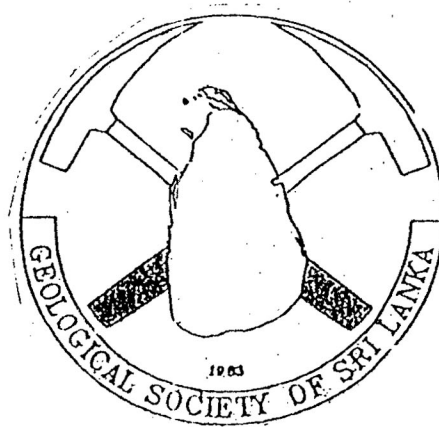


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ABSTRACTS



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the Highland Complex are intimately interlayered here, forming strongly imbricated transitional zone in between two complexes. Orthogneisses such as granitoid gneiss, charnockites, hornblende biotite gneiss as well as metasediments (garnet granulite, garnetiferous hornblende/biotite gneiss, quartzite) occur in this zone.

Orthogneisses encountered in the whole map area appear to have been derived from the granites, granodiorites, tonalites, quartz monzogabbro while paragenesis may have been derived from the impure sandstones, siltstones and calcareous shales.

STRATIGRAPHIC SEQUENCES OF THE CITY OF COLOMBO, SRI LANKA

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The city of Colombo which has been the centre of commercial and other activities are located between the Wellawatta channel and the Kelani river. Investigation of the stratigraphic sequences with emphasizing their evolution of this city is of great significance for the development of flood protection projects, water supply and drainage schemes construction of roads and high-rise buildings and reclamation of land for housing.

Preliminary relief map of the city of Colombo was compiled based on topographic sheets (1:63 360 and 1:50 000 sheets) and interpretation of aerial photographs. Stratigraphic sequences of the lower Kelani basin and the other sites of the area examined on the basis of bore-hole data obtained from the Foundation Engineering Consortium Limited, Colombo (1982), Multiplex Overseas Construction (Pvt) Ltd (1982), State Engineering Corporation of Sri Lanka (1982) and dug-well observations.

The northern area of the city boarded by the Kelani river outfall and several rock promontories around the Colombo harbour. The coast line between Mutwal and Mount-Lavinia consists of beach rocks shoals and submerged beachrock reefs which demonstrates the variations in sea level in the post-glacial epoch. The wetland of the lowlands have been largely reclaimed for industrial, commercial and residential purposes during the past 25 years period.

Geologically the area belongs to the Southwestern Group which is comprised of weathered metamorphosed rocks. Enchanted rock types are mainly gneiss, granitic gneiss, garnet-biotite gneiss and charnockites. The residual hills and rises, made up of laterites are found in Mattakkuliya and Kotahena areas. At Colombo Fort, about 100m eastward from the sea weathered gneissic rock is recorded from 10m-20m depth and the ground level of the area is 4.66m above msl. The stratigraphic condition of the Colombo fort indicate that the gravel of sub-angular and sub-rounded shapes may be fluvial in origin and they reset on the highly weathered gneissic rocks. In bore-hole data at Kew Road and at Rotunda gardens the soil layers comprise of fine sand, medium sand and clay beds. The colour of the sand varies between whitish and grey. But further inland, about 1.5km, the area is covered by residual hills and rises made up of laterite and lateritic soils.