

## ALITE VARIATION BETWEEN CLINKERS

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### ABSTRACT

The predominant alite polymorphs in each of nine cement clinkers have been determined by XRD analysis. These have then been related to the chemistry of the clinkers and of the constituent phases, in particular the alite composition. It has been found that in these examples, with similar contents of MgO, the SO<sub>3</sub> content of the clinkers was related to that in the alite crystals and that this was in turn closely related to the alite polymorph present, with higher SO<sub>3</sub> contents favouring the inversion to the lower temperature monoclinic form M<sub>1</sub>. A works example is presented which suggests that variability of SO<sub>3</sub> due to process factors has affected the type of alite in production clinkers.