QuteMol

Visual Computing Laboratory
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Interactive and Innovative Molecular Graphics

QuteMol is an open source (GPL), interactive, *high quality molecular visualization system*. QuteMol exploits the current GPU capabilites through OpenGL shaders to offers an array of innovative visual effects. QuteMol visualization techniques are aimed at improving clarity and an easier understanding of the 3D shape and structure of large molecules or complex proteins.

* Real Time Ambient Occlusion
* Depth Aware Silhouette Enhancement
* Ball and Sticks, Space-Fill and Liquorice visualization modes
* High resolution antialiased snapshots for creating publication quality renderings
* Automatic generation of animated gifs of rotating molecules for web pages animations
* Real-time rendering of large molecules and protein (>100k atoms)
* Standard PDB input
* Quick installers for Win *and* Mac OS X (intel) **(new!)**
* Support as a plugins of the NanoEngineer-1 the modeling and simulation program for nano-composites **(new!)**

QuteMol was developed by Marco Tarini and Paolo Cignoni of the Visual Computing Lab at ISTI - CNR

Links

Download QuteMol! v 0.4.1 - *6 Jun 2007* (whatsnew.txt)
Direct links: [win installer] - [mac OS X package]

QuteMol **project page** and **forums** on SourceForge

See a few **screenshots** of the visual effects featured in QuteMol.

See a few **side to side comparisons** between typical (state-of-the-art) molecular space-fill real-time renderings and QuteMol ambient occlusion enhanced renderings.

Remember that QuteMol is *citeware*: if you use images obtained with it then you should always **cite** QuteMol, especially in websites, scientific papers, books, manuals, etc. **How to cite**.

This **paper**, presented at IEEE 2006 Visualization conference, describes a few of the QuteMol tricks.
Abstract:*The paper presents a set of combined techniques to enhance the real-time visualization of simple or complex molecules (up to order of 10^6 of atoms) in space fill mode.* **[more]**

A quick **troubleshooting guide** covering the most common problems reported by QuteMol users.

The **slides** that have been used to present the CG techinques used by QuteMol at the IEEE 2006 Visualization conference - *3 Nov 2006*.
You can also see the quick (80 secs) preview slides.