CERAMAH TEKNIK (TECHNICAL TALKS)

D.F. Strong: Metallogeny of Circum-Atlantic orogenic terrain with emphasis on granite related deposits.

Laporan (Report)

Prof. D.F. Strong from Memorial University of Newfoundland, St. John's Newfoundland, presented the above-mentioned talk to about 35 members at the Department of Geology, Universiti Kebangsaan Malaysia on 18 January 1988.

Prof. Strong began his talk by elaborating on the four main suites of Palaeozoic granitoid plutons in the Newfoundland sector of the Appalachian-Caledonian orogen which are characteristic of three major tectonic zones. These are 1) composite mafic-silicic hornblende-bearing suites; 2) microclinemegacrystic biotite granites; 3) biotite-muscovite ("two-mica") leucogranites; and 4) alkaline-peralkaline granites.

Available geochemical and isotopic data suggest a crustal origin for the granitoid rocks of these suites, which have characteristic chemical features for each tectonic zone, like distinct evolutionary patterns of initial ⁸⁷Sr/⁸⁶Sr ratios increasing in time.

Next Prof. Strong showed the granitic suites comparable to those of Newfoundland have been well-documented in other regions as containing characteristic types of mineralization. Suite 1 is typically host to porphyry Cu and Mo deposits, e.g. in the American Cordillera; Suite 2 is generally barren; Suite 3 contains U, Sn, W, Be and associated deposits of Western Europe; and Suite 4 is associated with Sn deposits in Nigeria, fluorspar in Newfoundland and U in Namibia.

The talk was punctuated with relevant slides of the various rock types and their related deposits.



G.H. Teh

D.F. STRONG AT PELAPAH KANAN (Photo by Wan Fuad)