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## ORIGIN, GEOLOGY, LITHOLOGY AND RELIEF OF THE ARAL SEA

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#### **ABSTRACT**

The article presents ideas about the formation of the Aral Sea and the stages of relief manifestations formation. According to the researchers, in the second half of the Pleistocene and in the Holocene, these large rivers, after filling their beds with the listed sediments, turned to the island sediment, forming the Aral Sea. According to this, at the beginning of the Holocene period, the Aral Sea was shallow, since most of the Amu Darya water went into Sarykamysh Lake and fell into the Uzboy. However, since that period, the current channel of the Amu Darya and the coastal delta of the Aral Sea began to form. This process began more than 2500 years ago. The Amu Darya waters over the next hundreds of years steadily took off from their waters towards the Aral Sea.

**KEYWORDS:** Amu Darya River, Aral Sea, Geology, Lithology, Climate, Relief, Geological Periods.

### **REFERENCES**

- 1. Internet data: 2022. https://uz.denemetr.com/docs/769/index-330835-1.html
- **2.** Kuziev R. et al. Instructions for conducting a soil survey and drawing up soil maps for maintaining the state land cadastre. / Normative act, Tashkent, 2013, p.52.
- **3.** "All-Union instruction on soil surveys and compilation of large-scale soil maps of land use" / Moscow, ed.: "Kolos". 1973, p.96.
- **4.** "Soil mapping" / Moscow, 1959, p.125-256

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- **5.** Methods of research of agrophysical, agrochemical and microbiological properties of soils on cotton fields of Uzbek Scientific Research Institute of Cotton Growing / Uzbek Scientific Research Institute of Cotton Growing. Tashkent, 1993, p.37.
- **6.** Kattaeva G.N., Kalandarova N.N., Mamadzhanova U.H. Virgin-pasture soils of the Ural water area // Bulletin of the National University of Uzbekistan, No. 3/1/1 2022, p.71-74.
- 7. Hufler F., Novitsky Z. Green shield of the dried bottom of the Aral Sea // Tashkent, 2003, p.5-6.
- **8.** Zhollybekov B. Changes in soil cover and landscapes of the southern Aral Sea region in connection with anthropogenic impact // Nukus. 1995, p. 244.
- **9.** Khakimov F.I. Soil-meliorative conditions of desertification of deltas // Pushchino. 1989, -p.217.
- **10.** Rafikov V.A. 2013. The processes of desertification of the southern Aral Sea region. Tashkent. Printing House of Academy of Sciences of the Republic of Uzbekistan p.140.
- **11.** 11. Sektimenko V.E., Ismonov A.J. Features of desertification of soils of the Aral Sea region // "Theoretical and applied problems of geography at the turn of the century". Materials of the International Scientific and Practical Conference. Almaty: Kazakh National University, 2004, p.164-166.
- **12.** Ismonov A., Tursunov A.A. Characteristics of saline soils of the lower reaches of the Amudarya River // Collection of scientific articles of the International scientific and practical conference dedicated to the 25th anniversary of the Caspian Research Institute of Arid Agriculture on the topic "Modern trends in the development of the agricultural complex". Astrakhan, 2016, May 11-13. FGBNU "Caspian Research Institute of Arid Agriculture", 2016, p.344-348.
- **13.** Ismonov A, Dusaliev A., Mamazhanova U. The reclamation state of the soils of the drained bottom of the Aral Sea central part // Bulletin of the National University of Uzbekistan, No. 3/2/1 2022, p.52-55.
- **14.** 14. Kattaeva G.N., Ismonov A.J. Salt marshes formed on the drained bottom of the Aral Sea // Journal "Scientific Review". (biological sciences). Moscow. 2022, No. 4, p.112-117.
- **15.** Osmonov A.Zh., Duskaliev A.T. Kattaeva G.N., Kalandarov N.N., Mamadzhanova U.H., Virgin-pasture soils of the Ural water area // Bulletin of the National University of Uzbekistan, 2022, No. 3/1/1, p.71-73.
- **16.** Ismonov A.Zh., Mamazhanova U.Kh. Saline soils of the Aral sea region and their rational use // FAO.2022. Halt soil salinization, boost soil productivity —Global Symposium on Salt-Affected Soils, 20-22 october 2021. Proceedinds. pp. 57-58. Rome. <a href="https://doi.org/doi\_number.2022">https://doi.org/doi\_number.2022</a>