

Chemical geodynamics based on statistical analyses and forward simulation

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Chemical geodynamics is the 36 years old term since Allegre (1982) proposed for the first time, which links geodynamics phenomena to major chemical fractionation. Zindler and Hart (1986) expressed it as “a field of inquiry that has evolved from a marriage of mantle geochemistry and geophysics”. Since then, various attempts have been made to combine different chemical and physical approaches. This study is to introduce such an attempt for contributing to chemical geodynamics, on the basis of multivariate statistical analyses of geochemical data and forward simulation.