

Origin of the Donner Pass region granodiorite, Sierra Nevada, U.S.A. and its petrological study

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The Donner Pass Region Granodiorite, located in the northeastern margin of the Mesozoic Sierra Nevada Batholith, contains dominant amount of mafic magmatic enclaves and syn-plutonic mafic dikes. Both granodiorite and these mafic rocks have same mineral assemblage except some enclaves contain euhedral augite. Consisting minerals of the host granodiorite and the mafic rocks have similar chemical compositions. Bulk compositions show continuous trend between the granodiorite and the mafic rocks on a Harker Diagram.