

ALBERTO FRACCAROLLO

PERSONAL INFORMATION

Name: Alberto Fraccarollo
Date of Birth: August 9th, 1983
Nationality: Italian
Address: Viale Teresa Michel, n° 11 - 15121 Alessandria - (AL) - ITALY
Telephone (office): +39 0131 320268
e-mail: alberto.fraccarollo@mfn.unipmn.it

PRESENT POSITION

Actually he enrolls at Ph. D. Chemistry Science with Prof. Maurizio Cossi, and Prof. Leonardo Marchese - Università Piemonte Orientale "Amedeo Avogadro" (Alessandria). His research regards the quantum-mechanical ab initio investigation of the properties of crystalline and molecular compounds. In particular he turns attention to modeling of lamellar compounds like Hydrotalcite and semiconductor nanoclusters. This research shoots for investigate the possibility to use these materials in photovoltaic and photoluminescence devices.

EDUCATION ACADEMIC

2005-2007: Master Degree on Applied Chemistry - Università Piemonte Orientale "Amedeo Avogadro" (Alessandria).

Supervisor: Prof. Leonardo Marchese

Thesis: "Synthesis of new Nickel catalysts on mesoporous alumina supported: physical-chemistry characterization, and their applications in Molten Carbonate Fuel Cell (MCFC).

Final Mark: 104/110

EXPERIENCE ON COMPUTER SYSTEMS

Operating Systems: Unix/Linux, Windows.

Programming Languages: HTML.

Computer drawing: Molden, Material Studio, Moldraw

Web and transmission of data: good knowledge

Scientific and quantum-mechanical programs: Gaussian, CRYSTAL, TURBOMOLE, basic knowledge of ab initio plane-wave codes (Car-Parrinello Molecular Dynamics).

POSTERS AND PUBLICATIONS

5th – 10th July, 2009 (Sorrento): 13th National Convention of Italian Chemistry Society.

Poster session: “**Ab initio investigation of the ionic interlamellar structure in layered hydrotalcites**” (Alberto Fraccarollo, Caterina Benzi, Maurizio Cossi).

A. Fraccarollo, M. Cossi, L. Marchese, *DFT simulation of Mg/Al hydrotalcite with different intercalated anions: Periodic structure and solvating effects on the iodide/triiodide redox couple*, Chemical Physics Letters (2010).