

Creating a Nuclear Renaissance With the Truth

by Greg Murphy

Radiation and Modern Life

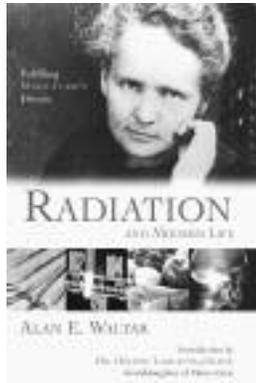
by Alan Waltar

Amherst, N.Y.: Prometheus Books, 2004

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This book represents a real effort to get out the truth about radiation, and nuclear power in general. This approach should be used as a way to organize a grassroots campaign to create a nuclear renaissance, in opposition to what the American Nuclear Society (ANS) has proposed—a campaign based on the statements of Gaia madman James Lovelock, who turned pro-nuclear out of his fear of global warming.

The American Nuclear Society, and the nuclear community in general, think that they must appeal to authority figures like Lovelock, instead of simply building a campaign based on *telling the truth*. The ANS and other nuclear representatives treat nuclear power and radiation as some form of mysticism that everyday people can not understand. In this way, they allow the anti-human and anti-nuclear environmentalists to set the terms of the debate.



Ammunition

Alan Waltar's book provides the ammunition to destroy some, if not all, of the myths about radiation and nuclear power, and does so with easy-to-understand language, with examples of how radiation and nuclear science affect and improve our lives everyday.

Today's college students in the field of nuclear engineering, as well as a small group of old-timers, readily tell you that the biggest mistake in the early days of developing nuclear science and nuclear power was not telling the truth about

radiation. The industry failed to fight for nuclear power plants and labs by not levelling with the population about how really *small* the danger of radiation is: and that failure allowed the nuclear industry to be all but shut down.

Waltar's book goes a long way to address that issue.

The book is put together with a real ordering principle, which makes it a very useful reference book. It opens with an excellent introduction by Hélène Langevin-Joliot, which sets the tone of the book. The introduction needs to be highlighted as a lesson to people how the discoveries and their applications do really advance mankind and civilization.

Waltar arranged the book in sections—agriculture, medicine, space exploration, and so on—and in each section he explains how radiation or nuclear energy has advanced the progress in that field. Each section builds on the next, with a thought of what is possible in the future from discoveries that are known, toward discoveries yet to be found. The author provides facts and charts to illustrate his points, but the best thing is his

sense of humor, using anecdotal stories and humorous examples to explain the more technical terms and ideas.

For this reason, the book is a good place to start for people who are concerned about radiation and nuclear power, and want to learn more. This writer, in fact, learned many new ways that radiation is used to better our lives. For example, did you know that radiation is used to sterilize contact lens solution?

The Curie Tradition

Dr. Hélène Langevin Joliot, who wrote the introduction, is a French scientist and granddaughter of Marie and Pierre Curie. Her introduction begins with how a simple discovery by her grandfather of the piezoelectric effect made it possible

to measure the radiation that is given off by elements like uranium; and this led to the discovery of radium.

She continues recounting the discoveries of her grandmother, as well as those of her mother, Irène, who discovered artificial radiation. Langevin-Joliot uses these discoveries as a backdrop to point to the need for nuclear power and further discoveries to brighten the future for all mankind. She includes a special call for the youth of the world to take seriously the study of science, and make the vision of Marie Curie come to life.

Langevin-Joliot concludes with a section from her grandfather's Nobel Prize lecture: "One can imagine that in criminal hands, radium could become very

dangerous, and here one must ask oneself if humanity gains anything by learning the secret of nature, if humanity is ready to profit from this or whether such knowledge may not be destructive for it. I am one who thinks like Alfred Nobel, that humanity will draw more good than evil from new discoveries."

The answer to the problems of new discoveries, Langevin-Joliot writes, is to understand, and we need to continue with the scientific research necessary to achieve solutions that will optimally benefit society.

This thought goes a long way to provide the optimism that is necessary to build a nuclear renaissance with the truth.