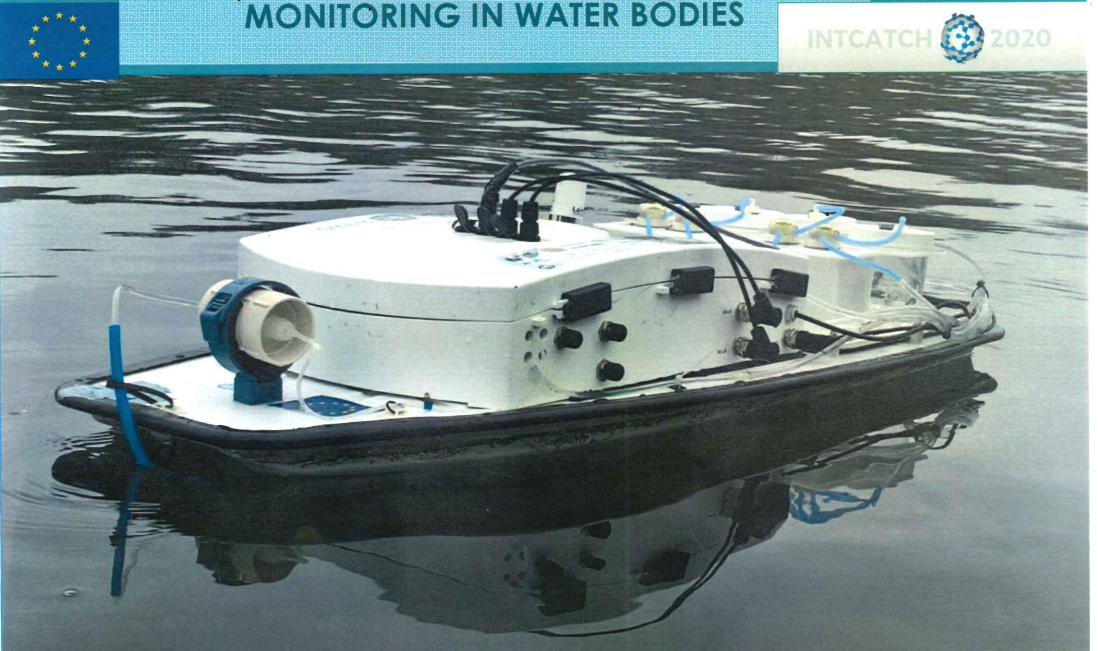
# INNOVATIVE ARROAGILIORITAVAYMEMI Moniorincinwaterbodes



#### **HEAVY METAL DETECTION**

# **Principle**

Simultaneous detection of **Pb** and **Cu** in water bodies by

Anodic Stripping Voltammetry method

using disposable Screen Printed Electrodes

Pre-concentration (reduction) of a metal ion on the electrode surface at negative potentials and

selective stripping (oxidation) of each metal species during an anodic potential sweep



#### **AUTOMATED SAMPLING**

#### Sampling

Can be triggered by threshold values or range of T°, DO, EC, pH parameters or their combination

**Geo referencing** and **time stamp** of sampling points

# AUTOMATED BOAT POSITIONING

Customized paths for automated boat driving

Variable boat speed possible

## **INLET FILTER**

Ensures proper analysis in real, particle-loaded samples through:

Filter 1 with pore size: 180 µm

Filter 2 with pore size: 80 µm

## SYSTEM PERFORMANCE\*

#### **Limit Of Detection - LOD**

Lowest value, significantly greater than zero that can be detected

#### Limit Of Quantification - LOQ

Lowest value that can be determined with an acceptable level of accuracy and precision

## Lowest Detectable Change – LDC

Smallest significantly measurable difference between two measurement

	LOD μg/L	LOQ µg/L	LDC μg/L
Pb	4	14	4
Cu	7	22	10

\*Validated for Pb:Cu ratio 1:4

\*These parameters are obtained under laboratory conditions. Results can be greatly affected by the sample nature and content