

KIMBERLITE EMPLACEMENT MECHANISMS PART 4 : A NEW PERSPECTIVE ON TEXTURAL AND GENETIC CLASSIFICATION

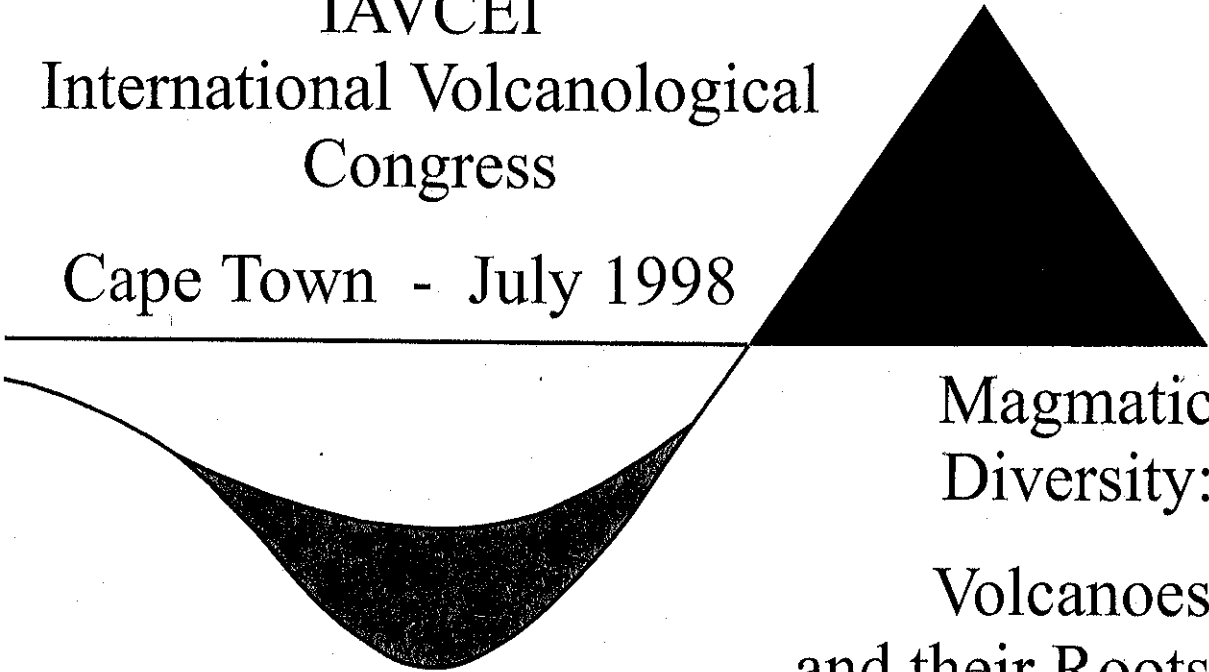
¹SCOTT SMITH, B.H. and ²FIELD, M. ¹Scott-Smith Petrology Inc., 2555 Edgemont Boulevard, North Vancouver, BC V7R 2M9, Canada; ²De Beers Consolidated Mines Ltd., P.O. Box 10191, Beaconsfield 8315, South Africa.

Textural variations in kimberlites result primarily from near surface emplacement processes and require a workable classification. In 1979 a landmark advance in rationalizing previous textural terminology for kimberlites was made by Clement and Skinner (1979 cited in 1985) when they proposed the first widely accepted, and now well tested, textural-genetic classification scheme. The main shortcoming of the Clement and Skinner classification is the fact that it is genetic and that an initial decision regarding facies has to be taken before a rock can be classified. Recent discoveries, particularly in Canada, have highlighted this shortcoming. The reverse logic should be applied. Observations should first lead to a non-genetic descriptive classification that is then used to arrive at a genetic interpretation when possible. Based on this concept a new textural classification scheme for kimberlites is proposed. This scheme is based on the fundamentals of Clement and Skinner (1985), and uses five descriptive textural categories namely: juvenile magma texture, structure, clast/grain size, xenolith/autolith content and type, and cognate olivine content to describe and classify kimberlite specimens. Some new terms, such as "magmaclastic" and "phenocrystic" have been introduced.



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Abstracts
