Measurements

March 16, 2022

1 PARAMETERS

```
HBox(children=(Label(value='Sample name :'), Text(value='test',␣
 ↪placeholder='Custom Name')))
```

```
HBox(children=(Label(value='Measure duration [s] :'), parameter(value=5.0,␣
 ↪continuous_update=True, step=0.1)))
```

```
HBox(children=(Label(value='Load resistance [Ohms] :'), parameter(value=300000.
 ↪0, continuous_update=True, step…
```

```
HBox(children=(Label(value='Nombre of periods [1] :'), parameter(value=5.0,␣
 ↪continuous_update=True, step=1.0))…
```

```
HBox(children=(Label(value='Circuit resistance [Ohms] :'), parameter(value=1.0,␣
 ↪continuous_update=True, step=1…
```

```
HBox(children=(Label(value='Maximum frequency for analysis: [Hz] :'),␣
 ↪parameter(value=100.0, continuous_update…
```

```
Button(description='Save parameters', style=ButtonStyle())
```
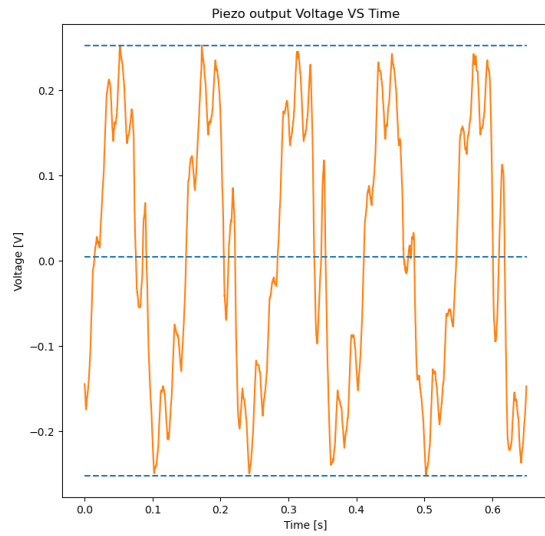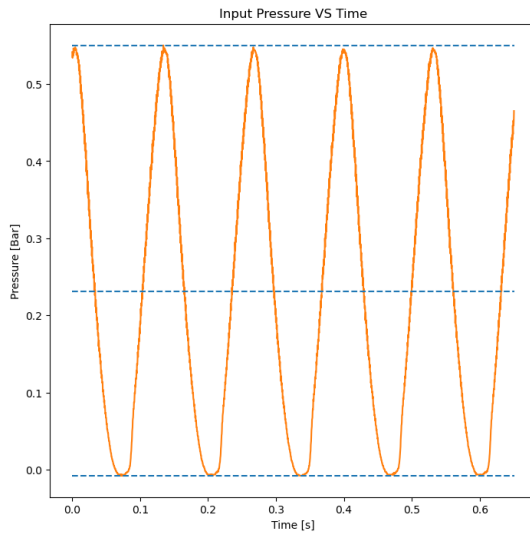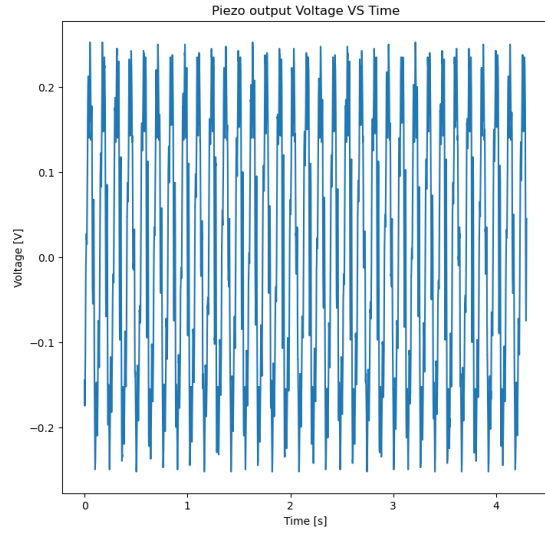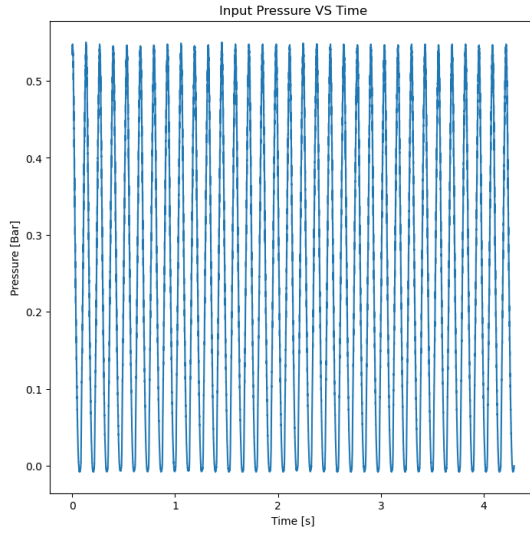
```
Output()
```

```
Sample name: test
```

