SMP055−10　　　　　会場:ファンクションルームB　　　　　時間: 5月23日16:15-16:30

変成岩中のせん断クラック周りの記号力学系列

Symbolic dynamics sequence along sealed shear cracks in the metamorphic rocks

鳥海　光弘[1*]

mitsuhiro toriumi[1*]

[1]東京大学新領域創成科学

[1]Graduate school of Frontier Sciences, Un

Multi-component nonlinear dynamical equations contain almost always chaotic solutions of some variables. In the system of the metasomatic and metamorphic rocks, important reactions should have higher order term of ionic concentrations in aqueous solution together with diffusion terms because of solubility constraint. Then, the mineral compositions in these rocks does not contain a stable assemblage although natural mineral assemblages are controlled by phase rule apparently. On the other hand, these rocks also show clear banding structures derived from enhancement of concentration contrast of rock chemistry. The banding structures of mineral compositions should be considered by the model of symbolic dynamics because ionic concentrations in the aqueous solution in the grain boundary are to be governed by diffusion reaction equation forming proper mineral compositions.

キーワード:記号力学,せん断クラック,鉱物縞構造,流体移動
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