

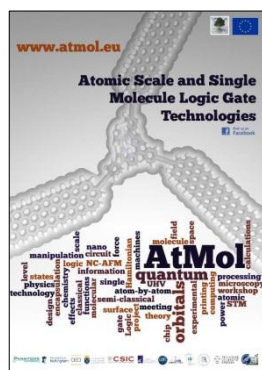


AtMol will establish comprehensive process flow for fabricating a molecular chip, i.e. a molecular processing unit comprising a single molecule connected to external mesoscopic electrodes with atomic scale precision and preserving the integrity of the gates down to the atomic level after the encapsulation. Logic functions will be incorporated in a single molecule gate, or performed by a single surface atomic scale circuit, via either a quantum Hamiltonian or a semi-classical design approach. AtMol will explore and demonstrate how the combination of classical and quantum information inside the same atomic scale circuit increases the computing power of the final logic circuit. Atomic scale logic gates will be constructed using atom-by-atom manipulation, on-surface chemistry, and unique UHV transfer printing technology.

AtMol conference series 2013: “International Workshop: Imaging and Manipulation of Adsorbates using Dynamic Force Microscopy” Nottingham - UK. April 16-17, 2013

Dynamic force microscopy (also known as non-contact atomic force microscopy) has evolved rapidly over the past decade to become an extremely powerful technique capable of not only ultrahigh resolution imaging and spectroscopy, but the precise positioning of individual adsorbed atoms and molecules.

AtMol Flyer Available



E-Nano Newsletter nº 26 – AtMol contributions



Single bond mechanochemistry at silicon surfaces A. Sweetman, S. Jarvis, A. Stannard, R. Woolley, C. Chiutu, A. Lakin, L. Kantorovich, J. Dunn and P. Moriarty.

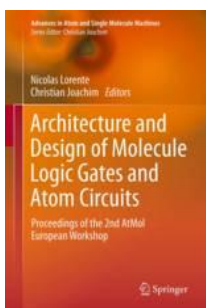
[AtMol Events](#)

[AtMol publications](#) [Further reading](#)



Proceedings of the 1st AtMol European Workshop Singapour Advances in Atom and Single Molecule Machines

Advances in Atom and Single Molecule Machines is the first comprehensive series of books dealing specifically with single atom and molecule machines.



Proceedings of the 2nd AtMol European Workshop Barcelona Architecture and Design of Molecule Logic Gates and Atom Circuits

Contributions from experts in the field of single molecule logic gates and surface dangling bond atomic scale circuits theory.

AtMol



[Consortium](#)



[Units](#)



[Short Facts](#)



[Events](#)



[Jobs](#)



[Publications](#)



[Videos](#)



[Press Releases](#)

General info



[Conferences](#)



[News](#)



[Resources](#)



[Image Gallery](#)



Find us on
Facebook

Editorial information

No 2. January 2013. Published by Phantoms Foundation (Spain)

Phantoms Foundation

c/ Alfonso Gomez 17,
planta 2, loft 16
28037 Madrid, Spain



Contact

Questions regarding the ATMOL Project, please contact:

Prof. Christian Joachim > Project Coordinator

CEMES/CNRS - GNS
29, rue Jeanne Marvig, BP 94347
31055 Toulouse Cedex 4; France

joachim@cemes.fr

Antonio Correia > Unit 05 Coordinator (Dissemination)

Phantoms Foundation
C/ Alfonso Gomez 17 / Planta 2 - Loft 16
28037 - Madrid , Spain

antonio@phantomsnet.net