

The use of some biota as bioindicators of heavy metal pollution has been demonstrated as particularly adequate due to their capacity of bioconcentration. This study evaluated the levels of platinum group metals (PGMs) in some selected species along the coastal belt of Ghana, using the neutron activation analysis (NAA) method. The result was processed to evaluate pollution indices in order to map the distribution of the metals in those species in the lagoons and estuaries along the coastal belt of Ghana. The analysis showed significant levels of all PGMs in blackchin tilapia (*Sarotherodon melanotheron* Cichlidae), brown goby (*Chonophorus lateristriga* Gobiidae), shrimp (*Macrobrachium vollehovenii* Palaemonidae), and mangrove oysters (*Crassostrea tulipa* Ostreidae) in the lagoons and river Pra estuary. However, the oysters showed an elevated mean concentration of 0.13 µg/g (dry weight) Pd. From the pollution indices, most of the sampling sites registered mean contamination factor (CF) values between 1.20 and 3.00 for Pt, Pd, and Rh. The pollution load index (PLI) conducted also gave an average pollution index between 0.79 and 2.37, indicating progressive contamination levels. The results revealed that anthropogenic sources, industrial and hospital effluent, etc., together with vehicular emissions, could be the contributing factors to the deposition of PGMs along the Ghanaian coast.