

professional groups, such as the American Association for the Advancement of Science and the American Physical Society. Needless to say, snake oil finely dressed up is always going to be available for sale.

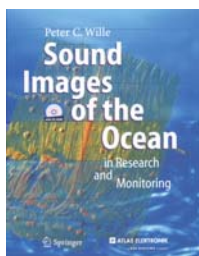
For me, the hero in *Imaginary Weapons* is Zimmerman, who quietly used his scientific training and experience in Washington to nudge the fable of a Hf bomb into a deservedly deep hole. Sadly, his nudge took several years to complete.

John H. Gibbons
Resource Strategies
The Plains, Virginia

Sound Images of the Ocean in Research and Monitoring

Peter C. Wille
Springer, New York, 2005. \$129.00
(471 pp.). ISBN 3-540-24122-1

The use of sound to study the seafloor and ocean has revolutionized our understanding of the planet and the forces that have shaped it over the ages. Ocean



acoustics can now provide unprecedented views of the seafloor's features, both natural and artificial, and help us to understand critical processes in the sea. Peter C. Wille's

Sound Images of the Ocean in Research and Monitoring is meant to provide the nonexpert with an overview of the uses of acoustical measurements in the sea. Through the extensive collection of imagery and associated explanatory text, the book provides a unique and comprehensive perspective on the use of sound in the study of the ocean and seafloor. Unfortunately, poor editing and an inconsistent writing style detract from the book's worthwhile and partially accomplished goal.

The book contains 400 sound images contributed by 120 experts from around the world. The graphics are accompanied by detailed explanations and provide excellent examples to accompany chapters on the seafloor, the ocean, and manmade matter. Introductory text gives background information on the use of acoustics and echo sounding. Woven throughout the book are explanations of plate tectonics and other processes that generate many of the fea-

tures seen in the imagery. The juxtaposition of images derived from satellite altimetry and gravimetric methods with those from high-resolution, multi-beam echo sounding is particularly enlightening.

Although the graphics and supplemental text are excellent, the main text just doesn't do the topic justice. It is often difficult to read because of run-on sentences, misused words, and misspellings. The text is also highly repetitive. In one section I found four sentences specifying the depth of the Mariana Trench and explaining that it is the deepest point in the ocean. In places the author attempts to go from a technical and straightforward style to more flowery wording that just doesn't work. Terms such as "peerless," "decisively supporting," and "ideal diagnostic tool" are used repeatedly to convince the reader of the importance and unmatched capabilities of undersea acoustics. The graphics and explanatory text undeniably show the contributions of acoustic imagery, so continually hitting the reader over the head with unnecessary adjectives and phrasing is distracting.

As a marine scientist and author, I have focused much of my time on translating science for the nonexpert. Thus I may be overcritical of the editing. I also consider myself to be within the target audience of Wille's book, having expertise in marine geology, with some knowledge of ocean acoustics and an interest to learn more. Nevertheless, I found it very difficult to get through the book—notwithstanding the fascinating images.

A CD accompanying the book provides six excellent globe relief images. I was disappointed, however, that more images from the book were not made available on the CD. Only 47 of the 400 appear on the CD, but many more would be an excellent resource for anyone teaching about the oceans, marine geology, and sedimentology.

Sound Images of the Ocean in Research and Monitoring brings together a spectacular set of high-resolution and informative images that showcase the utility and contribution of sound to image and study the ocean. Wille's expertise in the field of ocean acoustics is unquestioned: He is a professor at the University of Hamburg, was the director of the NATO Undersea Research Centre, and is considered an international statesman in the field. Along with his own experience, he brings together a group of renowned contributors. Their combined knowledge is well evident and showcased by the amazing collection of im-

ages, but poor editing has rendered the book less than compelling.

Ellen Prager
Earth2Ocean, Inc
Tierra Verde, Florida

new books
miscellaneous
The Science of Chocolate. S. T. Beckett. RSC Paperbacks. Royal Society of Chemistry, Cambridge, UK, 2006 [2000, reissued]. \$44.95 *paper* (175 pp.). ISBN 0-85404-600-3

A Scientist's Guide to Talking with the Media: Practical Advice from the Union of Concerned Scientists. R. Hayes, D. Grossman. Rutgers U. Press, New Brunswick, NJ, 2006. \$60.00, \$18.95 *paper* (200 pp.). ISBN 0-8135-3857-2, ISBN 0-8135-3858-0 *paper*

Spinning Flight: Dynamics of Frisbees, Boomerangs, Samaras, and Skipping Stones. R. D. Lorenz. Springer, New York, 2006. \$49.95 (346 pp.). ISBN 0-387-30779-6

Survival Skills for Scientists. F. Rosei, T. Johnston. Imperial College Press, London, 2006. \$38.00, \$24.00 *paper* (205 pp.). ISBN 1-86094-640-2, ISBN 1-86094-641-0 *paper*

Zababakhin Scientific Talks—2005. E. N. Avrorin, V. A. Simonenko, eds. AIP Conference Proceedings 849. Proc. conf., Snezhinsk, Russia, Sept. 2005. AIP, Melville, NY, 2006. \$185.00 (520 pp.). ISBN 0-7354-0345-7

nonlinear science and chaos

Biologically Inspired Algorithms for Financial Modelling. A. Brabazon, M. O'Neill. Natural Computing Series. Springer, New York, 2006. \$84.95 (275 pp.). ISBN 3-540-26252-0

Complexus Mundi: Emergent Patterns in Nature. M. M. Novak, ed. World Scientific, Hackensack, NJ, 2006. \$98.00 (346 pp.). ISBN 981-256-666-X

The Emerging Physics of Consciousness. J. A. Tuszynski, ed. The Frontiers Collection. Springer, New York, 2006. \$69.95 (487 pp.). ISBN 3-540-23890-5

Stochastic Modeling of Manufacturing Systems: Advances in Design, Performance Evaluation, and Control Issues. G. Liberopoulos et al., eds. Springer, New York, 2006. \$139.00 (363 pp.). ISBN 3-540-26579-1

nuclear physics

Hazardous and Radioactive Waste Treatment Technologies Handbook. C. H. Oh, ed. Mechanical Engineering Handbook Series 6. CRC Press, Boca Raton, FL, 2006. \$129.95 (792 pp.). ISBN 0-8493-9586-0

Nuclear Superfluidity: Pairing in Finite Systems. D. M. Brink, R. A. Broglia. Cam-