up on the reader at unexpected times. The book is technically excellent with surprisingly few typographical errors.

Ozima and Podosek are in complete command of the literature—not surprising since they wrote much of it. The tone of the book is that of a critical review which emphasizes the unknowns as much as the knowns. The authors review their own work with the same skepticism they accord the work of others. The book repeatedly points out how thin is the data base in terrestrial noble gases and how much work remains to be done.

The first three chapters of the book provide an introduction and background to the field of noble gas geochemistry. The 4th chapter is an excellent summary of the physical chemical behavior of the noble gases and brings together a very diverse literature. This chapter should be required reading to anyone interested in noble gases. Chapters 5 and 6 condense the extensive extraterrestrial literature into a useful background against which to discuss the terrestrial data. Chapters 7 through 10 review the data for Water, Sedimentary Rocks, Igneous Rocks, and Emanations respectively. Chapter 11 discusses how noble gas data are used to elucidate mantle structure and evolutionary history. Chapter 12 reviews the question of what are the significant terrestrial reservoirs of noble gases. The final chapter concerns noble gas constraints on the origin of the atmosphere. The last chapter is the only one with any mathematical models. While the authors admit it would be "naive to suppose [the models] are rigorously applicable to the earth", the models do allow "plausible generalizations" about the evolution of the atmosphere. Chapter 13 is by far the most coherent synthesis of the models yet presented in the literature.

This book is required reading for, and should be on the bookshelf of anyone who uses noble gases in the geosciences. It is of interest to almost any isotope geologist and chapters 5, 6, 11, 12, and 13 will be useful to a wide range of geologists. This book will certainly be the standard reference for the noble gas geochemistry for many years.

The only negative observation I can offer is the price—$79.50 for a book of this size effectively prices it out of the reach of all but research libraries and funded scientists. In particular, the price is an unreasonable burden on graduate students, who, in principle, should be a major market for this book. The price must be staggering when exchanged into the home currencies of non-U.S. scientists. One can only hope that publishers will eventually remember the parable of the goose that laid the golden egg.

E. CALVIN ALEXANDER, JR.
University of Minnesota

NOTICES

EXPERIMENTAL MINERALOGY AND GEOCHEMISTRY
Applications to Petrology and Ore Deposits

17–19 April, 1986—Nancy, France: International Symposium on the most recent advances in methods, results and applications of experimental studies in the following subject areas: Geochemistry, crystal chemistry, mineralogy, mineral deformation.

The Symposium is organized by: Société Française de Minéralogie et Cristallographie (F), the Mineralogical Society (GB), the Deutsche Mineralogische Gesellschaft (GFR), the Institut National Polytechnique de Lorraine (Ecole Nat. Sup. de Géologie, Nancy) and the Centre de Recherches Pétrographiques et Géochimiques (C.N.R.S.) (Nancy).

Information: Prof. A. WEISBROD, E.N.S.G., B.P. 452 - 54001 NANCY CEDEX (FRANCE).

AIPG

The American Institute of Professional Geologists (AIPG), Arvada, Colorado, has produced and is making publicly available two new booklets explaining in lay terms the background, present status of, and the Institute's recommendations for positive action on two matters of concern to the Nation having serious geologic implications.

Titled respectively "Hazardous Waste: Issues and Answers" and "Radioactive Waste: Issues and Answers", the two booklets were written by ad hoc committees of AIPG Members expert in each of these areas. More than two years in production, both are "primers" on these crucial and timely topics.

The new "Issues and Answers" are 8½″ × 11″, soft cover. Printed on top quality paper, the two publications are written for a general audience in a not-overly technical fashion. Both include numerous full color photos and artistic illustrations, plus charts, graphs and explanatory drawings, also in color. "Hazardous Waste" is 25 pages long and "Radioactive Waste" is 27 pages in length.

Copies of either of the booklets are available from AIPG Headquarters, 7828 Vance Drive, Suite 103, Arvada, Colorado 80003. One to 99 copies are $3.00 each postpaid. One hundred or more copies are $2.25 each postpaid. Orders of under $100.00 total must be accompanied by check.

AIPG certifies the competence and ethical conduct of professional geologists from all specialties. The organization is concerned with informing the public on geology-related subjects such as hazardous waste and radioactive waste. It presently has nearly 4,500 certified members in the U.S. and abroad. Founded in 1963, the Institute's National Headquarters is in Arvada, and it also maintains an office in Washington, D.C.

Request for Abstractors

The *new mineral names* section of the American Mineralogist is a collective effort on the part of many mineralogists. The bulk of the abstracting has been done in recent years by Dr. Michael Fleischer, but there is now a need for additional abstractors. The most urgent need is for those willing to prepare abstracts of new minerals described in Russian. There is also a need for abstractors of papers written in English. Those interested in contributing to this most important part of the Society's work should write to Dr. Frank Hawthorne, Dept. of Earth Sciences, University of Manitoba, Winnipeg, M6 R3T 2N2, Canada.