BOOK REVIEW


This book contains a summary of the author's knowledge of leached outcrops, derived from some 30 years' experience as a geologist operating mainly in the United States of America and Australia.

Part 1 of the book provides a comprehensive coverage of the various processes and substances involved in the oxidation of many minerals, under different climatic conditions, to form the final leached products.

In Part 2, details are given of the appearance and composition of the oxidation products of the following minerals: pyrite, pyrrhotite, arsenopyrite, chalcopyrite, chalcocite, bornite, tetrathedrite, oxidized copper minerals, galena, cerussite, sphalerite, molybdenite, chromite, hematite, magnetite, manganite, pyrolusite, calcite, siderite, fluorite, salite and supergene silica. The illustrations, the black and white photographs and the colour plates of oxidation products are of a high standard.

The material is presented in a logical order and in terms which are not over-technical; hence it is useful to persons other than trained geologists.

Despite the advances in geophysical and geochemical prospecting, the location and interpretation of gossans remains an important method of discovering ore bodies, particularly so since the correct interpretation of a leached material can prevent the fruitless and expensive prospecting of an underlying body of uneconomic concentration. Therefore it is considered that this volume will be a valuable addition to the libraries of universities, exploration companies and geologists.

It is of interest to note that the author, who died in 1966, presented a paper, under the same title as this book, to the Chemical, Metallurgical and Mining Society of South Africa in 1939. For this work he was awarded the Society's Gold Medal.

W.T.S.