



Loredana Valenzano

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My background

BS Physics, MS Particle Physics, PhD Theoretical Chemistry

Assistant Research Associate and Instructor: Holland, Italy, USA

Areas of research/expertise

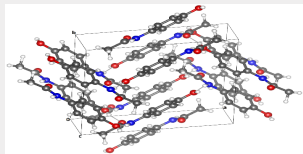
Quantum Chemistry

- ✓ Intermolecular interactions
- ✓ Crystal nucleation & crystal growth
- ✓ Adsorption and separation processes
- ✓ Behavior of materials under stress and pressure
- ✓ Behavior of materials at the interface
- ✓ Tailoring/Engineering of new materials

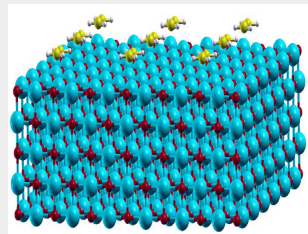
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How I can contribute

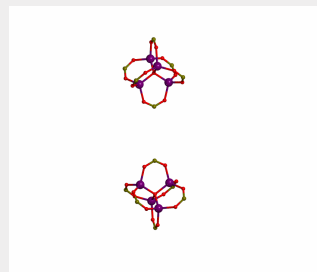
- Explanation of fundamental laws governing the behavior of molecules and materials and their properties
 - Structures, energetics, vibrations, electronic, mechanical, adsorption, diffusion
- Speeding up, decreasing cost, increasing robustness in the prediction of materials in terms of
 - Life performance, efficiency, resistance, changes related to the exposure of external agents, etc.



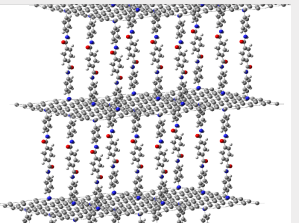
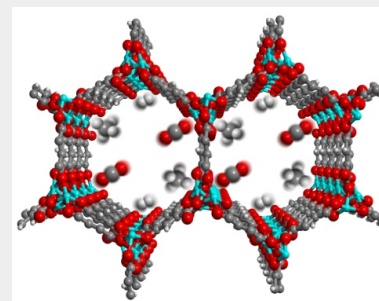
Pharmaceuticals
Explosives



Surfaces
Membranes



Porous Materials



Bio-inspired
Synthetic
Materials