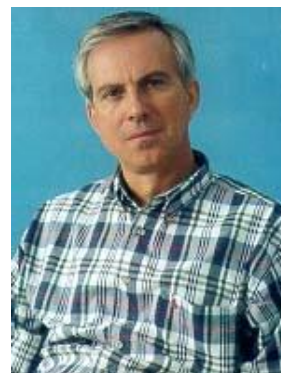


Stavros C. Farantos

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Education & Work experience

Born : June 3rd, 1951, Piraeus.
October 1969 - June 1973 : First degree in Chemistry,
Department of Chemistry, University of Athens.
October 1973 - February 1976 : Military service.
April 1976 - September 1978 : Ph. D. degree in Theoretical Chemistry,
University of Sussex (Title :
Potential Energy Surfaces and Molecular
Dynamics of Chlorine - Oxygen system
Supervisor: Professor John N. Murrell (FRS).
October 1978 - October 1981 : Research Fellow, School of
Molecular Sciences, University of Sussex.
November 1981-September 1984 : Research Scientist, Theoretical and
Physical Chemistry Institute, National
Hellenic Research Foundation.
October 1984 - July 1989 : Assistant Professor in Chemistry,
University of Crete, and Research
Scientist in the IESL, Foundation for
Research and Technology-Hellas.
July 1987 - September 1987 : Visiting Researcher, Department of
Chemistry, University of Bielefeld, Germany.
July 1989 - June 1990 : Visiting Professor, Departments of
Chemistry and Physics, University of
Southern California, California, USA.
August 1989 - March 1994 : Associate Professor in Chemistry,
University of Crete, and Research
Scientist in IESL, Foundation for
Research and Technology-Hellas.
April 1994 - Present : Professor in Chemistry,
University of Crete, and Research
Scientist in IESL, Foundation for
Research and Technology-Hellas.

Research interests

- [1] Spectroscopy, dynamics and thermodynamics of atomic and molecular clusters.
- [2] Theoretical vibrational spectroscopy of small polyatomic molecules with atmospheric interest.
- [3] Elementary chemical reactions - isomerization, dissociation - in small polyatomic molecules.
Applications of nonlinear mechanics.
- [4] Energy localization and redistribution in biological molecules.
- [5] Development of methods and computer codes for novel high performance,
high throughput computational schemes - Grid & Cloud computing - for classical and quantum dynamics.

Representative publications

- [1] Vangelis Daskalakis, Stavros C. Farantos, and Constantinos Varotsis.
Assigning vibrational spectra of ferryl-oxo intermediates of Cytochrome c Oxidase by periodic orbits and Molecular Dynamics.
J. Am. Chem. Soc., 130(37):12385-12393, 2008.
- [2] Stavros C. Farantos, Reinhard Schinke, Hua Guo, and Marc Joyeux.
Energy Localization in Molecules, Bifurcation Phenomena, and their Spectroscopic Signatures: The Global View.
Chemical Reviews, 109(9), 4248-4271, 2009.
- [3] Jaime Suarez, Stavros C. Farantos, Stamatis Stamatidis, and Lucas Lathouwers.
A method for solving the molecular Schroedinger Equation in Cartesian coordinates via angular momentum projection operators.
Comp. Phys. Comm., 180:2025-2033, 2009.
- [4] Massimiliano Porrini, Vangelis Daskalakis, S. C. Farantos, and Constantinos Varotsis.
Heme Cavity Dynamics of Photodissociated CO from ba3-Cytochrome c Oxidase: the Role of Ring-D Propionate.
J. Phys. Chem. B, 113, 12129, 2009.
- [5] R. Schinke, J. Suarez, and S. C. Farantos.
Photodissociation of N2O: Frustrated NN bond breaking causes diffuse vibrational structures.
J. Chem. Phys. (Communication), 133, 091103, 2010.