Propositions

1- Controlling the active surface of a microelectrode is crucial for the modulation of the performance of an amperometric enzyme-based biosensor.

This thesis

2- When combining self-assembled with electropolymerized membranes, we may end up with a "layer under layer", rather than a "layer-by-layer" construction.

This thesis (Chapters 2 and 3)

3- In the development of biosensors for *in vivo* biomonitoring, size does matter. Miniaturizing biosensors remains a challenging task.

This thesis

4- It will take a while to completely unravel biofouling complexity. Acknowledging and quantifying its deleterious effect on the performance of implantable biosensors is the first step towards better biosensors for in vivo biomonitoring.

This thesis (Chapters 4, 6 and 7)

5- Intrinsic enzyme selectivity is not sufficient to make amperometric enzyme-based biosensors a reliable bioanalytical tool for *in vivo* biomonitoring.

This thesis

6- The proof-of-concept device is not, at all, the end. It is merely the beginning.

This thesis

7-Knowledge is the only instrument of production that is not subject to diminishing returns.

J.M.Clark

8- Chose a job you love and you will never have to work a day in your life.

Confucius

9- Not everything that can be counted counts, and not everything that counts can be counted.

Unknown, although often attributed to Albert Einstein

10- For I am the size of what I see, not my height size.

Fernando Pessoa