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ABSTRACTS

Concept of the Geochemical Cycle

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A geochemical cycle represents the migrational stages of the elements within the phases of the outer parts of the earth. Existing graphical representations of the cycle are not adequate for classroom purposes. Most of them tend to overemphasize certain processes such as anatexis and palingenesis and to underestimate others, *e.g.*, sedimentation and diagenesis, or *vice versa*.

The flaws in the fifteen published representations stem from the arrangement of the stages of element migration along a circle or in a circular manner, therefore, giving the beginning student the impression of a continuous consecutivism without halting stages, which is not the case.

In order to correct this error, a simple presentation of the migrational stages is provided. The visual emphasis is put primarily on the corners of a tetrahedron which represent the four stages at which the cycle may halt. In this tetrahedral arrangement, it is possible to differentiate between petrochemical transformations and physicydynamic changes, a factor disregarded in most previous presentations. This noncyclic tetrahedral arrangement is more in accord with geochemical facts than any heretofore published presentations.