

# Prof. Koiti Araki

- 1. Age** 44 years-old
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Brazil
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- 5. Educational Qualifications** BSc (Chemistry) University of Sao Paulo, Brazil  
MSc (Chemistry) University of São Paulo, Brazil  
DSc (Chemistry) University of São Paulo, Brazil
- 6. Present Responsibilities** Teaching and research
- 7. Specialization** Supramolecular Inorganic Chemistry
- 8. Areas of Research** Synthesis of molecular and supramolecular coordination compounds and materials, Hybrid organic/inorganic nanomaterials, Molecular and hybrid interfaces and devices
- 9. Current Interests** Dyes/photosensitizers, photoelectrochemical cells and junctions, logic-gates, chemical sensors, molecular materials and interfaces
- 10. Experimental Facilities** Laboratory and equipments for synthesis, electrochemical, spectroscopic and morphologic characterization of chemicals and materials
- 11. General** Koiti Araki is presently a Full Professor at Institute of Chemistry of University of Sao Paulo, and one of the leaders in the "Group of Supramolecular Chemistry and Nanotechnology". He published more than 80 research papers.

## 12. Five relevant publications in last five years

- 1 - Luis F.O. Furtado, Ana Maria D.P. Alexiou, Léia Gonçalves, Henrique E. Toma e **Koiti Araki**, "TiO<sub>2</sub> based light-driven XOR/INH logic gates", *Angew. Chem. Int. Ed.* **45** (2006) 3143-3146
- 2 - Herbert Winnischofer, Henrique Eisi Toma e **Koiti Araki**, "Polymetallated Porphyrin Ultrathin Films as Transducing Elements for Molecular Devices and Logic Gates", *J. Nanosci. Nanotech.* **6**(6) (2006) 1701-1709.
- 3 - **Koiti Araki**, Eisuke Mizuguchi, Hirofumi Tanaka e Takuji Ogawa, "Preparation of Very Reactive Thiol-Protected Gold Nanoparticles: Revisiting the Brust-Schiffrin Method", *J. Nanosci. Nanotech.* **6**, 3 (2006) 708-712.
- 4 - A.F. Nogueira, A.L.B. Formiga, H. Winnischofer, M. Nakamura, F.M. Engelmann, **K. Araki** e H.E. Toma, "Photoelectrochemical properties of supramolecular species containing porphyrin and ruthenium complexes on TiO<sub>2</sub> films", *Photochemical & Photobiological Sciences* **3** (2004) 56-62.
- 5 - Ana Flávia Nogueira, Luis Fernando O. Furtado, André Luiz B. Formiga, Marcelo Nakamura, **Koiti Araki** e Henrique E. Toma, "Sensitization of TiO<sub>2</sub> by Supramolecules Containing Zinc-Porphyrins and Ruthenium-Polypyridyl Complexes", *Inorg. Chem.* **43** (2004) 396-398.