

CURRICULUM VITAE

Vassilis Gionis

Senior Researcher, TPCI/NHRF
Theoretical and Physical Chemistry Institute,
National Hellenic Research Foundation,
48 Vassileos Constantinou Ave.,
Athens 11635, Greece

Phone: +30 210 7273820

Fax: +30 210 7273894

E-mail: vgionis@eie.gr



EDUCATION

- Thèse d'Etat es Sciences Physiques, Organic Chemistry, Université Paris-Sud (Paris XI, Orsay) (1983)
- D.E.A. (Diplôme d'Etudes Approfondies), Organic Chemistry, Université Paris-Sud (Paris XI, Orsay) (1980)
- Diploma in Chemistry, Chemical Department, University of Athens (1976)

RESEARCH & TEACHING APPOINTMENTS

2002-	Senior Researcher, TPCI, NHRF, Athens, Greece.
1992-2002	Associate Researcher, TPCI, NHRF, Athens, Greece.
1986-1992	Assistant Researcher, TPCI, NHRF, Athens, Greece.
1/90-9/90	Maitre de Conférences Associé, Université Bordeaux I and CRPP / CNRS, Bordeaux, France.
1/84-2/86	Postdoctoral Researcher, Collège de France, Laboratoire de Chimie des Interactions Moléculaires, Paris, France. (Professor J.M. Lehn, Chemistry Nobel Prize 1987).
9/80-10/83	Associate Researcher, Laboratoire Central Recherches (L.C.R.) THOMSON-CSF, Orsay, France.

MAIN RESEARCH INTERESTS

- Materials characterization using non-destructive spectroscopic techniques: *Structure and properties of phyllosilicates and other industrial clays. Secondary structure of biomacromolecules. Chemometrics methodologies. Photopolymerized coatings. Cultural heritage's materials.*
- Modification of surfactant materials and spectroscopic characterization of intermolecular interactions in surfaces and interfaces: *Polymers. Hybrid materials of clays and organic molecules and macromolecules.*
- Development of process monitoring and product control methodologies based on NIR spectroscopy: *Polymerization of aminoplastic resin in aqueous phase. Adhesives ageing. Industrial applications.*
- Design, synthesis and characterization of organic materials for Molecular Electronics and Optoelectronics: *Synthesis and characterization of amphiphilic electroactive molecules. Conducting Langmuir-Blodgett films. Langmuir-Blodgett films with non-centrosymmetric structure.*
- Synthesis and characterization of electroactive molecular materials: *Synthesis of n -donor and n -acceptor and Charge Transfer Complexes (CTC) and Radical-Ion Salts (RIS) with transport properties.*
- Development of structure/properties relationship.
- Synthesis and characterization of molecular materials with liquid crystalline properties: *Disk-like molecules, columnar mesophases.*
- Transport phenomena (conductivity) in "soft" phases (Liquid Crystals και Langmuir-Blodgett Films).

EXTERNAL FUNDING

VG has been involved as scientific coordinator for TPCI-NHRF for EU and other international organizations projects (Human Capital & Mobility, Greece-France bilateral scientific program, Programme d'échanges Scientifiques NHRF-CNRS, NATO Collaborative Research Grant), and for regional development Science & Technology projects such as PENED'95, PAVE'99, PENED'99, EPAN/DSVEPRO, EPAN/AKMON. Finally, he is scientific coordinator of 3 active collaborations with industrial partners, in the frame of activities of the "Applied Spectroscopy Laboratory" (ASL) of the TPCI.

CONFERENCE AND INVITED TALKS

VG has an active participation in 26 International Conferences and 20 scientific meetings (*NATO ARW and ASI, Workshop of European Research Council, CNRS meetings*) in his scientific field with 7 invited talks.

TEACHING ACTIVITIES

VG has been supervisor of 6 post-graduated students for Masters Diploma, 2 post-doc fellows, and for the training of 4 post-graduated students. Last years, VG has an involvement in post-graduate courses of the Biological Department and of the Pharmaceutical Department of the Univ. of Athens.

HONORS & AWARDS

Jul. 85 - Dec. 85 NHRF-C.N.R.S exchange program fellowship, College de France, Paris, France.

Oct. 80 - Oct. 83 French government fellowship, Paris (France).

