

## **A project »WHITE GOLD FROM THE SEA«**

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Students have been introduced with the importance of salt. The history of so called »white gold« is very interesting. The salt we use every day is known as sodium chloride NaCl in chemistry. Table salt has been of great importance for human beings for ages. For that reason we call it »white gold«. It plays an important role for the proper function of our water balance, the nervous system, the digestion and the bone structure. The body of an adult needs one to three grams daily to compensate its loss through sweat and extraction

Young people are very curious and should have the opportunity to explore the world around them. The sea and maritime environment are good examples for that. School excursions to saltworks in Sečovelje are the best way for experiential or authentic learning.

The Bay of Trieste is a shallow marginal sea, the northernmost part of the Adriatic Sea surrounded by land on three sides. As it contains relatively little water, less than some large lakes, it is extremely sensitive to ecological changes, pollution and massive tourism.

Saltmaking is one of the oldest economic activities on the north-eastern shore of the Adriatic Sea, and the salt trade was once one of the most important branches of commerce in the territory of present-day Slovenia. This trade had a decisive role in the development of places like Trieste, Piran, Izola and Koper. The Sečovelje saltworks are the northernmost saltworks in the Mediterranean. The average salinity is 37-38‰ but in the summer it falls under 35‰. The salt work in Sečovelje is an activity that has survived for thousands of years.

According to the project students learn geography (northern Adriatic sea) and chemical processes at saltworks (past and today). They recognise the importance of salt – not only as a flavoring agent, but also as a source of different industrial chemicals. In the school laboratory students devise and carry out experiments to show how to extract salt from the sea. They prepare simple experiments of salt crystallization. They also learn about crystal structure of sodium chloride. Models of crystals can help better understanding its properties.