

Talk Outline

Title: *Marine invertebrates and sound*

Speaker: Dr. Marta Solé, Universitat Politècnica de Catalunya, Barcelona TECH (UPC)

1. Basics of marine invertebrate bioacoustics

<https://dosits.org/science/movement/how-does-sound-propagate-through-sediment/>

2. Techniques used to study invertebrate bioacoustics

3. Sound perception

<https://dosits.org/animals/sound-reception/how-do-marine-invertebrates-detect-sounds/>

4. Acoustic pressure vs. particle motion

<https://dosits.org/decision-makers/tutorials/science/characterize-sounds/>

5. Receptor systems

<https://dosits.org/animals/advanced-topics-animals/hearing-loss-advanced/>

6. Sound production

<https://dosits.org/animals/sound-production/how-do-marine-invertebrates-produce-sounds/>

<https://dosits.org/galleries/audio-gallery/marine-invertebrates/sea-urchin-kina/>

<https://dosits.org/galleries/audio-gallery/marine-invertebrates/mantis-shrimp/>

<https://dosits.org/galleries/audio-gallery/marine-invertebrates/snapping-shrimp/>

<https://dosits.org/galleries/audio-gallery/marine-invertebrates/spiny-lobster/>

7. Marine noise pollution

8. Sources (Natural, Biological, and Anthropogenic Origin)

<https://dosits.org/animals/effects-of-sound/potential-effects-of-sound-on-marine-invertebrates/>

<https://dosits.org/animals/effects-of-sound/moderate-or-eliminate-the-effects-of-human-activities/ship-quieting-technologies/>

<https://dosits.org/animals/effects-of-sound/anthropogenic-sources/small-vessels/>

<https://dosits.org/animals/effects-of-sound/anthropogenic-sources/wind-turbine/>

<https://dosits.org/animals/effects-of-sound/anthropogenic-sources/seismic-airguns/>

<https://dosits.org/animals/effects-of-sound/anthropogenic-sources/pile-driving/>

<https://dosits.org/decision-makers/ocean-policies/>

9. Effects of noise on marine invertebrates (adults, larvae, eggs populations and ecosystems): Physical, Behavioural, and Physiological effects

<https://dosits.org/animals/effects-of-sound/potential-effects-of-sound-on-marine-invertebrates/>

<https://dosits.org/animals/use-of-sound/marine-fish-and-invertebrates-feeding/>

10. Gaps and perspectives