



Creation of a virtual museum and a diving park east of the island of Lemnos at the shipwreck site of the Svyatoslav battleship

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Underwater Cultural and Natural Heritage Sites:

"Dive in Blue Growth"

16-18 October 2019, Athens





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Route of Russian fleet to the Mediterranean Sea, during the Russian-Turkish war of 1768-1774.

This enterprise was named **First Archipelago expedition.** It's of great interest for Russians, and our group wants to create a virtual museum of this venture.





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During this military company, the Russian Fleet reached the Mediterranean Sea and destroyed the Turkish fleet in the battles of Chios and Chesma. First Archipelago expedition is Everest Russian Navy. Our museum should tell about events of this expedition.



The battle of Chesma

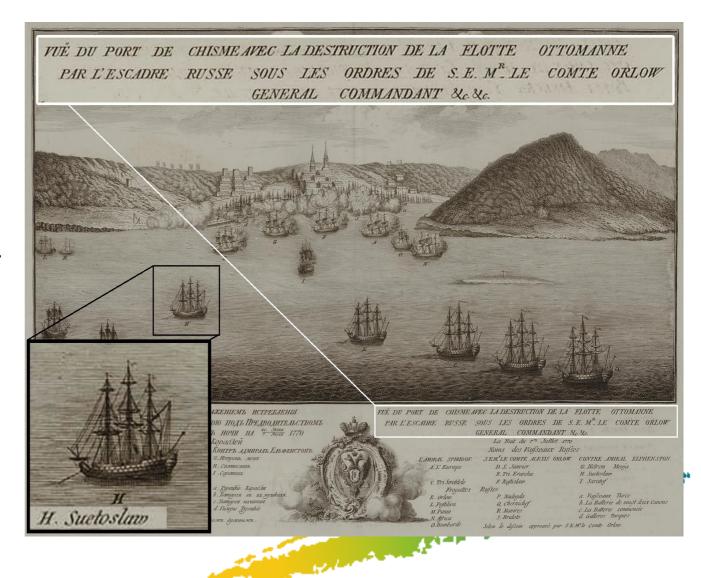
Painting by Ivan Aivazovsky



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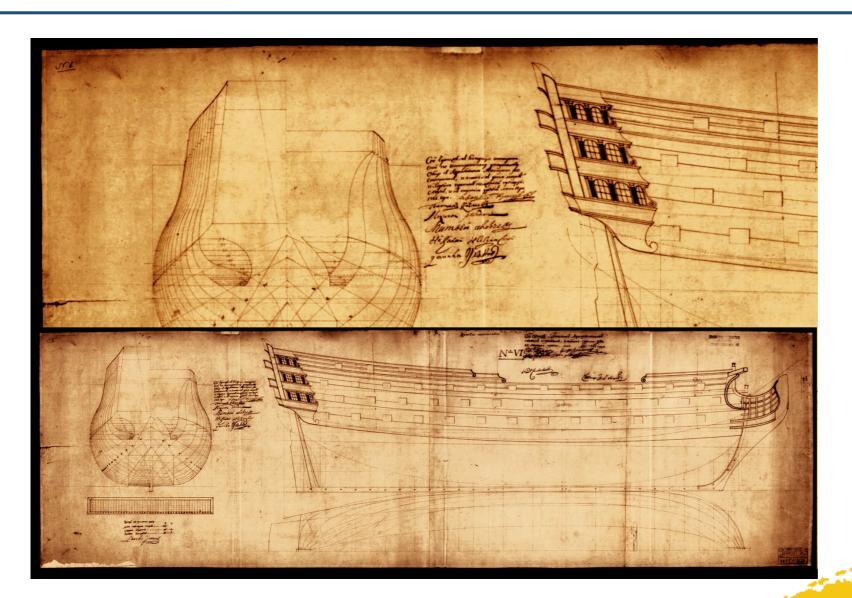
The first step towards the creation of this museum may be the virtual exposition of the battleship "Svyatoslav". This ship ran aground and sank at a depth of 6-8 meters near the island of Lemnos two months after the battle of Chesma. There were no victims, however all heavy equipment was lost: guns, anchors and everything else. It's the real time capsule.





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«Svyatoslav» was sailing 80-gun battleship of the Baltic Fleet of the Russian Empire, member of the First Archipelago expedition. «Svytoslav» was built in 1769 in Saint Petersburg by a British shipbuilder Lambert James.

