

ATHANASSIOS CHRISANTHOPOULOS



ASSISTANT PROFESSOR

LABORATORY OF INORGANIC CHEMISTRY, DEPARTMENT OF CHEMISTRY,
NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, GREECE

Email: achryssan@chem.uoa.gr

Tel.: +30 210 727 4218

Web: <http://www.chem.uoa.gr/>

EDUCATION

- 1988 Diploma: Chemistry, University of Patras, Greece.
- 1999 PhD: Chemical Engineering, University of Patras, Greece. Title: " Physicochemical investigation of the Vanadium complexes formed in molten alkali-pyrosulfate and alkali-sulfate, using Raman and UV/VIS spectroscopy".

RESEARCH INTERESTS

(i) Nanoscience/nanotechnology: Synthesis of inorganic (mainly ZnO and ZnO/C hybrid) nanostructured materials and characterization using light scattering, absorbance, photoluminescence and microscopy techniques, having as a final goal to understand the nanostructure growth mechanism and to control their physicochemical/optical properties. **(ii)** Computational chemistry: Structural, vibrational properties and molecular interactions using abinitio, DFT and/or semiempirical molecular orbital theoretical methods. **(iii)** Raman scattering spectroscopy: Investigation of the structure/structural changes of inorganic materials in solid (crystalline, glassy) and liquid state. **(iv)** f-f hypersensitive transitions as a rare earth halides' structural probe.

ACADEMIC POSITIONS HELD

- 9/2016-σήμερα Assistant Professor, Department of Chemistry, National and Kapodistrian University of Athens, Greece
- 1/2014-8/2016 Lecturer, Department of Chemistry, National and Kapodistrian University of Athens, Greece
- 3/2008-7/2012 Temporary Assistant Professor, Department of Materials Science, University of Patras, Greece.
- 10/2005-2/2008 Temporary Lecturer, Department of Materials Science, University of Patras.
- 2/2001-2/2013 Temporary Lecturer, Department of Chemistry, University of Patras.

TEACHING

UNDERGRADUATE COURSES

- Spectroscopy in Inorganic Chemistry, Department of Chemistry. 2015-2018.
- Laboratory of Spectroscopy in Inorganic Chemistry, Department of Chemistry. 2013-2018.
- Laboratory of Inorganic Chemistry III, Department of Chemistry. 2013-2018.
- Computers in Chemistry, Lab and Course, Department of Chemistry. 2014-2018.
- Chemistry, Lab and Course, Department of Physics. 2013-2018.
- Laboratory of Inorganic Chemistry, Department of Biology. 2013-2015.

POSTGRADUATE COURSES

- Structure and Reactivity of Inorganic Compounds, Department of Chemistry. 2016-2018.
- Physical Methods of Structure Elucidation, Department of Chemistry. 2014-2016.

AWARDS

- Outstanding Undergraduate Student Excellence Awards
- FORTH-ICE/HT Fellowship for Ph.D. studies
- NATO fellowships for attending NATO-ASI school
- EU fellowships for short period visit and collaboration at CNRS, Orleans
- ESF (European Science Foundation) fellowship for post-doctoral research training in the area of Femtochemistry and Femtobiology (Germany).
- DAAD (Deutscher Akademischer Austauschdienst) three months fellowship for post-doctoral research training (Germany).

RESEARCH PROJECTS

- 01.02.2006 - 31.12.2007 research project PYTHAGORAS II. Title: 'New Bioactive glasses: Synthesis, Structure Properties and Applications'.
- 01.07.2003 - 31.12.2004 (18 months) Contract number NNE5-2001-282. Title: "An integrate approach to design high intensity discharge lighting systems".
- 01.11.2002 - 30.06.2003 (8 months). Contract number LAMDATECH EPE. Title: "NISAN administered Tests with Network Diagnostics via a Noninvasive Sensor".
- 01.11.2001 - 31.10.2002 (12 months). Contract number EOK/EN-5. Title: "ENK5-CT2000-00115) (Flame sensors for efficient gas turbine engine cycles - FLAMESEEK".
- 01.01.2000 - 31.07.2000 (7 months). PENED (99EΔ44). Title: "Structural and Dynamic approach of Glass Transition phenomenon".
- 01.07.1999 - 31.12.1999 (6 months). Contract number JOE3-CT97-0045. Title: "Advanced solid Polymer Fuel Cell for operation at temperature up to 200oC".
- 01.12.1998 - 31.03.1999 (4 months). Contract number ENV4-CT98-0704. Title: "Novel remediation strategies for preservation of marble structures endangered from environmental damages".
- 01.07.1996 - 31.08.1997 (14 months). PENED/M-2, 127/3.2. Title: "Synthesis, Purification and Spectroscopic Study of molten salts".
- 01.03.1996 - 30.06.1996 (4 months). Contract number SCI-0181-C. Title: "Chemical and physical properties of molten salts related to".
- 01.01.1994 - 31.01.1995 and 01.01.1996 - 28.02.1996 (15 months). Contract number BRE2-CT93-0447. Title: "Molten salt catalysts for production of sulfuric acid and SO₂ removal from flue gas".
- 01.03.1993 - 31.12.1993 and 01.02.1995 - 31.12.1995 (21 months). Contract number EV5V-CT92-0238. Title: "The destruction of environmentally offensive waste Halocarbons using sodium metal".

