

Curriculum Vitae

Dr. Ioannis Thanopoulos

Present Address:

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Personal Background

Date of Birth: November 24, 1966
Place of Birth: Vrachnaiika, Achaïas, Greece
Citizenship: Greek
Languages: Greek (native), English (fluent), German (fluent)

Education and Professional Experience

04/08-present Research Fellow, Theoretical and Physical Chemistry Institute,
National Hellenic Research Foundation, Athens, Greece.
10/05-03/08 Research Associate, Department of Chemistry,
University of British Columbia, Vancouver, Canada.
06/07 Visiting Scientist at the Department of Chemical Physics,
Weizmann Institute of Science, Rehovot, Israel.
1/1/05-1/21/05 Visiting Scientist, Department of Chemistry,
University of Illinois at Chicago, Chicago, U.S.A.
6/04-9/05 Postdoctoral Fellow, Department of Chemistry,
University of British Columbia, Vancouver, Canada,
(group of Prof. Moshe Shapiro).
5/04 Visiting Scientist, Department of Chemical Physics,
Weizmann Institute of Science, Rehovot, Israel.

- 2/03-9/03 Visiting Scientist at the Department of Chemistry,
University of British Columbia, Vancouver, Canada.
- 8/1/01-8/15/01 Visiting Scientist, ITAMP, Center of Astrophysics,
Harvard University, Cambridge, U.S.A.
- 2/01-11/03 Postdoctoral Fellow, Department of Chemical Physics,
Weizmann Institute of Science, Rehovot, Israel,
(group of Prof. Moshe Shapiro).
- 9/2000 Ph.D. Chemical Physics, Swiss Federal Institute of
Technology (ETH), Zürich, Switzerland:
*Quantum dynamics of the CH and NH chromophores in small
molecules under coherent infrared multiphoton excitation.*
Examiners: Prof. Martin Quack, Prof. Roberto Marquardt,
Prof. Frédéric Merkt
- 3/94 - 9/00 Research work on Ph.D. Thesis under Prof. Martin Quack
Teaching Assistant: Lectures on Physical Chemistry
- 9/93 Diploma Thesis, Theoretical High-Energy Physics, ETH Zürich:
*Gluino contribution to hadronic cross-section
in e^+e^- annihilation.* Supervisor: Prof. Zoltan Kunszt
- 9/92 Diploma in Physics, ETH Zürich.

Awards

- 2/01-11/03 Postdoctoral Fellowship by the Swiss Friends of the
Weizmann Institute of Science.

Conference Organization

Organizer of the *Quantum Control and Light-Matter Interactions: Recent Theoretical and Computational Results* Symposium, with 35 participants (30 oral and 5 poster presentations), in the International Conference of Computational Methods in Sciences and Engineering (ICCMSE) 2007, 25-30 September 2007, Corfu, Greece.

Editorial Responsibilities

Guest-Editor of the Special Issue of *The Journal of Modern Optics*, (Taylor & Francis, UK) on *Quantum Control of Matter and Light*, scheduled for publication in the 2nd half of 2008.

Oral Presentations (* - invited)

* “Quantum World in Real Time” Workshop, Safed, Israel (2007),
Reduced Equations of Motion for Quantum Dynamics at Zero Temperature.

* Theoretical and Physical Chemistry Institute,
National Hellenic Research Foundation, Athens, Greece (2007),
Taming Quantum Molecular Dynamics: Theory and Applications.

ECAMP IX, 9th European Conference on Atoms, Molecules, and Photons,
Heraklion, Crete, Greece (2007),
Coherently Controlled Adiabatic Passage to Multiple Continuum Channels.

* 37th Winter Colloquium of the Physics of Quantum Electronics,
Snowbird (UT), USA (2007),
Coherently Controlled Adiabatic Passage to Multiple Continuum Channels.

* Theoretical and Physical Chemistry Institute,
National Hellenic Research Foundation, Athens, Greece (2006),
Quantum-Engineering by Coherent Light.

