

THE ORIGIN OF ROCKS AND MINERAL DEPOSITS

- using current physical chemistry of small particle systems.

By John Elliston

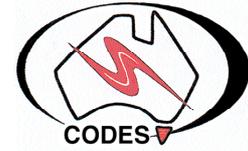


This project is proudly supported by



An Australian Government Initiative

AusIndustry



(Principles of ore genesis have now been confirmed and will be released at the symposium)

This book contains a selection of 756 photographic records of mineral structures and textures that can be seen in rocks, drill cores and mineral deposits. Many of these patterns and structures have puzzled geologists for years. They reflect the properties of the particulate systems and ore forming processes in the original massive deposits of fine sediment particles that have now become lithified and crystallised to rocks. It has been found that principles more recently developed in colloid science, rheology and surface chemistry now provide explanations for all the textures illustrated and the origin of mineral deposits.

This e-book provides an opportunity for everyone to look at the evidence in the rocks and mineral deposits in the light of modern physical chemistry and recognise that it: -

- **could establish Australian leadership in the Earth sciences.**
- **does provide an understanding of the formation of ore deposits.**
- **gives exploration managers an indication of the likelihood of ore occurrence.**
- **can be used to improve the cost effectiveness of exploration up to 300%.**
- **will create renewed interest in the Earth Sciences.**
- **will result in more interesting geology courses.**
- **makes features in outcrops, drill cores and mine openings simple to understand.**
- **opens the way for better Earth science research outcomes.**

Rock textures and structures similar to those in this e-book and the 4800 examples from which they have been selected can be seen by everyone in polished building facings, ornamental stonework, and natural rock outcrops. This book will greatly increase the understanding of all geological phenomena.

Copies of the Australian Preview Edition of "The Origin of Rocks and Mineral Deposits" will be available after the Symposium. Book price \$75.

A copy of this book will be provided to each registered participant at the symposium: -

SYNTAPHRAL TECTONICS AND DIAGENESIS

- 44 years on

John Elliston led the Peko and Geopeko teams from the mid 1950's until the mid 1980's and then became a research consultant to industry for a further 20 years. Exploration results from teams where he was involved were quite extraordinary. Many ore deposits were discovered and many aspects of the applied science and technology are now the basis of industry best practice throughout the world. The symposium programme addresses the science, technology, and philosophy developed over the last 50 years and updates concepts formally introduced 44 years ago. Australia's most distinguished colloid scientists will explain the simple chemical principles and some of Australia's most successful explorers will explain its application. Examples of how this science and related technology has resulted in significantly greater cost-effectiveness will be presented.

Thursday 22nd and Friday 23rd November 2007

CODES – The University of Tasmania

Programme and registration form is available on the CODES web site:

<http://fcms.its.utas.edu.au/scieng/codes/newsdetail.asp?INewsEventId=2464>

Symposium fee: \$A300. Speaker/Retired: \$250. Students: Free (must register)

Symposium Dinner: \$A90 per person. Registration: Katrina.Keep@utas.edu.au

CODES Geography-Geology Building (Room 356)

Private Bag 79, The University of Tasmania, Hobart, Tasmania 7001