REFEREE / EDITOR / EDITORIAL BOARD IN INTERNATIONAL JOURNALS

REFEREE

The Journal of Chemical Physics (American Institute of Physics), Journal of Applied Physics (American Institute of Physics), Journal of Physics and Chemistry of Solids (Elsevier), Thin Solid Films (Conference volume) (Elsevier), Electrochemical and Solid-State Letters (ESL) (The Electrochemical Society), Current Applied Physics (Elsevier), Vibrational Spectroscopy (Elsevier), Current Nanoscience (Bentham), Materials Letters (Elsevier), Physica E (Elsevier), Nanoscale Research Letters (Springer), Materials (open journal, MDPI), Molecules (open journal, MDPI), Journal of Nanostructured Polymers and Nanocomposites, Materials Science in Semiconductor Processing (Elsevier), Materials Science and Engineering B (Elsevier), Journal of Materials Science (Springer), CrystEngComm (RSC Publishing), Central European Journal of Chemistry (Springer).

ADDITIONAL INFORMATION

- Publications in referred Journals and special volumes: **54**
- Presentations in Conferences: **50**
- Number of Heterocitations: **1005**, h index: **18**
- BSc Thesis supervision: **30**
- Referee for Journals: **20**

SELECTED PUBLICATIONS

1. The Reaction of Bunsen's Cacodyl Disulfide, $\text{Me}_2\text{As}(\text{S})-\text{S}-\text{AsMe}_2$, with Iodine: Preparation and Properties of Dimethylarsinosulphenyl Iodide, $\text{Me}_2\text{As}-\text{S}-\text{I}$, Panayiotis V. Ioannou, Dimitris G. Vachliotis, Athanassios Chrissanthopoulos, *Z. Anorg. Allg. Chem.* 2015, 641, (7), 1340–1346.
2. Vibrational dynamics and surface structure of amorphous materials. T. Scopigno, W. Steurer, S. N. Yannopoulos, A. Chrissanthopoulos, M. Krisch, G. Ruocco and T. Wagner, *Nature Communications* (2011), 2:195, Febr. 2011.
3. Synthesis and characterization of ZnO/NiO p-n heterojunctions: ZnO nanorods grown on NiO thin film by thermal evaporation. A. Chrissanthopoulos, S. Baskoutas, N. Bouropoulos, V. Dracopoulos, P. Pouloupoulos and S. N. Yannopoulos, *Photonics and Nanostructures* (2011), Volume 9, Issue 2, April 2011, Pages 132-139.
4. The Ho(III) as structural probe for high temperature ionic liquids: RCl_3 (R= rare earth), A. Chrissanthopoulos, G.N. Papatheodorou, *J. Mol. Struct.* 892 (2008) 93–102.
5. Novel ZnO nanostructures grown on carbon nanotubes by thermal evaporation, A. Chrissanthopoulos, S. Baskoutas, N. Bouropoulos, V. Dracopoulos, D. Tasis and S. N. Yannopoulos, *Thin Solid Films*, 515 (2007) 8524–8528.
6. Vapor complexation in the CsI-HoI₃ system up to 1300 K and the $f \leftarrow f$ hypersensitive transition intensities of Ho(III) in different coordination geometries, G.N. Papatheodorou, A. Chrissanthopoulos, *J. Mol. Struct.* 832(1-3), (2007) 38-47.
7. Temperature dependence of the $f \rightarrow f$ hypersensitive transitions of Ho³⁺ and Nd³⁺ in molten salt solvents and the structure of the LaCl₃-KCl melts. A. Chrissanthopoulos and G.N. Papatheodorou, *Journal of Molec. Struct.* (2006), 782 (2-3), 130-142.
8. Structural investigation of vanadium - sodium metaphosphate glasses. Chrissanthopoulos, A.; Pouchan, C.; Papatheodorou, G. N.; *Zeitschrift fuer Naturforschung, A: Physical Sciences* (2001), 56 (11), 773-776.
9. Structure of Vanadium Oxosulfato Complexes in V₂O₅-M₂S₂O₇-M₂SO₄ (M = K, Cs) Melts. A High Temperature Spectroscopic Study. Boghosian, Soghomon; Chrissanthopoulos, Athanassios; Fehrmann, Rasmus. *Journal of Physical Chemistry B* (2002), 106 (1), 49-56.
10. Probing the structure of GdCl₃-KCl melt mixtures by electronic absorption spectroscopy of the hypersensitive $f \leftarrow f$ transitions of Ho³⁺ and by Raman spectroscopy. Chrissanthopoulos, A.; Papatheodorou, G.N.; *Physical Chemistry Chemical Physics* (2000), 2(16), 3709-3714.
11. Frequency-dependence of the polarizability anisotropy of CO₂ revisited. Chrissanthopoulos, A.; Hohm, U.; Wachsmuth, U.; *Journal of Molecular Structure* (2000), 526, 323-328.