

Measurements

March 11, 2022

1 PARAMETERS

Sample name: ES.PVDF.003

Duration of measurements: 4.29 [s]

Load resistance: 2.00e+04 [Ohms]

Circuit resistance: 2.00e-01 [Ohms]

Number of periods displayed: 3

Maximum frequency for analysis: 200

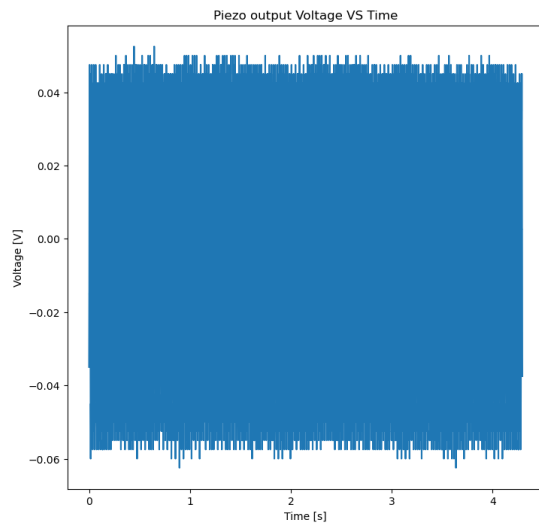
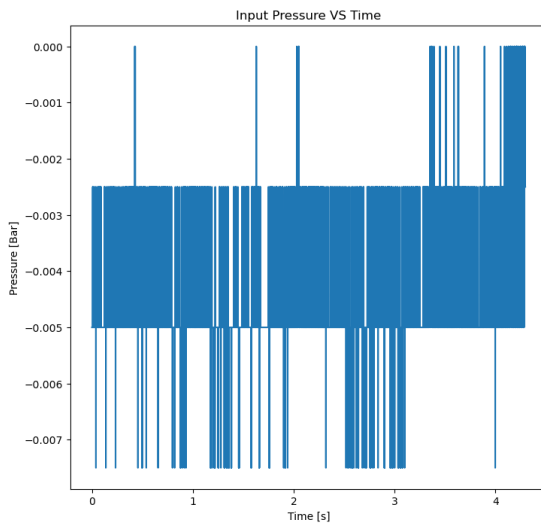
```
parameter(value=5.0, continuous_update=True, description='Duration [s] :',  
↳max=30.0, step=0.1)
```

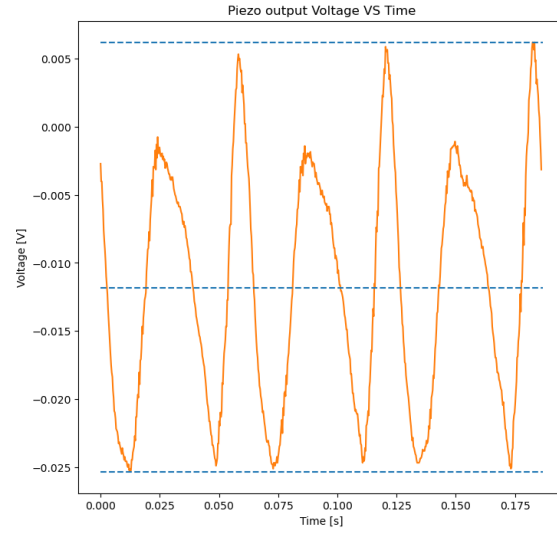
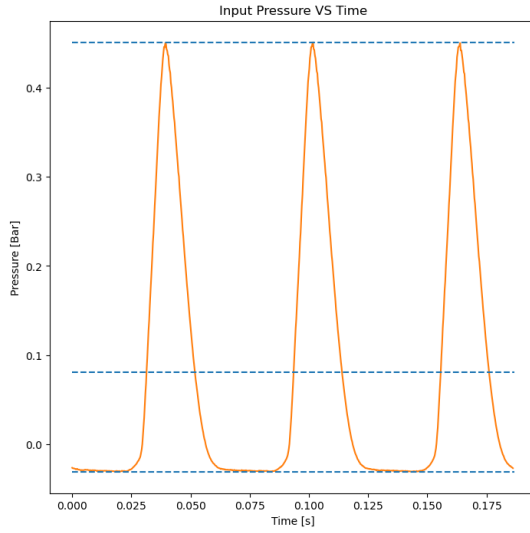
```
parameter(value=100.0, continuous_update=True, description='Rload [$\\Omega$] :  
↳', max=1000000000.0, step=1.0)
```

```
parameter(value=5.0, continuous_update=True, description='Nb Cycles [1] :',  
↳max=1000000000.0, step=1.0)
```

