

INTISARI

Batuan granitoid di Pulau Belitung memiliki persebaran yang luas dan terdistribusi secara tersebar. Batuan granit biotit ditemukan di wilayah barat, utara, dan timur Pulau Belitung, sementara granodiorit berada di bagian timur, dan monzonit kuarsa ditemukan di bagian selatan. Penelitian ini mengkaji karakteristik petrografi dan geokimia batuan granitoid tersebut. Analisis petrografi menunjukkan bahwa granitoid di Pulau Belitung memiliki ukuran butir sedang hingga kasar, tekstur holokristalin, dan granularitas equigranular faneritik dengan tekstur hipidiomorfik granular. Tekstur khusus yang diamati meliputi grafik, poikilitik, dan *zoning*. Berdasarkan komposisinya, batuan granitoid kaya akan biotit dan bebas hornblenda merupakan granit biotit, sedangkan batuan yang kaya akan hornblenda dan mineral opak merupakan granodiorit, dan granitoid dengan komposisi kuarsa yang lebih rendah merupakan monzonit kuarsa. Berdasarkan data geokimia, granit biotit memiliki saturasi alumina peralumina, afinitas magma *high-K calc-alkaline – shoshonite*, batuan sumber berupa metasedimen dan terbentuk pada zona kolisi. Granodiorit memiliki saturasi alumina metalumina – peralumina, afinitas magma *high-K calc-alkaline*, berasal dari batuan beku dan terbentuk pada zona subduksi. Monzonit kuarsa memiliki saturasi alumina metalumina – peralumina, afinitas magma *high-K calc-alkaline – shoshonite*, batuan sumber berupa metasedimen dan terbentuk pada zona subduksi yang cukup kompleks. Berdasarkan karakteristik petrografi dan geokimia, batuan granit biotit diklasifikasikan sebagai tipe S, granodiorit dan monzonit kuarsa merupakan tipe I. Penelitian ini juga menunjukkan bahwa terdapat informasi mengenai penamaan 'adamelit' yang tidak relevan untuk digunakan, serta peta distribusi batuan granitoid terbaru.

Kata Kunci: Belitung, granitoid, petrografi, geokimia

ABSTRACT

Granitoid rocks on Belitung Island are widely distributed and occur in various locations across the island. Biotite granite is found in the western, northern, and eastern regions of Belitung Island, while granodiorite is located in the eastern part, and quartz monzonite is present in the southern region. This study examines the petrographic and geochemical characteristics of these granitoids. Petrographic analysis reveals that the granitoids on Belitung Island have medium to coarse grain sizes, holocrystalline texture, and equigranular phaneritic granularity with hypidiomorphic granular texture. Specific textures observed include graphic, poikilitic, and zoning. Based on their composition, the biotite-rich granitoids that are free of hornblende are classified as biotite granite, while hornblende-opaque rich rocks are classified as granodiorite, and granitoids with lower quartz composition are classified as quartz monzonite. Geochemical data indicate that biotite granite exhibits peraluminous alumina saturation, high-K calc-alkaline – shoshonite magma affinity, the source rock is metasediment rock, and formed in collision zones. Granodiorite shows metaluminous – peraluminous alumina saturation, high-K calc-alkaline magma affinity, the source rock is igneous rock and formed in subduction zones. Quartz monzonite has metaluminous – peraluminous alumina saturation, high-K calc-alkaline – shoshonite magma affinity, the source rock is metasediment rock, and formed in a complex zone, specifically in subduction zones. Based on petrographic and geochemical characteristics, granite biotite is classified as S-type, granodiorite and quartz monzonite classified as I-type. This research also indicates the presence of information regarding the naming of 'adamelit' that is not relevant for use and the distribution map of the latest granitoid rocks.

Keyword: Belitung, granitoids, petrography, geochemical