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Tailoring molecular nano-architectures on metallic surfaces

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Leonid Solianyk
November 2018, Groningen

Propositions

accompanying the dissertation

Tailoring molecular nano-architectures on metallic surfaces

by

Leonid Solianyuk

1. On the Au(111) surface, Au adatoms can be involved in two- and threefold coordination to pyridyl organic ligands. *Chapters 3 and 4.*
2. A change in the structure of molecular building blocks can influence the thermal stability of the resulting self-assembled nano-architectures. *Chapters 3 and 4.*
3. Porous Au-coordination networks can be used for controllable tuning the electronic properties of the Au(111) surface on a macroscopic scale. *Chapters 4 and 5.*
4. A deep understanding of the chemical environment and conformation geometry of organic adsorbates on surfaces is essential for the development of *molecular* electronics. *Chapter 3 and 6.*
5. The time spent at synchrotrons is quite memorable not only because of the obtained experimental results and hard work, but, to a larger extent, because of the wonderful colleagues with whom you work.
6. The acknowledgment that each of us has an *individual* point of view is a first step towards healthy communication.
7. Giving feedback as well as receiving it, is a delicate art.
8. Each moment is an *opportunity* to shape the rest of your life.