
Significance of radiolarian chert from the Chert Spillite Formation, Telupid, Sabah

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Chert in the Telupid area is found associated with basalt, serpentinite and peridotite. This rock association may represent a part of an ophiolite sequence. The chert occurs as thinly bedded chert interbedded with siliceous shale. The chert is red to reddish brown in colour. The chert contains abundant skeletons of radiolaria. The radiolaria were retrieved from their siliceous matrix by leaching with hydrofluoric acid. Several species of radiolaria were identified and their age were determined. Geochemical analysis of bedded radiolarian chert exhibits a very high percentage of silica (more than 95%). Most of them are biogenic silica. The low content of Al_2O_3 and CaO suggests that the chert was deposited very far away from sources of terrigenous detritus and below the calcite compensation depth.

Rijang di kawasan Telupid didapati berasosiasi dengan basalt, serpentinit dan peridotit. Asosiasi batuan ini mewakili sebahagian jujukan ofiolit. Rijang ini wujud sebagai lapisan nipis yang berselang lapis dengan syal bersilika. Rijang ini berwarna merah hingga merah-perang. Rijang mengandungi kelimpahan rangka radiolaria. Radiolaria dikeluarkan daripada matrik silika dengan melarutkan dalam asid hidrofluorik. Beberapa spesies radiolaria dikenalpasti dan usia telah ditentukan. Analisis geokimia lapisan rijang berradiolaria menunjukkan peratusan silika yang tinggi (lebih 95%), kebanyakannya silika biogen. Kandungan Al_2O_3 dan CaO yang rendah mencadangkan rijang ini diendapkan jauh daripada punca gersik terigen dan diendapkan di bawah kedalaman pampasan kalsit.