SOLAR BOOKS AND **PERIODICALS**

While researching material for this solar energy issue, Janet Raloff, Policy/Technology Editor and Jane Livermore, Book Review Editor came across the following books and periodicals that they felt would be of interest to SCIENCE NEWS readers

The books marked with asterisk (*) may be ordered through the Book Order Service, Science News, 1719 N Street, N.W., Washington, D.C. 20036. Please remit retail price plus 25¢ handling charge for each book ordered.

Addresses for books and periodicals to be ordered directly from the publisher are given in the listing.

BOOKS

*THE COMPLETE SOLAR HOUSE - Bruce Cassiday — Dodd, 1977, 212 p., illus., \$8.95. An introduction to the use of solar energy in the home. Discusses solar collectors, solar hotwater systems, solar space heating and air conditioning and explores "retrofitting"—the addition of a solar system to an existing home heating system. A list of manufacturers is included.

CONCENTRATED SOLAR COLLECTORS -Leonard Took with K.D. Tentarelli — Triangle Associates, P.O. Box 104, Lake Villa, IL 60046, 1977, 26 p., diagrams, paper, \$4.50. Intended to be used as a guide for the do-it-yourself builder of solar heat collectors.

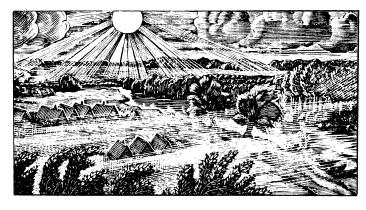
*DIRECT USE OF THE SUN'S ENERGY - Farrington Daniels - Yale U Pr, 1964, 374 p., illus., \$15. A pioneer in solar energy utilization provides an introduction to solar energy use for the general reader. Bibliographies with material of a more technical nature are included.

FLAT PLATE SOLAR HEAT: How to Save Fuel Costs with Solar Energy — Leonard Took — Triangle Associates, P.O. Box 104, Lake Villa, IL 60046, 1977, 24 p., diagrams, paper, \$4.50. Directed to the needs of the homeowner/handy man to help devise a means to reduce the cost of space and water heating.

*HOMEOWNER'S GUIDE TO SOLAR HEATING AND COOLING—William M. Foster—TAB Bks, 1976, 196 p., illus., tables, \$7.95; paper, \$4.95 Advice on how to select, install and maintain solar heating and cooling, and hot water sys

*HOW TO BUILD A SOLAR HEATER: A Complete Guide to Building and Buying Solar Panels, Water Heaters, Pool Heaters, Barbecues, and Power Plants - Ritchie, 1975, 247 p., photographs, drawings, paper, \$4.95. Instructions for the do-it-yourselfer.

* HOW TO BUY SOLAR HEATING: Without Getting Burned - Malcolm Wells and Irwin Spetgang — Rodale Pr. 1978, 262 p., illus., paper, \$6.95. To acquaint the buyer with problems that could be encountered in planning solar heating. Insulation with many practical suggestions is discussed. A bibliography is included at the end of each chapter; lists of solar manufacturers and architects are also included. - Rodale Pr, 1978, 262 p., illus., paper, architects are also included.



NICHOLSON SOLAR CATALOGUE AND BUILDING MANUAL—Nick Nicholson—Baraka Books, 1977, 175 p., illus. paper, \$9.50. Information pertaining to the practical application of solar energy and related sys-tems, covering home design, air systems, collectors and storage fabrication, wind systems, water heaters, greenhouses and insulation techniques. Well illustrated with detailed drawings and photographs.

*1977 SOLAR ENERGY & RESEARCH DIREC-TORY — Ann Arbor Science Special Task Group — Ann Arbor Science, 1977, 386 p., paper, \$22.50. Compiled from questionnaires distributed to individuals, companies and research facilities involved in solar activities. Each re-spondent is classified as to Energy Conservation, Manufacturers of Solar Components or Total Systems, Distributors, Design/Construc-tion, Solar Research, Solar Energy-Related

THE 1978 SUN CATALOG - Solar Usage Now, Box 306, Bascom, OH 44809, 224 p., photographs and drawings, paper, \$2. A catalog of hardware from many different manufacturers for

the utilization of solar energy.

of energy.

