Review by Christopher G. Kendall

This book is largely concerned with the philosophy of the exploration for oil and gas. It is divided into three sections— the philosophy on oil and gas discovery, petroleum exploration and the role of the geologists, and the scientific method.

This book has a definite cerebral slant, lending itself to reading in the evening or in quiet moments during the day. It is essentially a compendium of papers by the likes of Wally Pratt, Norman Foster, Funkhouser, Parker, Bear, Ken Crandel, Totten, Weimer, Masters, etc. The question posed by the book is "how is oil found? " and we read how different people like Edwardo Guzman focus on what they perceive to be the important elements to oil exploration including the importance of following an idea through, the importance of data sources, the importance of courage, salesmanship and the importance of not being afraid to be proved wrong. Some of the papers in this book are short two to three page articles, some are much longer and have numerous illustrations, cross sections, maps, etc. All however are focussed on what it is that makes an oil finder and what it is that enables a person to be successful in exploration. For instance John Masters of Canadian Hunter in his article "Winning" emphasizes the importance of reducing the cost of exploration to match the profits that are going to be made from discovery. He explains that with todays economic climate you have to make cuts in spending, you have to have money and you have to have a small staff to work intelligently and imaginatively as a group. As he points out, it takes a lot of people to produce oil but only a few to find it. He quotes John Paul Getty as saying that "the meek will inherit the earth but not the mineral rights".

The final section of the book consists of nine papers dealing with the scientific method. Here are papers by Kope and Kohn, Gilbert, Davis, and Johnson. There is a famous article on multiple working hypothesis by Chamberlin, a paper by Haus, another on models versus data by Solsbury, the geological attitude by Fuller, and continental drift and the scientific revolution by David Kitts. These last papers in the book all focus how scientists carry out research and develop ideas. It considers what is it that makes a successful scientists and so a successful oil finder.

This is a seminal book and it is not for everyday reading. However many geologists may wish to have this text on their shelves, rather than in the library, so they have the opportunity to read and think about what the basis is for successful oil exploration and successful scientific discovery. This is a great book and though it is probably the least practical of all the AAPG treatise, it is one of the most interesting. It aims at the heart of what makes a good scientist and what is it that distinguishes this successful scientist from an unsuccessful one.