

practical joke. [Few graduate students have had an advisor with the inspiration and technical "ability" necessary to fill a student's car with styrofoam packing material.] I am also indebted to the members of the Jenkins laboratory who have been so helpful, particularly Dempsey Lott whose technical wizardry, and remarkable desk drawer full of critical spare parts, have always amazed me. I thank Department Chairman Bob Gagosian and the Woods Hole Oceanographic Institution for providing a first-class atmosphere in which to do research.

A very important part of my education was the postdoctoral year that I spent at the University of Paris in the laboratory of Claude Allègre. Working with Thomas Staudacher on the heavy noble gases, and being a part of the incredibly talented team at the Institut de Physique du Globe was a great opportunity. Although I wasn't quite as productive as I would have liked, working near the "epicenter" known as Claude Allègre taught me a great deal about science. It is an honor just to share this occasion with such a distinguished scientist.

Upon my return to Woods Hole, I believed that I understood helium in the mantle fairly well and was anxious to expand my horizons, and to apply some of the knowledge gained in Paris, particularly with respect to heavy noble gases and solid source mass spectrometry. To tie up the loose ends with respect to helium would take only a few months of hard work. The "loose ends" have now taken several years, and the unexpected discovery of cosmogenic helium in terrestrial rocks showed that it was incredibly presumptuous to have assumed a mastery of this subject. Although the diversions with cosmogenic helium have displaced my schedule, they have been well worth the time and effort. One of the principal lessons that I learned is that when you think you have reached a point of geochemical understanding [or misunderstanding]: go back and look carefully at the rocks.

Finally, I give tribute to the people who really deserve a medal: my wife Slim and my daughter Danielle. Slim has not only patiently endured late nights and frequent absences, but has been my most important partner, friend and collaborator.

Organic Geochemistry Division of the Geochemical Society Best Paper Award 1985

M. D. LEWAN (1985) Evaluation of petroleum generation by hydrous pyrolysis experimentation. *Philosophical Transactions of the Royal Society of London, Series A*, **315**, 123–134.

The hydrous pyrolysis method described by M. D. Lewan in this paper and its predecessors [LEWAN M. D., WINTERS J. C. and McDONALD J. H. (1979) *Science* **203**, 897–899; WINTERS J. C., WILLIAMS J. A. and LEWAN M. D. (1983) *Adv. Organic Geochem. 1981*. pp. 524–533; LEWAN M. D. (1983) *Geochim. Cosmochim. Acta* **47**, 1471–1479] has had a major im-

act on organic geochemistry over the past few years. Virtually every petroleum exploration research laboratory has developed an active hydrous pyrolysis research program patterned after that described by Lewan and co-workers, J. C. Winters and J. A. Williams at the Amoco Production Research Center. The method has become a standard approach in source rock and heavy oil analysis. In the present paper the primary features of the hydrous pyrolysis method are illustrated, including the controversial topic of evaluation of kinetic parameters for petroleum generation.