

## AtMol EU project supports the “Atoms and molecular computing” session to be held during TNT 2012

Madrid (Spain): 26 April 2012

Madrid (Spain) will host the 13<sup>th</sup> edition of the Trends in Nanotechnology International Conference ([TNT 2012](#)) from the 10<sup>th</sup> until the 14<sup>th</sup> of September 2012. This high-level scientific meeting aims to present a broad range of current research in Nanoscience and Nanotechnology as well as related policies (European Commission, etc.) or other kind of initiatives (nanoGUNE, FinNano, GDR-I, etc.). TNT events have demonstrated that they are particularly effective in transmitting information and establishing contacts among workers in this field.

The TNT 2012 structure will keep the fundamental features of the previous editions, providing a unique opportunity for broad interaction. The call for abstracts is now open and the deadline is the 4<sup>th</sup> of June 2012. The early bird registration fee is the 20<sup>th</sup> of June 2012.

Currently, 20 keynote [speakers](#) from all over the world are confirmed covering different fields of Nanotechnology.

Within its dissemination & training activities, the EU Integrated Project [AtMol](#) (funded under ICT/FET) will organize a session on "Atoms and molecular computing" during TNT 2012. This session is tentatively planned on the 12<sup>th</sup> of September 2012.

AtMol project 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.

TNT conference provides an ideal venue for industrial, academic and governmental organizations to share common objectives and drive the commercialisation of nanotechnology discoveries. Research Institutes and Universities, technology and research centres and extensive business and industrial activities give Madrid, and its surroundings, its singular potential for commercial growth and development.

TNT 2012: [www.tntconf.org/2012](http://www.tntconf.org/2012)

TNT Conference Series: [www.tntconf.org/conf/history.php](http://www.tntconf.org/conf/history.php) (Statistics)

Phantoms Foundation: [www.phantomsnet.net](http://www.phantomsnet.net)

AtMol EU Integrated Project: [www.atmol.eu](http://www.atmol.eu)

ICT/FET: [http://cordis.europa.eu/fp7/ict/fet-proactive/amolit\\_en.html](http://cordis.europa.eu/fp7/ict/fet-proactive/amolit_en.html)