Intro lecture (artist talk)
Sounds of Troubled Worlds = Songs for Serenity
lecture by Robertina Šebjanič with focus on her projects Aurelia 1+Hz and Aquatocene

Project Aquatocene / subaquatic quest for serenity (2016) reflects about the immersion into the underwater acoustic environment and the sound and noise pollution produced there by human presence. The project explores the relationship between sound, nature and society and the human impact on the (under)water habitat as well as the establishment and maintenance of safe audio environments for animals that live in the oceans and seas.

The Aurelia 1+Hz project is divided in two parts; the performance proto viva sonification looks into a new critical redefinition of social values and new attitude towards cohabitation of interspecies while the installation proto viva generator deals with the biopolicy of prolonging life.

© Courtesy of the artist Robertina Šebjanič.

DIY hydrophone workshop
In this workshop with artist Robertina Šebjanič we will build simple DIY hydrophones for non invasive exploration of underwater worlds – a starting point to rethink our understanding of life in the world's oceans and the human impact on the marine environment.

The world's seas and oceans cover more than 70% of the Earth's surface. 97% of it is saltwater, 2% is fresh water in the form of ice, and only the remaining 1% is drinking water, distributed around the planet very unevenly. Exploration of any ecosystem requires detailed study and observation. As the ocean is a complex and harsh environment, accessing it requires specially designed tools and technology. It is only in recent years that the technology has advanced to a point where we can examine the ocean in a systematic, scientific, and non invasive way. Our ability to observe the ocean environment and its resident creatures has finally caught up with our imaginations, in turn enabling us to understand it in ways that we could not even have imagined before.

Underwater noise pollution, intense human-generated noise in the marine environment, is the contemporary reality of our industrialized oceans. Noise pollution levels have steadily risen over the last 50 years thanks to increasing use of cargo traffic, sonar, explosives, oceanographic experiments, use of sound cannons to look for oil etc, posing a significant threat to marine life and biodiversity. This noise can cause temporary and permanent hearing loss or impairment, strandings and beachings, disruption of feeding patterns, breeding, nursing, communication, sensing and other behaviors, and in trying to avoid it many species are displaced from their preferred habitat.

The Hydrophone (Ancient Greek ὕδωρ = water and φωνή = sound) is a microphone designed for listening to and recording sound underwater. Hydrophones are based on piezoelectric transducers that generate electricity in response to changes in pressure. housed in a water resistant membrane or ceramic enclosure that facilitate the capture of vibrations, They are quite specialist equipment and usually quite expensive and difficult to get hold of. We will show you how to build a simple DIY hydrophone for underwater aural exploration.