- 3. Input, behaviour and fates of petroleum hydrocarbons
- 4. Biological and ecological effects of oils
- 5. Biological and ecological effects of dispersants
- 6. Biodegradation of oil in freshwaters
- 7. Clean-up technology
- 8. Restoration and recovery
- 9. Summary on conduction

There are over 600 references cited; a glossary is given and in addition a standard index, the authors have compiled a systematic (biological species) index.

GARY F. BENNETT

Heavy Metals in the Environment (Trace Metals in the Environment Vol.1), edited by J.-P. Vernet, Elsevier, Amsterdam, 1991, ISBN 0-444-89064-5, xviii + 406 pp., Dfl. 270.00.

Studies released recently in the United States have revealed that lead is a far more toxic pollutant than previously thought. And more steps are being taken to limit human exposure through air (lead from gasoline), water (lead in soldered joints), and solid phase (lead in paint and soil) pathways. Concern for lead and other metals is not solely a U.S. problem; it is global; hence the series of books, *Trace Metals in the Environment*, is well conceived. The goal is to provide a forum for transdisciplinary studies on heavy metal pollutant fate, transport, effects and abatement.

The continuing worldwide interest in the role of heavy metals in the environment has led to seven international conferences, the first in 1975 in Toronto, the seventh in 1989 in Geneva. This volume, the first in a new series, contains 22 papers selected from the many presented at the last conference (at the time of printing Vol. 2 in the series has appeared).

The coverage is very broad as the title of the various chapters listed below (and the number of papers in each chapter) indicate:

- Atmospheric transport: Large scale transport, modes (1)
- Acid deposition and soil acidification (2)
- Soil interaction (2)
- Regional studies: Freshwater and marine environment (3)
- Bio-accumulation (2)
- Microbial adaptation and microbial interaction (1)
- Health effects of metals (1)
- Radionuclides as chronometers and tracers (4)
- Wastewater (4)
- Analytical and general methods (2)