future network of information known as "the Inte...

Keywords:

molecular manufacturing, nanotechnology

Article Body:

Despite a massive assault by its critics, Engines of Creation is a truly revolutionary work, and Eric Drexler should be commended for launching a worldwide discussion on the topic of molecular manufacturing (MM), or molecular nanotechnology (MNT), as some refer to it. First of all, this is a book that needs to be updated, as the opening chapters deal in-depth with protein design and a later chapter tries to paint a picture of a future network of information known as "the Internet". But the remainder of the book is timeless. (Update: Since this review, Engines of Creation has been updated and replaced by "Engines of Creation 2.0")

The true merit of Engines of Creation comes not from the argument of whether or not manipulation of individual molecules is possible. We already know that it is. Our bodies are filled with nature's own molecular machines. But the true worth of this book stems from its assumption that such technology will develop into a worldwide enterprise and will have enormous consequences for the human experience. The importance of the examination and study of those consequences cannot be overstated, and Drexler formed the Foresight Institute in an attempt to grapple with many of these issues. (Although personally, I recommend The Center for Responsible Nanotechnology as the best "think-tank" on molecular manufacturing's benefits and dangers).

The power to thoroughly and inexpensively control the structure of matter will

effect every aspect of the human experience, and although it is a worthy endeavor to speculate on the implications for medicine, space exploration, ending poverty, etc., none of these benefits will be realized if we fail to work out a reasonable system of governance once molecular manufacturing becomes reality. The development of this technology will lead to the creation of new weapons of destructive power, possibly give rise to demagogues, and provide the conditions necessary to precipitate a dangerous, and possibly world-threatening, arms race between competing MM-enabled nation states. Although we have faced these concerns since the dawn of the Nuclear Age, it remains unclear as to whether or not the same principles of Mutually Assured Destruction (MAD) will still apply. Engines of Creation sparks the debate on how we will deal with the new problems that arise from man's ability to manipulate molecules, and in doing so, it provides an invaluable service to the human race.

Those concerned about our future and the world in which we live should read this book, because molecular manufacturing will define our future.