

## Book reviews

**Franklin J. Agardy, Nelson Leonard Nemerow (Eds.), *Environmental Solutions*, Elsevier Academic Press, Burlington, MA, 2005, 475 pp., US\$ 89.95, ISBN 0-12-088441-0.**

If I were to teach a general environmental course dealing with world-wide environmental problems and solutions, I would seriously consider this book as a text. It was authored by an old friend, Nemerow (through the literature), who wrote an early text that I used when I was actively teaching environmental engineering. The book was entitled *Theories and Practices of Industrial Waste Treatment*.

Nemerow and his co-editor, Agardy, have assembled an impressive list of 17 contributors having diverse backgrounds and countries of origin. The editors' goal was to:

“... write and propose to practicing professional environmental engineers potential solutions to vexing problems, instead of theories of their origin, characteristics, and potential treatment. You, as the reader, can select a particular area of interest and peruse the chapters' potential solutions; then select the appropriate one(s) which apply most directly to your situation. Economic comparisons of solutions make your selections even simpler.”

And, in the main, they have done this well.

The 15 chapters are grouped under four major headings:

1. Politics and policies of pollution.
2. Scientific and technical solutions.
3. International aspects.
4. Summary.

As I do in many of my reviews, I will examine the chapters of personal interest, the first of which is entitled “Forensic (Legal) Solutions.” Much of the chapter is about the history of litigation, a topic so important I once had a lawyer friend of mine conduct a mock deposition in one of my graduate environmental engineering classes. One quote in this chapter reveals its importance: “In no other political and social movement has litigation played such an important and dominant role [as in the environmental movement].” I appreciated the final paragraph in this chapter which reads:

“A final comment concerns the relationship between law, litigation, and technology. Let it be understood that what technology can accomplish should translate to practice. However, litigation and law cannot accomplish what technology cannot provide, therein lies the rub. Lawyers can sue and laws

can be passed but without the available technology the mission cannot be readily accomplished. In any case, hindsight always being 20/20 whereas at one time ‘the solution to pollution was dilution,’ perhaps we should have focused on ‘the solution to pollution is litigation.’”

Part 2 of the technical core of the book deals with scientific and technical environmental problems; there are chapters devoted to: economic, environmental engineering, biological, hydrogen energy, chemical, electrical and thermal, environmental health, industrial collaborative, and industrial ecological solutions. In their writing, the authors range globally in their discussion with many examples given for both China and India.

One chapter dealt extensively with hydrogen and its potential for solving energy problems. This chapter was well written and full of technical information and discussion on the generation, transmission, and use of hydrogen. The authors of this chapter appear to be far more optimistic for the ability of hydrogen to solve environmental/energy problems than other sources I have read recently, but I hope their optimism is well placed. In any case, this is one of the best written reviews of the topic I have encountered.

Nemerow, himself, contributed a chapter entitled “Industrial Collaborative Solutions.” This chapter incorporates much of his prior work with one citation as far back as 1963. In this chapter he discusses industrial complexes and their ability to minimize emissions. Numerous examples are given. Personally, this was the chapter I enjoyed reading most in the text.

In closing, I will make two general comments: (1) each chapter ended with review questions, this feature will enhance this book's potential use as a text, and (2) some of the contributions suffered from a lack of editing for English. Commonly, as an editor, I receive papers from non-English speaking countries and these papers need significant editing work. While the contributions to this book were not bad, they could well have been improved with an editor's pen.

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