* New Frontiers in Condensed Phase Quantum Dynamics Symposium,
PACIFICHEM 2005, Honolulu (HA), USA (2005),
*Coherent optical control of broken-symmetry states:
Detection and automatic repair of mutations.*

BIOMACH Conference: “From Molecular Switches to Molecular Motors” Ascona,
Switzerland (2005),
Optical Molecular Switch: Automatic Repair of Mutations in Di-Nucleotides.

* International Symposium on Laser Control and Molecular Switches,
Brijuni, Croatia (2005), *Switching nucleotide base pairs by coherent light.*

* 35th Winter Colloquium of The Physics of Quantum Electronics,
Snowbird (UT), USA (2005)
Coherent Control of Nucleotide Base Pair Mutations.

* Department of Materials Science, University of Patras, Patras, Greece (2004)
Photo-physical Properties of Molecular Materials.

* Quantum Information and Quantum Control Conference,
Fields Institute and The University of Toronto, Toronto, Canada (2004)
Quantum Coherent Control of Current and Chiral Cat States.

* Condensed Phase and Gas Phase Vibrational Dynamics,
TSRC Workshop, Telluride (CO), USA (2003),
Complete Control of Degenerate Quantum Systems: Chiral Molecules and Beyond.

Physical Chemistry Seminar, Department of Chemistry,
University of British Columbia, Vancouver, Canada (2003),
Two-Step Enantiomeric Purification of Racemic Mixtures by Optical Means.

* Seminar über Spezielle Probleme der Physikalischen Chemie,
Laboratory of Physical Chemistry ETHZ, Zürich, Switzerland (2002),
Slowing Down of Light by Laser Induced Barrier Hopping.

IESL Seminar, Institute of Electronic Structure&Laser, Heraklion, Greece (2001),
*Quantum Dynamics of Important Infrared Chromophores Under Coherent
Multiphoton Excitation.*

Seminar über Spezielle Probleme der Physikalischen Chemie,
Laboratory of Physical Chemistry ETHZ, Zürich, Switzerland (2001),
Mode Selective Tunneling Dynamics in Prototype Nonrigid Molecules.

Physikalische Chemie Kolloquium,
Laboratory of Physical Chemistry ETHZ, Zürich, Switzerland (2000),
Coherent Infrared Multiphoton Excitation of Polyatomic Molecules.

Poster Presentations

9th European Conference on Atoms, Molecules, and Photons,
Heraklion, Crete, Greece (2007),
Laser-Operated Porphyrin-Based Molecular Current Router

Gordon Research Conference: Electronic Spectroscopy and Dynamics,
Bates College, Lewiston (ME), USA (2003),
Complete Control of Cluster-Degenerate Quantum Systems.

International Conference on Multiphoton Processes, ICOMP IX, Crete, Greece (2002),
Two-Step Enantio-selective Optical Switch.

Summer School on Coherent Control in Atomic and Molecular Systems,
Corsica, France (2002), *Two-Step Enantio-selective Optical Switch.*

Quantum Dynamical Concepts: From Diatomics to Biomolecules,
Max-Planck-Institut für Physik komplexer Systeme, Dresden, Germany (2002),
Optical Enantiomeric Separation by Cyclic Population Transfer Processes.

Cold Molecules 2001: Coherent Control and Cold Molecules,
Gif-sur-Yvette, France (2001), *Slow Light in Laser Catalyzed Systems.*

Gordon Research Conference: Quantum Control of Atomic and Molecular Motion,
Mount Holyoke, South Hadley (MA), USA (2001),
Slow Light in Laser Catalyzed Systems.

Spectroscopy and Computational Challenges in Vibrationally Highly Excited
Polyatomic Molecules, CECAM Workshop, Lyon, France (2000),
*Dynamical Chirality and the Quantum Dynamics of Bending Vibrations
of the CH Chromophore in Methane Isotopomers.*

36th IUPAC Congress, Geneva, Switzerland (1997),
Some Simple Mechanisms of Multiphoton Excitation in Many Level Systems.