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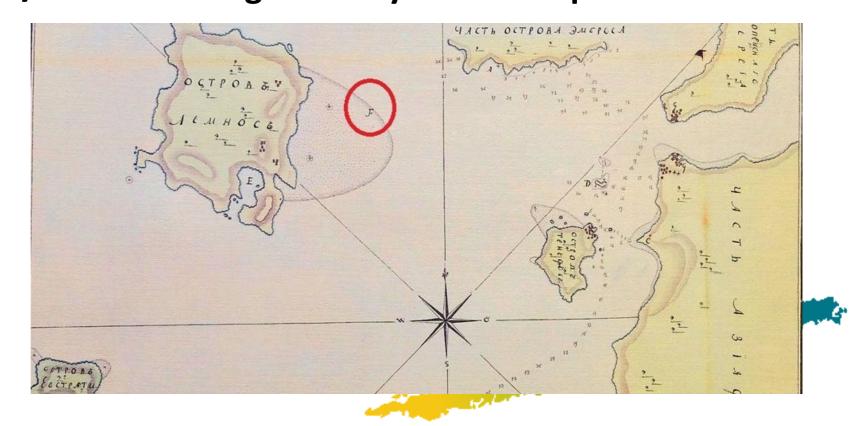
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In the logbook of Captain S.P. Hmetevsky, who took part in the First Archipelago Expedition, there is a detailed description of the accident with "Svyatoslav". from Hmetevskiy's The logbook, map indicating the «Svytoslav» shipwreck site.

Captain S.P. Hmetevsky











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The concept of creating a virtual exposition of the "Svyatoslav" ship

The result of the work should be an organized array of information consisting of

- •electronic copies of historical documents,
- drawings and maps,
- •dynamic models reflecting the past events,
- •video clips telling about life on the ship.

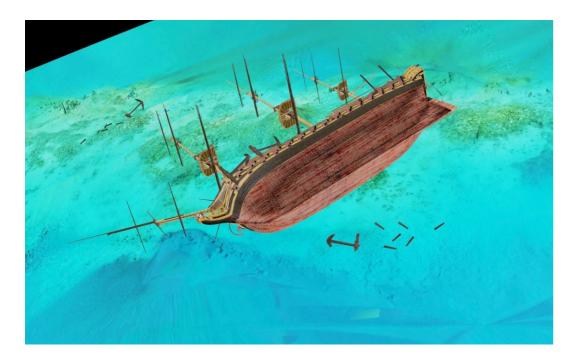




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The important part of the exposition should be a digital elevation model reflecting the current state of the place of Svyatoslav's death and giving people the opportunity, wherever they are, to plunge to its remains and see them with your own eyes.







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We want to create detailed 3D models of the ship and related objects, in cooperation with:

- -3D-designers
- -Historians
- -Museologists
- -Underwater archaeologist





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The virtual museum can be present in real museums and Web in VR and AR. We plan to make virtual video tours in which a museum visitor will virtually explore the site as if surrounded by fellow divers. We also plan to integrate recreated 3D objects to 3D-scenes and video.





A replica of Captain George Vancouver's cabin in HMS Discovery at Royal BC Museum. 3D-model of ship HMS Victory (1765). https://sketchfab.com/



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Examples of our work: localization of the ancient submerged fortress Sarkel and localization of the submerged and exploded cathedral.







Chersonesus. The stock and the anchor reconstruction.







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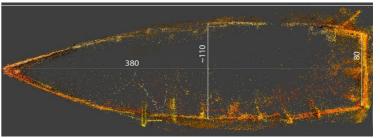


The results of our team's research project on Kizhi island in Onega Lake. The goal was to search for underwater cultural heritage objects.

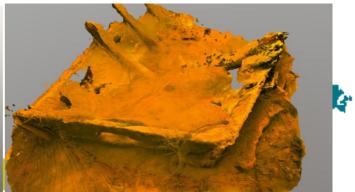














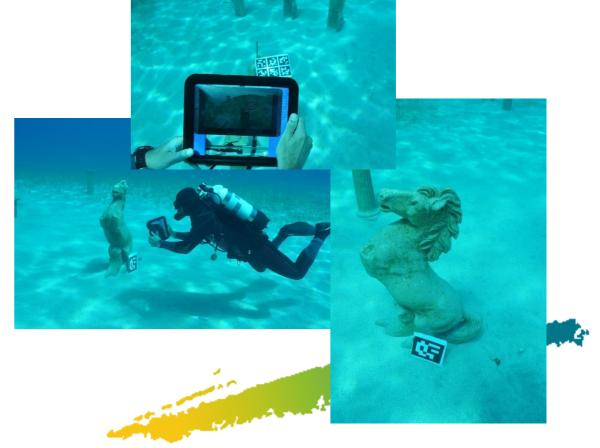
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Nowaday, in Greece the dive parks are created. Why not to make a dive park at the shipwreck of Svyatoslav?



Using 3D content from Virtual Museum as Augmented reality (AR)





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For over 15 years Island Lemnos has been hosting Russian Days Festival. We are sure that a new tourist site, such as Svyatoslav, will attract even more tourists from Russia and other countries.

A lot of Russian and Greek people take part in the Lemnos festival. In this photo you can see some of them near the monument to the sailors of the First and Second Archipelago expeditions.





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