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ASSESSMENT OF THORIUM AND ASSOCIATED RESOURCES: PHILIPPINE INITIATIVES

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The exploration for thorium in the Philippines has always been regarded as secondary to uranium and then tied up with the exploration of rare earth elements. With 70% of the country having been covered by reconnaissance geochemical surveys, the potential areas for thorium are the Ombo and Erawan coastal areas containing radioactive heavy minerals situated in north-western Palawan Island. Mineralogical examinations of these heavy minerals from panned concentrates of beach and stream samples showed major medium to coarse-grained euhedral brown-reddish allanite (74.0 –81.8%) and minor fine-grained subhedral yellow monazite (2.4 –11.6%).

Field gamma-ray spectrometric measurements in Ombo and Erawan showed thorium varying from 2.2 –770.5 ppm and 8.6 –388.5 ppm, respectively. Thorium values by gammametric analysis in panned heavy beach and heavy stream sediment samples showed values ranging from 0.93 –1.28% and 0.76 –1.15%, respectively. X-ray fluorescence analyses for rare earth elements in both the panned heavy mineral stream and beach samples gave ranges of values of lanthanum (3.00 –12.24%), cerium (5.00 –21.07%), praseodymium (.04 –1.71%), neodymium (2.00 –6.51%) and yttrium (0.03 –0.21%).

Country or International Organization

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