

THE GEOCHEMISTRY OF SOME TRACE METALS IN THE  
SEDIMENTS OF THE KANDY LAKE

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A six step sequential extraction method was used in the study of Fe, Mn, Cu and Co in sediments of the Kandy Lake. The sequential extraction steps were (1) 1M ammonium acetate (pH7) (2) 1M Sodium acetate (pH5) (3) 1M  $\text{NH}_2\text{OH} \cdot \text{KCl} + 0.01\text{M } \text{NH}_3$  (pH2) (4) 0.02M ammonium oxalate + 0.02M oxalic acid (pH3) (5) 30%  $\text{HNO}_3 + \text{H}_2\text{O}_2$  (PH 2) (6) Conc  $\text{HNO}_3$  (heat  $120^\circ\text{C}$ ) media. The highest total fractional concentration observed were Mn (30.5%)/step 3; Zn(37.1%)/step 3; Fe (56.5%)/step 4.4; Co (48.2%)/step 3; Cu(42.2%)/step 4 for the sediment samples.

The maximum and minimum concentrations of Fe, Mn, Zn, Cu, and Co released from the Kandy Lake sediments from the sequential extraction steps (given in ppm) are (0-7981); (6-78); (3-50); (2-26); (0-9) respectively. Compared with the mean trace element concentration in the earth's crust, the Kandy Lake sediments are not excessively polluted by anthropogenic influences.