Member of examination comitee and reporter for PhD Thesis at University Paris XI / Orsay University, Bordeaux I / Bordeaux), University Rennes I / Rennes (France) and Banaras Hindu University (India).

PUBLICATIONS

VG is the author of 52 publications in international refereed scientific journals and investigator of 3 international patents and he shows an active participation in international congresses and conferences of his field, while he presents more than 850 citations (h-index=21).

SELECTED RECENT PUBLICATIONS

Measuring the layer charge of dioctahedral smectite by O-D vibrational spectroscopy, A. Kuligiewicz, A. Derkowski, K. Emmerich, G.E. Christidis, C. Tsiantos, V. Gionis and G.D. Chryssikos, [Clays and Clay Miner. 63, 443-456 \(2015\)](#).

Revisiting the infrared spectrum of the water-smectite interface, A. Kuligiewicz, A. Derkowski, M. Szczerba, V. Gionis and G.D. Chryssikos, [Clays and Clay Miner. 63, 15-29 \(2015\)](#).

Near-infrared investigation of folding sepiolite, M. Tsampodimou, V.J. Bukas, E.T. Stathopoulou, V. Gionis and G.D. Chryssikos, [Am. Mineral. 100, 195-202 \(2015\)](#).

Synchronous ATR infrared and NIR-spectroscopy investigation of sepiolite upon drying, V.J. Bukas, M. Tsampodimou, V. Gionis, G.D. Chryssikos, [Vib. Spectrosc. **68**, 51-60 \(2013\)](#).

Vibrational investigation of indigo-palygorskite association(s) in synthetic Maya blue, C. Tsiantos, M. Tsampodimou, G.H. Kacandes, M. Sanchez del Rio, V. Gionis, and G.D. Chryssikos, [J. Mater. Sci. **47**, 3415-3428 \(2012\)](#)

A combined synchrotron powder diffraction and vibrational study of the thermal treatment of palygorskite-indigo to produce Maya blue, M. Sanchez del Rio, E. Boccaleri, M. Milanesio, G. Croce, W. van Beek, C. Tsiantos, G.D. Chryssikos, V. Gionis, G.H. Kacandes, M. Suarez, E. Garcia-Romero, [J. of Materials Science **44**, 5524-5536 \(2009\)](#)

Octahedral cation distribution in palygorskite, G.D. Chryssikos, V. Gionis, G.H. Kacandes, E.T. Stathopoulou, M. Suarez, E. Garcia-Romero and M. Sanchez del Rio, [Am. Mineral. **94**, 200-203 \(2009\)](#)

Combined Near-infrared and XRD investigation of the octahedral sheet composition of palygorskite, V. Gionis, G.H. Kacandes, I.D. Kastritis and G.D. Chryssikos, [Clays Clay Miner. **55**, 543-554 \(2007\)](#)

In situ high-throughput study of drug polymorphism under controlled temperature and humidity using FTIR spectroscopic imaging, K.L.A. Chan, S.G. Kazarian, D. Vassou, V. Gionis and G.D. Chryssikos, [Vib. Spectrosc. **43**, 221-226 \(2007\)](#)

On the structure of Palygorskite by mid- and near-infrared spectroscopy, V. Gionis, G.H. Kacandes, I.D. Kastriotis and G.D. Chryssikos, [Am. Mineral. **91**, 1125-1133 \(2006\)](#)

Dogfish egg case structural studies by ATR FT-IR and FT-Raman spectroscopy, V.A. Iconomidou, M.E. Georgaka, G.D. Chryssikos, V. Gionis, P. Megalofonou and S.J. Hamodrakas, [Int. J. Biological Macromolecules **41**, 102-108 \(2007\)](#)

Diblock copolymer adsorption from the aqueous micellar phase to solid surfaces: Real time monitoring by ATR spectroscopy in the mid-infrared, I. Keskini, V. Gionis, G.D. Chryssikos, I. Hiotelis, C. Toprakcioglu, N. Stavrouli and C. Tsitsilianis, [Macromol. Symp. **205**, 117-128 \(2004\)](#)

Use of FT-NIR spectroscopy for on-line monitoring of formaldehyde-based resin synthesis, E. Dessipri, E. Minopoulou, G.D. Chryssikos, V. Gionis, A. Paipetis and C. Panayiotou, [Eur. Polymers Journ. **39**, 1533-1540 \(2003\)](#)