they are in snow south of the polar pack. Ready movement of contaminants from the industrialized northern hemisphere to the ice is one very important difference between the Antarctic and the Arctic. Another important difference is the presence of *in situ* oil and gas development in ice-covered northern seas. One wonders how the Northwest Passage will fare if liquefied natural gas tankers transit the Passage day and night throughout the year, as has been proposed. The Antarctic is mercifully free of such resourceextraction issues.

These are, however, relatively minor criticisms of an overall very good book. There is much in here for anyone interested in some aspect of frozen oceans, and no matter how qualified the reader, it will definitely be a learning experience. *Frozen Oceans* will be an important popular reference as well as a fun read for anyone remotely interested in polar oceanography. Harold Welch (buster@fishquilt.com) is a retired marine biologist with Fisheries and Oceans Canada. He has worked seven winters and twenty five summers conducting research in the Arctic, most recently spending fourteen months aboard the Canadian icebreaker Des Grosseiliers as leader of the biological component of the SHEBA (Surface Heat and Energy Balance of the Arctic) ice drift experiment.

The Sea's Enthrall Memoirs of an Oceanographer

A Book by Timothy Parsons Ecce Nova, 2004, 187 pages, ISBN 0-9731648-7-5, paperback: \$19.95

REVIEWED BY DAVID W. TOWNSEND

The name Timothy R. Parsons is immediately recognizable to biological oceanographers. Most of us have routinely used one or both of his manuals of sea water analysis (the first published with J.D.H. Strickland in 1965; the second with Y. Maita and C.M. Lalli in 1984), or we used as students (or teachers) the first *bona fide* textbook on biological oceanography, published with M. Takahashi in 1973 (and which also saw later revisions). In nearing the end of a remarkable career, Parsons tells us here, in simple language and few words, a short story of his life, from his early childhood years in England and Ceylon, up to and including his winning The Japan Prize in 2001. He brings us through his life's landmark events—both personal and professional—and introduces us to his most unforgettable characters, including that special science teacher to whom he credits his pursuing a career in marine science (most of us can relate, I am sure). He shares with us intimate aspects of his personal life and high points in his scientific career, all the while weaving in his political views on the environment.

Having decided that he wanted a career in "something in biology," Parsons left England for Canada and McGill University where he would study the



only field of biology he was aware of at the time—agriculture. His interest in analytical chemistry subsequently led him to pursue his Ph.D. in biochemistry. From McGill, Parsons took his first job in Nanaimo, British Columbia, working under John Strickland at the Pacific Oceanographic Group of the Fisheries Research Board of Canada. Those early years helped to form the scientist we have come to know today. "Violently seasick and retch[ing] constantly..." on

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his first oceanographic cruises, Parsons' career would soon take off. Time spent at UNESCO shored up his international perspectives on fisheries and environment-related matters, while exposing him to cultures and political bureaucracies of various nations. Those experiences appear to have served him well when he made his transition to academia, taking a post at the University of British Columbia where he would spend much of the remainder of his career.

Parsons' general views on the philosophy of science surface in several places, and his anecdotal accounts are at times reminiscent of episodes that many of us can recall having experienced at one time or another. In his early attempts to win research grants (e.g., in 1972), he became frustrated with the same pervasive focus held today by many funding agencies: that scientific research must be hypothesis-driven. His views on ocean pollution may surprise some readers: he argues for what he feels to be a more even-handed perspective with regard to environmental policies, stressing that we will not "kill the planet," and indeed, that the ancient ocean was also polluted as a result of greater volcanic activity long ago. No doubt some readers will be taken aback by Parsons' seeming defense of the harvest of harp seals, and his almost relegating to insignificant the environmental damage caused by oil spills. But no one can accuse Parsons of not speaking his mind. Whether it is his views on fields of oceanographic research ("mud sucks"), or university politics, he lays bare his feelings.

The field of fisheries oceanography became for Parsons almost a passion, and he describes his work to advance the scientific study of fisheries as his most significant. While successful in advancing the field, he did not prevail, ironically, in his attempts to establish an institute at his own university that married fisheries science and oceanography. His limited ability to maneuver in the murky world of university politics would thus represent one of his greatest failures; in frustration, he took early retirement.

Travel, family affairs, and professional consulting now occupy his time. Parsons relates some of these stories to the reader, almost as an afterthought, before he concludes his memoirs by sharing with us his winning the prestigious Japan Prize.

That the book is too short and spotted with typographical errors does not detract from Parsons' having achieved his goal, which, I presume was to reveal who he is and what he believes in. But, I wish he had written more. **E**

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Books Received for Review

An Introduction to Ocean Remote Sensing by Seelye Martin, Cambridge University Press, 426 pp.

Changing Sea Levels: Effects of Tides, Weather and Climate by David Pugh, Cambridge University Press, 258 pp.

Surf Science: An Introduction to Waves for Surfing by Tony Butt and Paul Russell with Rick Grigg, University of Hawaii Press, 142 pp.

Upcoming Events

American Meteorological Society 85th Annual Meeting & Exhibition January 9-13, 2005 San Diego, CA USA www.ametsoc.org/meet/85annual