Black siliceous deposits in Peninsular Malaysia: their occurrence and significance

BASIR JASIN, ZAITON HARUN AND SITI NORHAJAR HASSAN

Program Geologi, Fakulti Sains dan Teknologi Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor

Black Radiolarian cherts are found in the Setul, Mahang, Kubang Pasu formations. The occurrence of the cherts and carbonaceous material was related to high plankton productivity. The lithologic association of the chert represents the continental shelf rocks association. The geochemical data from the chert samples of the Setul, Mahang and Kubang Pasu Formations plotted on the Fe_2O_3/TiO_2 vs. $Al_2O_3/(Al_2O_3 + Fe_2O_3)$ discrimination diagram show most of the points are located in the field of older upper continental crust. The chert was deposited on a passive continental margin, which episodically received the supply of terrigenous material from the continent. During the Cambrian, both the Machinchang and Jerai Formations were deposited in a deltaic environment. The sea level rose in the Ordovician followed by deposition of the Setul and Mahang Formations. The Mahang basin was a faulted basin deeper than the Setul basin. The Singa and the Kubang Pasu Formations overlie the Setul and the Mahang Formations respectively. The radiolaria in the chert were deposited in a relatively shallow marine environment on the continental shelf.