2 PRESSURE AND VOLTAGE MEASUREMENTS

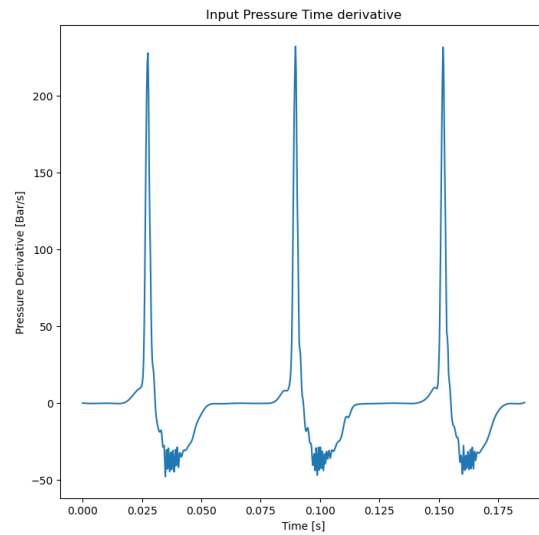
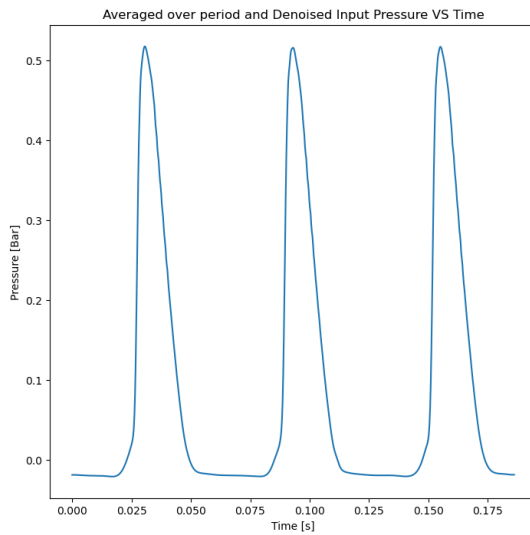
The input frequency is: 50.06 Hz



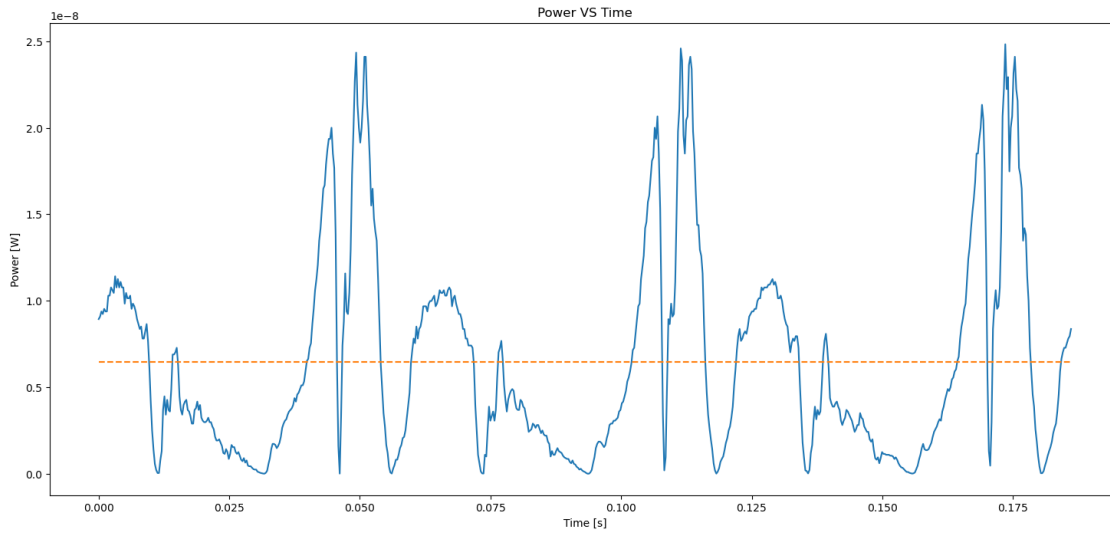


Max pressure: 0.53 [Bar]
 Min pressure: -0.03 [Bar]
 Peak to peak pressure: 0.56 [Bar]
 Mean pressure: 0.08 [Bar]
 Max voltage: 0.02 [V]
 Min voltage: -0.04 [V]
 Peak to peak voltage: 0.06 [V]
 Mean voltage: -0.01 [V]

