ANIL AGGRAWAL'S

Internet Journal of Book Reviews

A sister journal of AAIJFMT · Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology

VOL. 2, NO. 1 · JANUARY – JUNE 2003

Downloaded from www.anilaggrawal.com · ISSN 0972-9674 (Online) · https://www.anilaggrawal.com/br/vol_002_no_001/reviews/books/page001.html

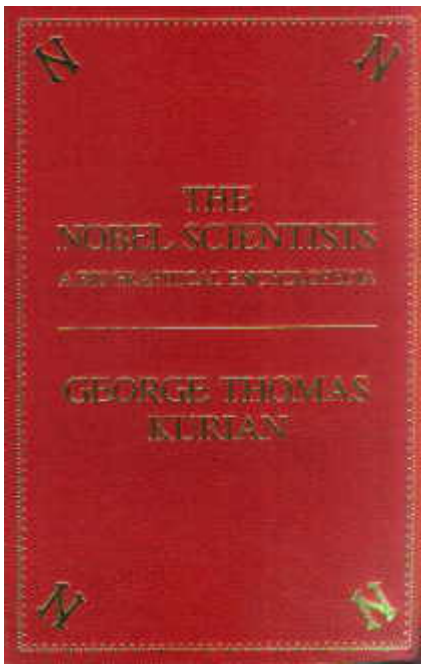
The Nobel Scientists: A Biographical Encyclopedia

THE BOOK

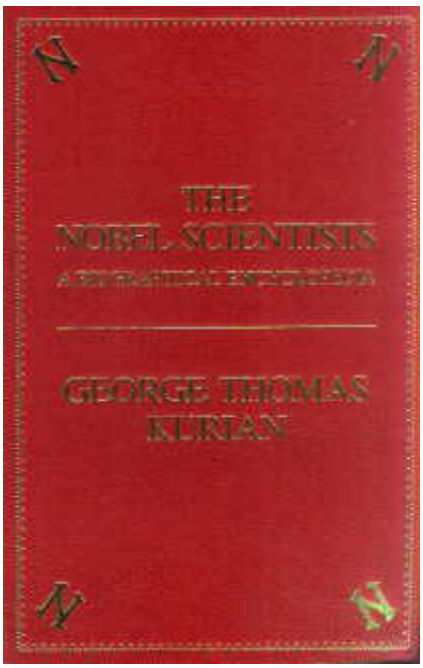
Published September 17, 2002
Pages 425
ISBN-10 1-57392-927-1
Price $75.00

A VERITABLE ENCYLOPEDIA OF NOBEL SCIENTISTS

The Nobel Scientists: A Biographical Encyclopedia *by* George Thomas Kurian, Cloth Bound, 6" x 9". Prometheus Books, 59 John Glenn Drive, Amherst, New York 14228-2197, USA. or . Publication Date September 17, 2002. 425 pages, ISBN 1-57392-927-1. Price $75.00
Official site of this book: http://www.prometheusbooks.com/site/catalog/book_1148.html



Extracts from the Preface



The Nobel Scientists: A Biographical Encyclopedia is a biographical reference that celebrates one hundred years of the Nobel Prize in 2001. It contains the profiles of 466 scientists and chronicles their lives and achievements in, as far as possible, simple, nontechnical language. Each laureate receives a separate entry, even when the prize was awarded in a given year to two or three persons. This may mean some overlap, but makes each entry self-contained.

Among intellectual and scientific institutions in the modern world, the Nobel Prize occupies a unique position. It is the accolade par excellence for accomplishments in six fields and it confers on its winners the crown of ultimate achievement. Begun in 1900, it has honored over 700 individuals, of whom more than 450 were scientists. The emphasis on science was a direct legacy of Alfred Nobel, who himself was a child of the nineteenth century. It reflected the great hopes that his generation placed on the ability of science and scientists to usher in a brave new world of limitless possibilities. This dream was achieved in the sense of creating a world where the mysteries of matter and the world were, if not solved, at least clarified, and many dread diseases that afflicted mankind for centuries were, if not eliminated, at least controlled. In only very rare instances in human history has the dream of one man to create a better world been so fruitful and so inspiring.

Nobel Prize winners form one of the most exclusive clubs in the world. The scientific prizes have been more or less uncontroversial and often widely applauded. This is because the Nobel Prize Committee itself is a highly respected body and its selection norms and procedures are among the most rigorous in the world. They involve nominations from distinguished captains of erudition and professional associations throughout the world. Nominations of candidates can be made only on invitation. Between 200 and 250 nominations are received every year by the Nobel selection bodies for science. In many cases, the same candidate is nominated by more than one nominator. Some candidates are proposed over and over again for many years before they are selected. The only criterion adopted by the selection committee is that laid down by Alfred Nobel himself - the discoveries should "confer the greatest benefit on mankind." According to the statutes, no more than three persons can be awarded the Nobel Prize in any one field in any one year, and this seriously limits the number of laureates. The Nobel Foundation itself is not

involved in proposing candidates or evaluating their work or the final selections, but it arranges the Nobel Prize ceremonies and also administers the Nobel Symposia. A second reason why the prize is so prestigious is that it is one of the first truly international prizes to be awarded in the twentieth century. Citizens from over thirty nations have received the prizes in science. Because of the statutory limitations on the number of winners in any one year, many great discoveries have not received an award and big science projects involving many teams of workers are often ignored. The turbulence of the twentieth century is reflected in the history of the Nobel Prizes. The two world wars resulted in a hiatus in the awards between 1914 and 1918 and between 1939 and 1945. Nazi Germany prohibited the award of the prizes to its citizens during the latter part of the 1930s.

