

## CHAPTER X



### CONCLUSION

Considerable time may be saved, and an increase in success rate may be achieved, in searching for economic tin deposits if suitable granitic host rocks are preliminary identified followed by the detailed studies of the individual granite plutons in petrology, geochemical evaluation and structure related features. The studies of granites in the Phuket Plutons are only a case of example which have revealed that the biotite-muscovite granites have a high tendency to be tin-bearing granites whilst the biotite granites have not.

It should also be concluded that the proper phase for tin mineralization is favoured by the younger or the later phase in granitic evolution especially with some action of metasomatic and pneumatolytic alterations. The petrochemistry of the granites can be used to identify the individual granite as tin-bearing. This is indicated by the D.I.  $> 85$  and P.I.  $\leq 4$  as well as high content of  $\text{SiO}_2$  and  $\text{K}_2\text{O}$ .

In addition, for the selected granite plutons, the trace-element geochemistry showing a high content of Rb, Nb, Sn and low content of Ba and Sr should then justify that they are most favourable for tin mineralization.

However, tin-mineralization occurring in minor intrusive bodies is found in the same trend as regional fractures and is probably controlled by such features.