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## Distribution pattern of NORM in Red Sea shore sediments and their relation to non-nuclear industries

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The Red Sea is a deep semi-enclosed and narrow basin that has an intensive non-industrial activities on and near its shore. Oil exploration, phosphate mining and trading, navigation activities and intensive touristic activities are considered as non-nuclear pollution sources. They could impose a serious radiological and ecological impacts on the Red Sea marine environment. Both oil and phosphate related activities could increase the concentration of Naturally Occurring Radioactive Materials –NORM such as  $^{238}\text{U}$  series,  $^{232}\text{Th}$  series and  $^{40}\text{K}$ . Forty representative shore sediment samples were collected from the Egyptian Red Sea shore, from Shuqeir to Marsa Alam City region. Activity concentration of  $^{238}\text{U}$ ,  $^{232}\text{Th}$ ,  $^{40}\text{K}$  were measured using ICP-MS analytical techniques. Previous study showed the possible impact of industrial activities on the activity concentration of NORM in shore sediment. This study will investigate such relationship and the distribution pattern of NORM in relation to the elemental composition of the shore sediment.

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