The Nobel Scientists is organized in three sections: Chemistry, Physics, and Physiology or Medicine. In each section, the names are presented chronologically.

The Nobel Scientists is a rich tableau of the lives of the many geniuses whose lives have changed the very nature of knowledge in the twentieth century.

I distinctly remember how I used to be obsessed with the Nobel Prizes during my school days. Way back in 1969, when I used to be a ninth standard student in Ramjas School No. 1, Daryaganj, once I was rummaging through the library shelves for information on Nobel prizes (or perhaps on Einstein's work in a relatively non-technical language). Suddenly I came across a not-very-old issue of *Scientific American*, with a very interesting article on Nobel prizes. It was the November 1967 issue. The article was entitled "The Sociology of the Nobel Prizes", and it was written by an assistant professor of sociology Harriet Zuckerman. So interesting was the article that I read it in one go.

Zuckerman had conducted a survey, and nearly all of 1300 American physicists in that survey ranked the Nobel Prize ahead of such older or richer prizes as the Rumford Premium, the Enrico Fermi Award or the Albert Einstein Medal. The reasons for this are multifarious and sometimes not so apparent (*see box*). One of the most interesting things about this article that I still remember was that the author divided the Nobel Laureates according to various American Universities they were affiliated with (only American Nobel Laureates were discussed in this article).

A Nobel Laureate could be affiliated with a University in a number of ways. Either he may have done his undergraduate studies there, or got his doctoral degree there, or may be, have remained there as a research assistant sometime in the past. Breakups of University affiliations were shown in this way in a very interesting table. The Universities, having the maximum number of affiliations with Nobel Scientists were Harvard University, Columbia University, University of California at Berkeley, University of Chicago, California Institute of Technology, Princeton University, Washington University, and John Hopkins University in that order. Several other Universities and institutes were mentioned in this table. I fondly jotted down that table, and still have that in my possession (of course now I have it in my computer). In fact while I am writing this review, I am referring to it.

> *...Perhaps the most interesting and useful feature of this book is that it gives the Nobel prize winning work in a relatively non-technical language. I am a forensic pathologist by profession, yet I could follow the entries in physics and chemistry section with relative ease...*

The article also gave a comprehensive list of all Nobel Science Laureates till the year 1966, which I painstakingly jotted down in my notebook. That list is still lying somewhere in my big rack of files. I meticulously maintained a file after that, adding each year's Nobel Prize winner.

When the book under review arrived at the journal office, I found myself seized with the same old emotion that I had experienced more than 30 years back, when I suddenly and unexpectedly discovered that article by Zuckerman. Here was a treasure house of information on Nobel scientists in one book, quite similar to that article, but on a much much larger scale. The scientists are not indexed by the Universities they are affiliated with (as in Zuckerman's article), but they are indexed by last names, countries and the scientific work they have done. Each Nobel scientist gets a separate entry, and is discussed under several headings such as Prize, Born, Died, Nationality, Education, Career, Other awards and so on.

The book also gives the Nobel Citation for each scientist. For instance the citation of, say, Bertram Neville Brockhouse, the 1994 Nobel Laureate in physics reads thus:

"For pioneering contributions to the development of neutron scattering techniques for studies of condensed matter" (with Clifford G. Shull); "for the development of neutron spectroscopy".

Perhaps the most interesting and useful feature of this book is that it gives the Nobel prize winning work in a relatively non-technical language. I am a forensic pathologist by profession, yet I could follow the entries in physics and chemistry section with relative ease. I read with interest the Nobel prize winning works of several physicists and chemists. The femtochemistry of Ahmed H. Zewail (1999 Nobel Prize for Chemistry) appealed to me very much, and although the name femtochemistry may sound intriguing to you, the concept is so nicely explained, you would have no difficulty understanding it.

Many entries give interesting sidelights in Nobel Prize winning research. For instance, on page 120, we are told of a very interesting accident which led Hideki Shirakawa, a Japanese scientist to the Nobel Prize in Chemistry in 2000. Shirakawa was exploring an unprecedented new era of polymer science by converting insulating polyacetylene into an electrically conducting one. In one of the experiments, one of his juniors added a thousand times too much catalyst during the synthesis of a polymer. It resulted in a silver film possessing many properties of a metal. This accident ultimately led to work, which finally won Shirakawa the Nobel prize.

The book is full of hundreds of such anecdotes and stories. And since all kinds of information about a scientist is given, you can make lists of your own in many interesting ways. I was talking of university affiliations earlier. Although this book does not give these affiliations in a well-defined table (as in Zuckerman's article), you can work out a table for yourself, since the whole career graph of each scientist is given.

The book should be very useful to teachers of science and researchers. It should also be very useful to all intelligent people who want to know more about Nobel prize and its winners. It is going to be a very useful reference book for students, writers and researchers.

Order this Book by clicking here

View this book on Amazon

-Editor-in-Chief