Caspian Sea Impact On Gastropods Temporal And Spatial Variation

Homayoun Khoshravan [1] and Arya Khoshravan [2]

(1) Water research institute, 4818183998 Sari/ mazandaran, Iran
Telephone: +98 151 3822974 Email: h_khoshravan@yahoo.com
(2) azad university of Tehran, 4818183998 sari, Iran
Telephone: +981513822974 Email: khoshravan.arya@yahoo.com

Determination, localized and frequency control and distribution condition of Gastropod species in several sedimentary environment in Miankaleh territory and their temporal and spatial variation by Caspian rapid sea level changing impact are main targets in this research. By selecting 8 measuring transects along the study area, 24 sediment samples and 8 water samples have been taken for biofacies and chemical properties analysis. At parallel of above mentioned subject, deformation and displacement degree of shore line of the Caspian Sea during 38 years was evaluated by remote sensing and GIS modeling. Results show us that the most important species of Gastropod totally include: 10 species associated to 3 genera of two family of suborder prosobranshia. Also some species of Gastropod was selected due to sedimentary environment bioindicators. Water chemical quality and quantity indicate that the salinity, EC, Ph degree is different in several parts of study area. Sediments grain size gradually has decreased from the West to East region of Miankaleh territory. Instead of in the same direction near to Gorgan Golf shore line the sediment particles size have been increased. Gastropod species accumulation and concentration tendency convert to high population in saline low land and lagoon with shallow depth and gentle slope of bottom. The correlation of information layers of Gastropod species location map with shore line displacement in GIS modeling indicate the vital variation more in the central and east part of Miankaleh.