*RAYS OF HOPE: The Transition to a Post-Petroleum World — Denis Hayes — Norton, 240 p., \$9.95, paper, \$3.95. The transition to a world with dwindling oil output is an imminent reality; it could be a painful transition if we do not prepare for it, says the author. This Worldwatch Institute book attempts to think through some of the steps that must be taken in energy conserva-tion and in the development of alternate sources

SOLAR AGE CATALOG: A Guide to Solar Energy Knowledge and Materials — Solar Acs — Solar Vision (Brickhouse), 1977, 232 p., illus., paper, \$8.50. Lists the latest products by category, includes performance charts and comparative data tables, a directory of manufacturers, a listing of architects, engineers and designers and an annotated reading list.

SOLAR COLLECTOR DESIGN — D.K. Edwards — Franklin Inst Pr, Box 2266, Philadelphia, PA 19103, 1977, 64 p., diagrams, paper, \$6.50. Describes different types of solar collectors, demonstrates how physics can be used to predict their performance, how performance is affected by design features and briefly describes the procedures used to achieve designs of maximum benefit to users.

SOLAR COOLING -- Susuma Karaki and Paul J. Wilbur — Franklin Inst Pr. Box 2266 Philadelphia, PA 19103, 1977, 43 p., diagrams, paper, \$6.50. Deals with the application of solar energy for air conditioning and refrigerant systems. Describes the technical aspects of two solarpowered refrigeration systems: the absorption cooler and a heat engine that drives a vapor compression refrigerator.

*SOLAR ENERGY: Fundamentals in Building Design—Bruce Anderson—McGraw, 1977, 374 p., illus., \$21.50. Intended for architects and building professionals. A more technical version of the "Solar Home Book." *SOLAR ENERGY BOOKS - International Compendium — National Solar Energy Education Campaign, 1977, 118 p., illus., paper, \$4.50. A catalog of books on solar energy and related subjects to aid the homeowner, teacher and student, businessman and librarian with the selection of titles of interest to them.

SOLAR ENERGY EXPERIMENTS: For High School and College Students—Thomas W. Norton—Rodale Pr. 1977, 129 p., illus., paper, \$5.95. Eighteen experiments of varying difficulty covering the important aspects of solar energy utilization and eight classroom-type activities presenting worldwide data and solar energy data for individual analysis.

SOLAR HEATED BUILDINGS OF NORTH AMERICA: 120 Outstanding Examples — W.A. Shurcliff — Brickhouse, 310 p., photographs & drawings, paper, \$8.95. Presents concise, factoristic forms of the standard forms. tual descriptions of houses, office buildings, factories and schools. Emphasis is on the solar heating system itself, on hardware and performance. (Publication expected June 1.)

*THE SOLAR HOME BOOK: Heating, Cooling and Designing with the Sun — Bruce Anderson with Michael Riordan — Brickhouse, 1976, 297 p., illus. by Edward A. Wong, paper, \$8.50. Addressed to home owners, builders and architects, discusses fundamentals of solar energy and its applications, such as flat-plate collectors heat storage methods, integrated solar designs, as well as low-cost do-it-yourself projects.

*SOLAR HOMES AND SUN HEATING — George Daniels — HarRow, 1976, 184 p., photographs, diagrams, \$8.95. Explains the basics of sun heating, describes the use of windows in heating a house, 14 different sun-heating systems, how to hold on to stored heat, and tells how to build a flat-plate solar-heating system.

SOLAR HOT WATER AND YOUR HOME - National Solar Heating and Cooling Information Center, P.O. Box 1607, Rockville, MD 20850, 20 p., diagrams, free upon request. Basic facts about solar hot water heating. Discusses design and choice of different systems and indicates some possible pitfalls. Provides references and a list of manufacturers.

PERIODICALS

Rain. 10 issues per year, \$10, 2270 N.W. Irving, Portland, OR 97210. Covers appropriate technologies with much material on solar energy.

SOLAR AGE: A Magazine of the Sun. Monthly, U.S. \$20 for one year, SolarVision, Inc., 200 East Main St., Port Jervis, NY 12771.

Solar Energy Update. Monthly, \$27.50 per year, U.S. Energy and Development Administration, Technical Information Center, Box 62, Oak Ridge, TN 37830. Subscriptions to: Supt of Documents, G.P.O., Washington, DC 20402.

