



**Elemental concentrations of Beach sand deposits between Visakhapatnam to Itchhapuram, India by PIXE method**

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**ABSTRACT**

*The chemical constituents of ilmenite, monazite and sillimanite of Bhimuniapatnam – Visakhapatnam were analyzed by using PIXE technique. The mean values of 32.7% Fe and 66.33% titanium were determined in ilmenite. Monazite recorded 137.6 ppm Ce, 1.5 ppm Dy, 116 ppm Mn and 60.73% Ca, 7.2% Co and 15.8% Zr. Sillimanite recorded 108 ppm Mn and 3.33 ppm Nb. The above said mean values are found within the acceptable ranges prescribed with reference to the beach minerals.*

**Keywords:** PIXE, Beach sands, ilmenite (ILM), monazite (MON) and sillimanite (SIL).

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