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## BOOK REVIEWS

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### Science and Engineering Indicators—1989

*Reviewed by Bernard M. Strauss, Teledyne Engineering Services, Waltham, MA 02254.*

**REFERENCE:** *Science and Engineering Indicators—1989*, National Science Board, available from U.S. Government Printing Office, Washington, DC 20402, Stock Number 038-000-00583-9, 1990, 415 pages.

Every two years the National Science Board, part of the National Science Foundation, publishes a comprehensive report containing data on the state of American science and engineering with respect to its global counterparts. This report, "Science and Engineering Indicators—1989," is the latest edition of a widely used resource in government, industry, and academia citing trends in worldwide interest in science and engineering and the relative ranking of the United States in R&D. The report also states the strengths and weaknesses of American science and technology and gives recommendations for action.

Because the United States no longer dominates the sciences, education in science, engineering, and mathematics is a national weakness which must be effectively addressed by cooperative action between industry and government.

This report effectively presents the data supporting these conclusions with many well organized graphs, charts, and chronological trends. It is highly recommended as a data resource for the current status of financial resources for R&D, science, math-

ematics and engineering education, public attitudes toward science and technology, and global markets for U.S. technology.

### Concise Encyclopedia of Building and Construction Materials

*Reviewed by Barry Donaldson, Tishman Research Corporation, New York, NY 10103.*

**REFERENCE:** *Concise Encyclopedia of Building and Construction Materials*, Fred Moavenzadeh, Ed., MIT Press, Cambridge, Mass., 1990, 682 pp. + Index, \$175.00.

This is a good reference book for very technical information on building material. I am not sure who the audience is except that it must be very broad. Since the emphasis is quite technical, I assume the audience is manufacturers, materials scientists, and laboratory and testing people. This is a book which would be of great interest to architects or specifiers.

The book, although somewhat esoteric, is an adequate reference work. It does not present new research but surveys existing information. I did not discover any factual errors, and I believe the book meets the objective of being an "encyclopedia" (it is thorough but very broad). My only concern is that the material is so broad that it does not always address the needs of building and construction. Sometimes the emphasis is more towards the materials sciences and manufacturing.