



## **Carbon mass-balance modeling and carbon isotope exchange processes in the Curonian Lagoon**

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The Curonian lagoon one of the largest coastal lagoons in Europe is located in the south [U+F02D] eastern part of the Baltic Sea and lies along the Baltic coast of Lithuania and the Kaliningrad region of Russia. It is influenced by a discharge of the Nemunas and other smaller rivers and saline water of the Baltic Sea. The narrow (width 0.4 km, deep 8-14 m) Klaipėda Strait is the only way for fresh water run-off and brackish water intrusions.

This research is focused on carbon isotope fractionations related with air – water exchange, primary production and organic carbon sedimentation, mineralization and uptake from both marine and terrestrial sources.