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- 1979 Πτυχίο Χημείας του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης
- 1980-1982 State University of New York, Teaching Assistant.
- 1980-1982 **M.A.** Chemistry, State University of New York, U.S.A.
- 1982-1985 **Ph.D.** Chemistry, State University of New York, New York, U.S.A.
- 1985-1986 Research Associate, Northeastern University, Boston, USA.
- 1986-1987 Εκπλήρωση στρατιωτικών υποχρεώσεων.
- 1988-1991 ΠΔ-407 Πανεπιστήμιο Κρήτης, Τμήμα Χημείας.
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- 2005 (Φεβρ.-Ιούνιος) Επισκέπτης Καθηγητής, University of Nottingham, UK.
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ΥΠΟΤΡΟΦΙΕΣ

- Υποτροφία Ι.Κ.Υ. στο τρίτο και τέταρτο έτος σπουδών στο Α.Π.Θ. (1978, 1979).
- Υποτροφία Εργατικής Εστίας.
- Υποτροφία SUNY-Research Foundation, State University of New York, USA, 1980-1985.

ΆΛΛΕΣ ΔΡΑΣΤΗΡΙΟΤΗΤΕΣ

- ◆ Κριτής εργασιών και ερευνητικών προτάσεων
Journal of Polymer Science, Physics Edition
Journal of Physical Chemistry
Journal of Non-Crystalline Solids
Materials Research Society
Macromolecules
National Science Foundation, USA
- ◆ Συνδιοργάνωση του 4th *Mediterranean School and Symposium on Science and Technology of Advanced Polymer Based Materials* στο ΦΟΔΕΛΕ, Κρήτη, **5-9 Ιουνίου 1995**.
- ◆ Διοργάνωση του 4th *International Discussion Meeting on Relaxations in Complex Systems* στο CRETA MARIS HOTEL στη Χερσόνησο Ηρακλείου με 700 συμμετοχές από Ελλάδα, Ευρώπη, Κίνα, Αμερική και Αυστραλία, **17-23 Ιουνίου 2001**.
- ◆ Συνδιοργάνωση του 5^{ov} *Πανελληνίου Συνεδρίου Πολυμερών* στο Ίδρυμα Τεχνολογίας Έρευνας (ΙΤΕ), Ηράκλειο, Κρήτη, **15-17 Δεκεμβρίου 2001**.
- ◆ Συνδιοργάνωση του 5th *International Discussion Meeting on Relaxations in Complex Systems* στη Lille , FRANCE σε συνεργασία με τον Κ. L. Ngai του Naval Research Lab. USA, M. Descamps και F. Affouard, Lille, FRANCE **7-13 Ιουλίου του 2005**.
- ◆ Μέλος της επιτροπής προπτυχιακών σπουδών και επιτροπής ασφάλειας του τμήματος Χημείας.
- ◆ Σύμβουλος Καθηγητής 1998-σήμερα
- ◆ Διδασκαλία των παρακάτω προπτυχιακών και μεταπτυχιακών μαθημάτων:
 - ◆ Χημεία και Σύγχρονα Θέματα Διατροφής
 - ◆ Γενική Χημεία Ι
 - ◆ Γενική Χημεία ΙΙ
 - ◆ Φυσικοχημεία ΙΙΙ
 - ◆ Χαρακτηρισμός Μακρομοριακών Συστημάτων με Φασματοσκοπία Σκέδασης Ακτίνων Laser
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ΕΠΙΒΛΕΨΗ ΔΙΑΤΡΙΒΩΝ

- Επίβλεψη τής διπλωματικής εργασίας του Α. Πετυχάκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 1999
- Συνεπίβλεψη του ΜΔΕ του Γ. Βλάχου, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2001
- Συνεπίβλεψη του ΜΔΕ του Μ. Στειακάκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2002
- Συνεπίβλεψη της Διδακτορικής διατριβής του Ι. Τσακίρη, Πανεπιστήμιο Κρήτης, Ιατρική Σχολή, 1997-2003
- Επίβλεψη του ΜΔΕ του Ι. Αλιφραγκή, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2003
- Συνεπίβλεψη του ΜΔΕ της Α. Ρουσάκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2002-2004
- Συνεπίβλεψη του ΜΔΕ της Λακιωτάκη Κλεάνθης, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2002-2004

- Συνεπίβλεψη του ΜΔΕ της Κλίνη Αργυρώς, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2002-2004
- Επίβλεψη του ΜΔΕ του Π. Σαμόλη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2005
- Επίβλεψη τής διπλωματικής εργασίας της Α. Μπουντουράκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2004
- Επίβλεψη τής διπλωματικής εργασίας της Χ. Λογκάκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2004
- Συνεπίβλεψη τής Διδακτορικής διατριβής του Μ. Στειακάκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας 2002-2006
- Επίβλεψη τής Διδακτορικής διατριβής του Ι. Τσικαλά, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας 2003-2007
- Επίβλεψη του ΜΔΕ της Χ. Λογκάκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2010
- Επίβλεψη του ΜΔΕ της Α. Μπουντουράκη, Πανεπιστήμιο Κρήτης, Τμήμα Χημείας, 2010

ΕΡΕΥΝΗΤΙΚΑ ΕΝΔΙΑΦΕΡΟΝΤΑ

- Φυσικοχημεία πολυμερών και βιοπολυμερών.
- Δυναμική μακρομορίων κοντά στη θερμοκρασία υάλου.
- Διαμόρφωση, αυτοοργάνωση και δυναμική βιολογικών μακρομορίων – βιοδραστικών πεπτιδίων.
- Διερεύνηση του παθογενετικού μηχανισμού του ιού του AIDS.
- Διερεύνηση σχέσης μεταξύ Χημείας, διατροφής και υγείας.