SOLAR ENGINEERING MAGAZINE, Official publication of the Solar Energy Industries Association. Monthly, Subscription rates: U.S. and Canada, \$15 for 12 issues, \$1.50 for single copies, Edito-rial & circulation offices, 8435 Stemmons Freeway, Suite 880, Dallas, TX 75247.

APRIL 22, 1978

A complete reference on all aspects of the energy problem.

ANNUAL REVIEW OF ENERGY

Critical, informative, and timely reviews of progress in active areas of research. Each article is written by an internationally known expert in the field.

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VOLUME 1 (1976)

A review of energy technologies and an examination of the policy issues surrounding energy production and use in the United States.

Energy in our Future, H. Brown

Coal: Energy Keystone, R. A. Schmidt and G. R. Hill

Production of High-Btu Gas from Coal, H. R. Linden, W. W. Bodle, B. S. Lee, and K. C. Vyas

Clean Liquids and Gaseous Fuels from Coal for Electric Power, S. B. Alpert and R. M. Lundberg

The Nuclear Fuel Cycle, E. Zebroski and M. Levenson

Solar Energy, F. H. Morse and M. K. Simmons

Geothermal Energy, P. Kruger

Oil Shale: The Prospects and Problems of an Emerging Energy Industry, S. Rattien and D. Eaton

Nuclear Fusion, R. F. Post

Waste Materials, C. G. Golueke and P. H. McGauhey

Hydrogen Energy, D. P. Gregory and J. P. Pangborn

Energy Storage, F. R. Kalhammer and T. R. Schneider Advanced Energy Conversion, E. V. Somers, D. Berg, and

A. P. Fickett The Energy Industry and the Capital Market, W. E. Pelley,

R. W. Constable, and H. W. Krupp

The Price of Energy, D. E. Sander

Energy System Modeling and Forecasting, K. C. Hoffman and D.O. Wood

Raising the Productivity of Energy Utilization, L. Schipper Potential for Energy Conservation in Industry, C. A. Berg

Social and Institutional Factors in Energy Conservation, P. P. Craig, J. Darmstadter, and S. Rattien

Social and Environmental Costs of Energy Systems, R.J. Budnitz and J. P. Holdren

Health Effects of Energy Production and Conversion, C. L. Comar and L. A. Sagan

Economic Costs of Energy-Related Environmental Pollution, L. B. Lave and L. P. Silverman

Philosophical Basis for Risk Analysis, C. Starr, R. Rudman, and C. Whipple

Safety of Nuclear Power, J. M. Hendrie

Energy Self-Sufficiency, P. L. Auer

Energy Regulation: A Quagmire for Energy Policy, W. O. Doub Federal Land and Resource Utilization Policy, J. A. Carver, Jr. International Energy Issues and Options, M. Willrich

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Author, subject, and cumulative indexes.

VOLUME 2 (1977)

Analyses from a variety of perspectives on global, international, and national issues surrounding the production, trade, and use of energy.

The Global Energy System, W. Häfele and W. Sassin

International Energy Trade: Recent History and Prospects, H. K. Schneider

Global Energy Resources, M. Grenon

Policy Alternatives of the Major Energy-Importing Nations, E. B. Steinberg and J. A. Yager

The Role of Multinational Oil Companies in World Energy Trade, F. R. Wyant

Global and International Energy Models: A Survey, J. M. Beaujean, J. P. Charpentier, and N. Nakicenovic

Energy and Food, D. Pimental and E. Cruze Terhune

The Impact of Production and Use of Energy on the Global Climate, B. Bolin

The International Safeguards Problem, L. Scheinman and H. B. Curtis

The Coming Age of Conservation, R. H. Socolow

Energy and Economic Growth in Central America, A. M.

Perspectives on Energy in the People's Republic of China, V. Smil and K. Woodward

The European Community - An Energy Perspective, G. Brondel and N. Morton

Perspectives on Energy in India, A. Ramachandran and J. Gururaja

Perspectives on Energy in Japan, K. Matsui

The Organization of the Arab Petroleum Exporting Countries: Objectives and Potential, R. El Mallakh

Perspectives on Energy in Sweden, G. Hambraeus and S. Stillesjö

Energy Syndrome, Soviet Version, H. Block

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VOLUME 3...will be published October 1978

This volume will provide reviews of the activities and the literature relevant to those topics in energy in which important changes have occurred over the last few years. Energy conservation will be one of these topics; the international trade in nuclear technology and nuclear materials will be another.

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