

# Listening to Nature with Vibrotanica

# Biosonification Workshop

## Workshop Concept

The biosonification workshop, led by Jérôme Li-Thiao-Té, a multidisciplinary contemporary artist also known as J3ZZ, draws inspiration from the “Vibrotanica” project to offer an introduction to biosonification. This workshop invites participants to discover the secret music of plants by transforming their bioelectrical signals into unique sound compositions. It immerses participants in an experience where technology and nature converge to reveal the hidden symphony of the natural world.

## Workshop Objectives

- **Scientific Exploration:** Introduce participants to how plants generate bioelectrical signals that can be captured and transformed into sound.
- **Ecological Awareness:** Enhance participants' understanding of the connections between humans and the plant world, using music as a medium for expression and connection.
- **Inspiration and Curiosity:** Spark interest in exploring new forms of artistic and scientific expression.

## Workshop Content

### 1. Introduction to Biosonification (15 minutes)

- **Brief Presentation:** A simple explanation of biosonification and its importance in understanding the interaction between technology, art, and nature.
- **Overview of the Vibrotanica Project:** A quick introduction to the Vibrotanica project and how it uses biosonification to create an immersive experience.

### 2. Technical Demonstration (15 minutes)

- **Introduction to Tools:** Explanation of the sensors and electronic equipment used to capture the plants' signals.

- **Live Demonstration:** Real-time illustration of capturing a plant's bioelectrical signals and transforming them into sounds.

### 3. Hands-On Experience (20 minutes)

- **Interaction with Plants:** Participants are invited to gently touch the plants or expose them to light or water to observe the resulting sound changes.
- **Listening and Observation:** Participants are encouraged to listen closely to the sounds produced and observe the plants' reactions in real-time.

### 4. Listening and Reflection Session (10 minutes)

- **Feedback:** Participants share their impressions and what they have learned.
- **Summary and Q&A:** A recap of the workshop and answers to participants' questions.
- **Discussion and Conclusion:** A reflection on the creative processes, the experience, and the emotions evoked by the sounds produced from the plant signals.

**Target Audience:** This workshop is designed to be accessible to everyone, from music enthusiasts to nature and technology lovers. It is ideal for a diverse audience, including individuals with specific needs, thanks to its strong sensory dimension.

**Duration:** The workshop can be adapted based on the context, ranging from a 1-hour session for a quick introduction to a full-day experience (6 to 8 hours) for a deeper exploration. The longer format includes segments dedicated to learning, creating, and collective reflection.

#### Required:

- Bioelectrical sensors for capturing plant signals. *(Provided by the artist.)*
- Computers equipped with sound creation and processing software. *(Provided by the artist.)*
- Plants with leaves suitable for attaching 2cm x 2cm sensors. *(To be provided by the event organizer.)*
- Audio systems for broadcasting the final compositions. *(To be provided by the event organizer. For further details, please refer to the technical sheet.)*

- Tables, chairs, electrical outlets, and extension cords. *(To be provided by the event organizer.)*

**Location:** The workshop can be held in various settings, such as music studios, cultural centers, or even outdoors, in environments that inspire sound exploration.

## History and Previous Workshops

The workshop has already been presented at several notable events in 2023 and 2024:

- **May 31, 2024:** Institut Français de Budapest in Budapest (Hungary) - Biosonification workshop with 30 participants.
- **May 4, 2024:** Institut Français de Maurice in Rose-Hill (Mauritius) - Biosonification workshop with 30 participants.
- **December 2023 to March 2024:** Collège Bois de Nèfles in Saint-Denis (Réunion Island) - A 30-hour curriculum (biosonification, conductivity, photosynthesis, biodiversity, scientific experimentation process, algorithmics, music, public speaking) developed in consultation with teachers of Earth Sciences, Physics/Chemistry, and Mathematics for a 6th-grade class with 35 participants (11-12 years old).
- **November 17, 2023:** École des Alizés, Entre-Deux (Réunion Island) - Biosonification workshops with several primary school classes (70 children) as part of the Science Festival. (8-9-10 years old)
- **November 10, 2023:** École de Montvers les Hauts, Saint-Pierre (Réunion Island) - Biosonification workshop with a CM1/CM2 class of 35 children (8-9-10 years old).
- **November 9, 2023:** École de la Crête, Saint-Joseph (Réunion Island) - Biosonification workshop with a CM1/CM2 class of 35 children (8-9-10 years old).
- **November 7, 2023:** École du Baril, Saint-Philippe (Réunion Island) - Biosonification workshop with a CM1/CM2 class of 35 children (8-9-10 years old).
- **November 6, 2023:** École de Bras-Sec, Cilaos (Réunion Island) - Biosonification workshop with a CM1/CM2 class of 35 children (8-9-10 years old).

- **October 28, 2023:** Réunion Book Fair, Saint-Leu (Réunion Island) - Biosonification workshop with 40 participants.
- **September 23, 2023:** Institut Français de Budapest in Budapest (Hungary) - Biosonification workshop with 40 participants, half of whom were children (6 to 10 years old).
- **June 10, 2023:** Mizik O Marmay Festival, Saint-Pierre (Réunion Island) - Biosonification workshop with 40 participants.
- **June 4, 2023:** Rendez-vous aux Jardins, Jardin de l'État, Saint-Denis (Réunion Island) - Biosonification workshop with 40 participants.
- **April 20, 2023:** Presentation of work and research on biosonification at the École Supérieure d'Art in Le Port, Réunion Island, with the participation of 40 people..

At these events, the intergenerational audience showed great interest in the theme addressed and the artistic work presented. Feedback from both professionals and the public highlighted the uniqueness and originality of the concept. Many participants expressed their desire to speak with the artist after the workshop, asking questions and demonstrating that the workshop effectively captivated minds and provoked deep reflection on the relationship with the living world.

**Conclusion:** This biosonification workshop offers a unique opportunity to merge science, art, and technology in order to explore the hidden music of nature. Participants will leave with a renewed appreciation for the plant world and the endless possibilities of sound creation.