3 PRESSURE DERIVATIVE



4 POWER

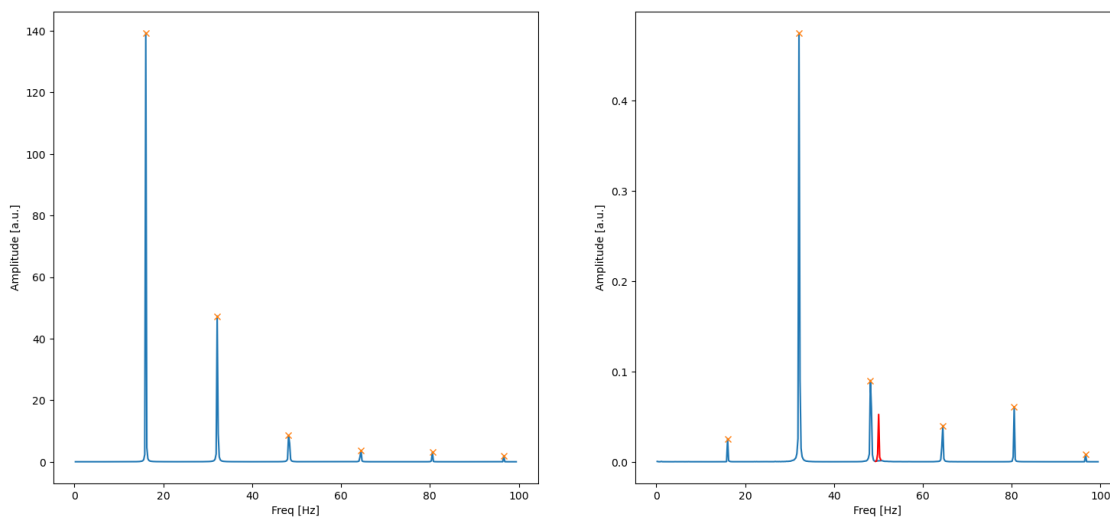


Mean power: 6.45×10^{-9} [W]

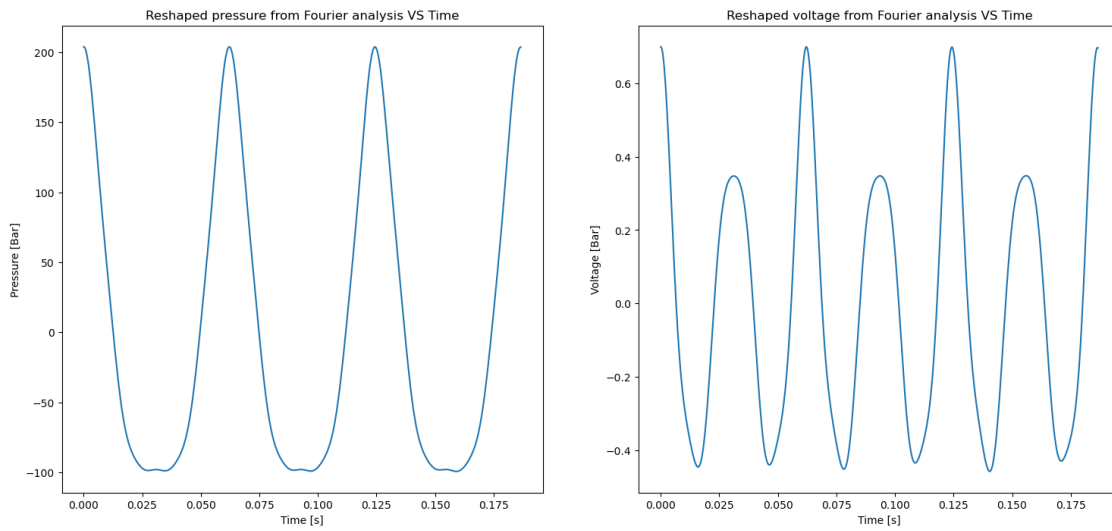
5 FREQUENCY ANALYSIS

5.1 Perform Fourier transform

```
/Users/eliottsarrey/opt/anaconda3/lib/python3.8/site-packages/numpy/core/_asarray.py:102: ComplexWarning: Casting complex values to real discards the imaginary part
  return array(a, dtype, copy=False, order=order)
```



5.2 Recreate signals



6 MODEL CHECK UP

