



## Geomorphological and Sedimentological Features of River Sadong, Sarawak, Malaysia

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**Abstract** - The effect of topography, climate, soil, and geology on River Sadong sediments is related to its geochemistry. Eighteen surface sediments and five core samples were collected in replicates from six sampling sites along River Sadong, Sarawak, Malaysia. The main aim of this study is to describe the geomorphology and sedimentological characteristics of the river sediments. This was achieved by the study of the processes that form the sediments and influence their physical and chemical characteristics. The sediments were analyzed for their sedimentological characteristics. The results indicated that the studied area is enriched with organic matter, and there are no sedimentary structures in its vicinity.

**Keywords:** geochemistry, geology, geomorphology, River Sadong, sedimentological characteristics, topography

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### INTRODUCTION

The River Sadong covers an area of 4,000 km<sup>2</sup>, located between longitudes 1° 14' 0.012" - 1° 34' 0.012" N and latitudes 110° 38.09'.5" - 110° 45' 0" E. It is located in the southern part of Sarawak, Malaysia, about 4.8 km wide and approximately 82.1 km long. This river covers a large area from Serian District to the Samarahan-Asajaya District in Sarawak, Malaysia, and flows largely through the Sadong Basin, southern Sarawak (Bryant, 2003). The river is situated in the northwestern part of Borneo Island, and it is the main source of water for the surrounding com-

munity. It receives a major input of fresh water from upland, transport sediments for several metres then meanders along its path, then flows through the estuary, and finally discharges into the South China Sea. The environments of the River Sadong are characterized by mangrove swamps, abandoned coal mining site, tourism spots, peat swamps, and economic activities such as fishing and agriculture activities. Agriculture is one of the major activities around this river, and rice farming and oil palm plantation are present in some localities around this river. This may lead to a nonpoint source of pollutants due to the use of pesticides, because chemical compounds such