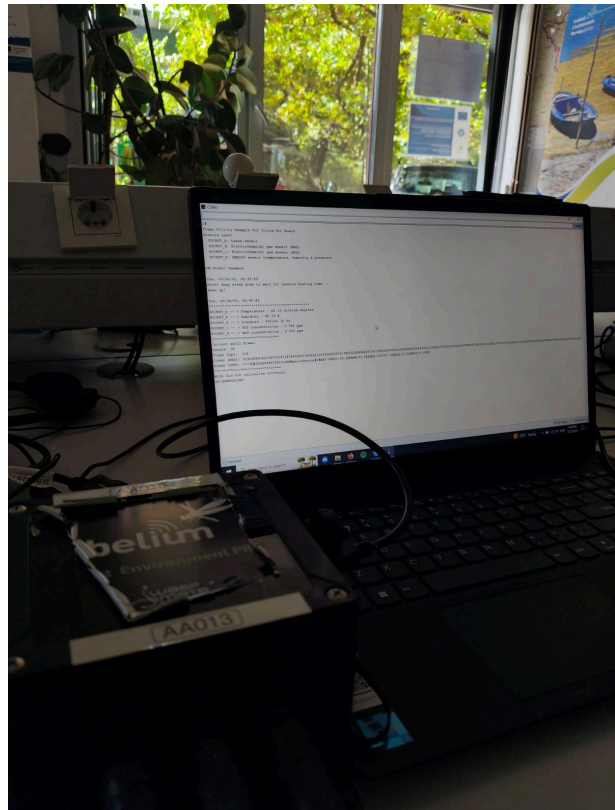
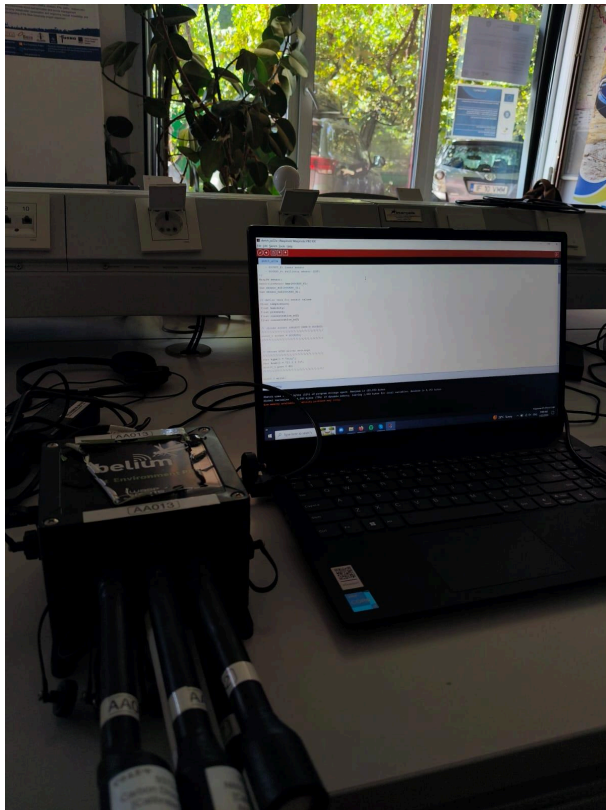


# Libelium Station Configuration

For this project, I have decided to use one of BEIA's Libelium Stations. We have configured the station using Waspote IDE.



Figure 1. Libelium Smart Environment Pro Station



## *Sensors*

- Sulfur Dioxide (SO<sub>2</sub>)
- Nitric Dioxide (NO<sub>2</sub>)
- Temperature, Humidity and Pressure
- Ozone (O<sub>3</sub>)
- Carbon Dioxide (CO<sub>2</sub>)



## *Configuration Guide*

First of all, we started by downloading the WASPMOTE IDE and connecting the Libelium Station to the Laptop via USB.

Second of all, we chose the correct port and made sure our station is recognizable.

Next, we run the code into the IDE, and change the Baud Rate into the Terminal to 11520.

Lastly, we can see the values in the terminal.

The **code** is on the Github Repository:  
<https://github.com/OviMG2/Libelium-Station>

## Assistant Researcher: Guse Ovidiu-Marius

```
COM5
J#
Frame Utility Example for Citrus Pro Board
Sensors used:
- SOCKET_A: Electrochemical gas sensor (CO2)
- SOCKET_B: Electrochemical gas sensor (NO2)
- SOCKET_C: Electrochemical gas sensor (SO2)
- SOCKET_D: Electrochemical gas sensor (O3)
- SOCKET_E: BME280 sensor (temperature, humidity & pressure)

PM Sensor Example

Tue, 00/06/05, 02:50:09
Enter deep sleep mode to wait for sensors heating time...
Wake up, Libellium :) !

Tue, 00/06/05, 02:51:09
*****
SOCKET_E --> Temperature : 27.49 Celsius degrees
SOCKET_E --> Humidity : 44.45 %
SOCKET_E --> Pressure : 100088.59 Pa
SOCKET_D --> SO2 concentration : -1.000 ppm
SOCKET_B --> NO2 concentration : 0.000 ppm
SOCKET_A --> CO2 concentration : 796.178mol*-1
SOCKET_D --> O3 concentration : -1.000DO[Dobson Unit]
*****
Current ASCII Frame:
Length: 122
Frame Type: 134
frame (HEX): 3C3D3E860823323532413434453831393632334344423576174657226456657267792330234241543A39332354433A32372E34392340554D3A34342E3523505245533A3130303030382E353923534F323A2D312E303030234F323A302E30303023
frame (STR): <=>[0#252A44E819623C4D#Waters&Energy#0#AT:93#TC:27.49#HUM:44.5#PRES:100088.59#SO2:-1.000#NO2:0.000#CO2:796.178#CO2:-1.000#
*****
WiFi did not initialize correctly
AT+SRWSTACON72. WiFi is connected ERRORWiFi switched OFF

*****
...Enter deep sleep mode 16 min
...Wake up! Date: Tue, 00/06/05, 02:52:52
*****
Tue, 00/06/05, 02:53:08
Enter deep sleep mode to wait for sensors heating time...
Wake up, Libellium :) !

Autoscroll No line ending 115200 baud
```

## My colleagues:

- Vaduva Matias
- Catrina Alexandra
- Mustata Carmen