	Parameter	Value	Unit
0	Sample name	test	
1	Measure duration	5.0	[s]
2	Rload	300000.0	[Ohms]
3	Nb Periods	5.0	[1]
4	R Circuit	1.0	[Ohms]
5	Max Frequency	100.0	[Hz]

2 PRESSURE AND VOLTAGE MEASUREMENTS

```
The input frequency is:  7.68 Hz
```

	Variable	Min	Max	Peak to peak	Mean	Mean of absolute value
0	Pressure [Bar]	-7.50e-03	5.50e-01	5.57e-01	2.31e-01	2.32e-01
1	Voltage [V]	-2.53e-01	2.53e-01	5.05e-01	3.85e-03	1.37e-01

3 POWER
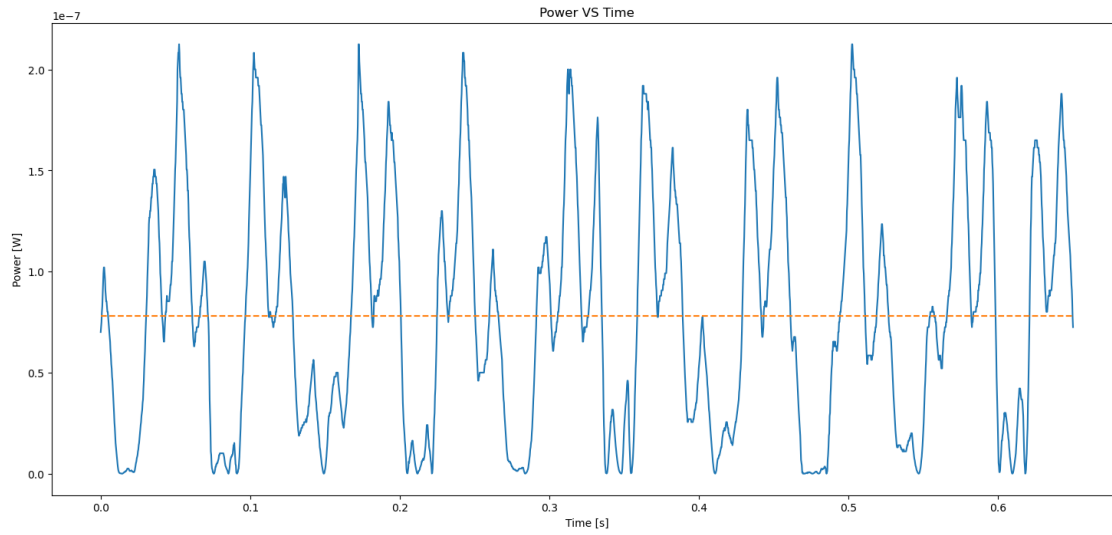
Mean power: 7.81e-08 [W]

4 FREQUENCY ANALYSIS
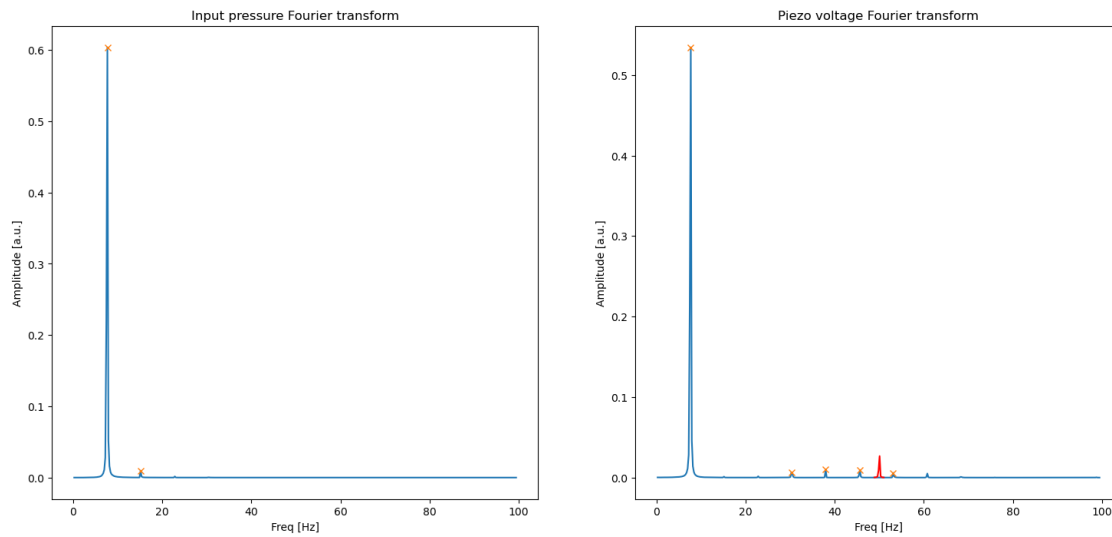
4.1 Voltage frequency peaks

	Freq [Hz]	Amplitude percentage
0	7.68	53.44
1	30.27	0.66
2	37.95	0.98
3	45.64	0.93
4	53.09	0.58

4.2 Pressure frequency peaks

	Freq [Hz]	Amplitude percentage
0	7.68	60.38
1	15.13	0.97