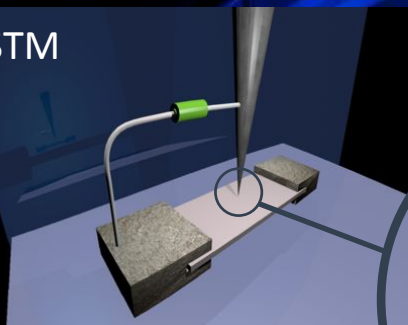


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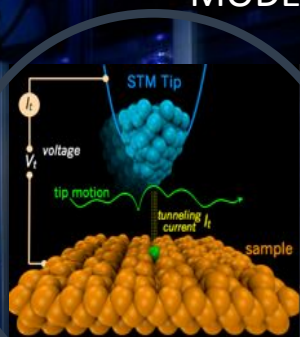
NAMUS 2017

Third international NAMUS Workshop on Nano Manipulation of Atoms and Molecules Using STM 8-9 November 2017, Jackson State University, USA

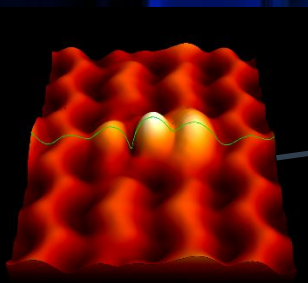
STM



MODEL



DFT



The impressive progress of nanotechnology has already reached high controllability levels on matter and it is now clear that its future developments will depend upon our ability to control and manipulate atoms and molecules accurately, in particular in the context of the bottom-up approach. These levels of manipulation require powerful techniques with atomic scale resolution such as the scanning tunneling microscopy (STM) as well as the increasing power offered by the DFT simulations tools devoted to the nanoscale experiments

SCOPE:

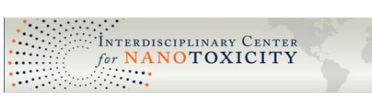
The NAMUS III – 2017 workshop will present an up-to-date overview on the thriving field of nanoscale imaging and manipulation of atoms or molecules with scanning tunneling microscope (STM) combining DFT simulations. The scientific program will combine tutorial talks by specialists and hands-on sessions. It is jointly organized by the Icnanotox center in Jackson MS, USA and the MND research group at ISMO, Paris, France

Organizing committee:

Jerzy Leszczynski	Jackson State University, USA
Damien Riedel	Institut des Sciences Moléculaires d'Orsay, France
Henry Pinto	Yachay Tech University, Ecuador
Devashish Majumdar	Jackson Stat University, USA
Juganta Roy	Jackson State University, USA
Shonda Allen	Jackson State University, USA
Galina Lobodina	Jackson State University, USA
Alicja Mikolajczyk	University of Gdansk, Poland

Venue : The workshop will take place at the
ICN building at JSU

Registration : register available at
<http://icnanotox.org/namus-workshop/>





NAMUS III

OR

Nano Manipulation of Atoms and Molecules Using STM

8-9 November 2017

Jackson State University – USA

(Preliminary Scientific program)

Wednesday, November 8th 2017– 8:45 a.m. – 5 p.m. (CST)

Morning

• 08:50 a.m. – 09:00 a.m.

Introduction to the NAMUS III workshop.

• 09:00 a.m. – 10:00 a.m.

Lesson 1: Experimental description of SPM techniques: from imaging to manipulation

• 10:00 a.m. – 11:00 a.m.

Lesson 2: Introduction to DFT: towards simulations of STM experiments, Part 1

• 11:00 a.m. – 11:15 a.m. Coffee break

• 11:15 a.m. – 12:30 p.m.

Lesson 3: Theoretical description of the tunnel junction and tunnel current

• 12:30 p.m. – 1:30 p.m. Lunch

Afternoon:

• 1:30 p.m. – 2:30 p.m.

Lesson 4: Introduction to DFT: towards simulations of STM experiments, Part 2

• 2:30 p.m. – 3:00 p.m. Coffee break

• 3:00 p.m. – 5:00 p.m.

Hands-on session 1: Introduction to VASP: simulation of a bulk crystal

Tuesday, November 17 – 09 a.m. – 5:15 p.m. (CST)

Morning

09:00 a.m. – 10:00 a.m.

Lesson 5: Experimental investigations with STM through examples (part 1)

10:00 a.m. – 10:15 a.m. Coffee break

10:15 a.m. – 11:15 p.m.

Lesson 6: DFT simulations with inorganic 3d/5d or 4f systems

• 11:30 a.m. – 12:30 p.m.

Hands on with STM: Experimental investigations with STM through examples (part 2)

12:30 p.m. – 13:30 p.m. Lunch

Afternoon:

13:30 p.m. – 14:30 p.m.

Hands-on session 2: Introduction to VASP: simulation of a surface

(Dr. H. Pinto/J. Roy).

3:00 p.m. – 3:15 p.m. Coffee break

3:15 p.m. – 5:00 p.m.

Hands-on session 3: Simulation of an STM images with VASP

(Dr. H. Pinto/J. Roy).

5:00 p.m. – 5:15 p.m.

Conclusion and closing remarks.