The Soft Molecular Landing Machine

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Propositions

accompanying the dissertation

The Soft Molecular Landing Machine:

Ultra-High Vacuum Deposition of Non-Volatile Solution Processable Organic Materials and Polymers

by

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1. Literature values of 5 or higher for the work function of gold should not be used to calculate device properties of devices that have not been prepared and kept entirely under vacuum. (This thesis)
2. Contrary to common knowledge, it is possible to perform electrospray on molecules with very low polarity. (Chapter 3 & 4)
3. Solution processable OPV materials make production of devices more simple, but understanding how they work more difficult.
4. A well-staffed and well-equipped mechanical/electrical workshop is an absolute necessity for any PhD. student wishing to develop a new high-tech measurement setup.
5. The properties that we attribute to certain materials turn out not to be actual material properties, but properties of the material in a specific environment. The same can be said of characters of people.
6. Theoretical physicists might prefer to work on their problems in vacuum as it eliminates a lot of unwanted difficulties, but for experimental physicists, working with vacuum provides enough problems of its own.
7. Regardless of the good or bad nature of a artificial general intelligence, we should make sure that the human reaction around its release isn't going to be catastrophic.