Τα τελευταία χρόνια υπάρχει αυξημένο επιστημονικό ενδιαφέρον σχετικά με τις αλληλεπιδράσεις διατροφής και υγείας. Το ενδιαφέρον αυτό οφείλεται στο σημαντικό ρόλο που παίζει η διατροφή καθ' όλη τη διάρκεια της ζωής μας. Ο ρόλος αυτός επηρεάζει την ανάπτυξη του σώματος κατά την παιδική ηλικία, τον κίνδυνο για οξείες και χρόνιες ασθένειες καθώς και τη διατήρηση των φυσιολογικών βιολογικών διαδικασιών. Ένας σημαντικός στόχος της έρευνας μας είναι να συμβάλουμε και στην ενημέρωση και βελτίωση των γνώσεων σχετικά με τις σχέσεις μεταξύ διατροφής και των μοριακών διαδικασιών δράσης των τροφίμων.

ΔΗΜΟΣΙΕΥΣΕΙΣ* ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ ΜΕ ΚΡΙΤΕΣ

1. “*Biomonitoring of bisphenol A, triclosan and perfluorooctanoic acid in hair samples of children and adults*”. Karzi V, Tzatzarakis MN, Vakonaki E, Alegakis T, Katsikantami

- I, Sifakis S, Rizos A, Tsatsakis AM. *J Appl Toxicol*. 2018 Aug;38(8):1144-1152. doi: 10.1002/jat.3627. Epub 2018 May 3.
2. "Quantification of 4-Methylimidazole in soft drinks, sauces and vinegars of Greek market using two liquid chromatography techniques". Tzatzarakis MN, Vakonaki E, Moti S, Alegakis A, Tsitsimpikou C, Tsakiris I, Goumenou M, Nosyrev AE, Rizos AK, Tsatsakis AM. *Food Chem Toxicol*. 2017 Sep;107(Pt B):565-571. doi: 10.1016/j.fct.2017.03.028. Epub 2017 Mar 19.
 3. "A global assessment of phthalates burden and related links to health effects" I. Katsikantami, S. Sifakis, MN Tzatzarakis, E Vakonaki, OI Kalantzi, AM Tsatsakis, AK Rizos *Environ. Int.* 2016 Sep 23. pii: S0160-4120(16)30414-7. doi: 10.1016/j.envint.2016.09.013. [Epub ahead of print].
 4. "Determination of 4-methylimidazole in soft drinks, beers, vinegar and sauces of Greek market using liquid chromatography–mass spectrometry" E. Vakonaki, M. Tzatzarakis, S. Moti, D. Vynias, M. Flamourakis, M. Kavvalakis, C. Tsitsimpikou, I.N. Tsakiris, A.K. Rizos, A.M. Tsatsakis *Toxicology Letters* 238S (2015) S56–S383
 5. "Bisphenol A in beverages and canned foods of the Greek market" M. Tzatzarakis, V. Karzi, E. Vakonaki, E. Barbounis, C. Tsitsimpikou, A.I. Vardavas, I. Tsakiris, S. Psycharakis, A.K. Rizos, A.M. Tsatsakis *Toxicology Letters* 238S (2015) S56–S383
 6. "Determination of diacetyl in butters and margarines by gas chromatography – mass spectrometry" M. Tzatzarakis, E. Vakonaki, C. Kampourpoulou, P.D.. Stivaktakis, S. Papachristou, D. Vynias, I. Tsakiris, A.K. Rizos, A.M. Tsatsakis *Toxicology Letters* 238S (2015) S56–S383
 7. "Clustering of HIV-1 Subtypes Based on gp120 V3 Loop Electrostatic Properties" Aliana Lopez de Victoria, Chris A Kieslich, Apostolos K Rizos, Elias Krambovitis, Dimitrios Morikis *BMC Biophysics* 2012, 5:3 (7 February 2012)
 8. "The chlorosome of *Chlorobaculum tepidum*: Size, mass and protein composition revealed by electron microscopy, dynamic light scattering and mass spectrometry-driven proteomics" Kalliopi Kouyianou, Pieter-Jan De Bock, Shirley A. Müller, Antigoni Nikolaki, Apostolos Rizos, Vladislav Krzyz, Aikaterini Aktoudianaki, Joe Vandekerckhove, Andreas Engel, Kris Gevaert and Georgios Tsiotis *PROTEOMICS* Volume 11, Issue 14, 2011
 9. "HIV and Immune System Deregulation" Rizos, Apostolos K; Morikis, Dimitrios; Krambovitis, Elias, *JAIDS Journal of Acquired Immune Deficiency Syndromes*: April 2011 - Volume 56 - Issue - p 52
 10. "The adsorption of organophosphates into microporous and mesoporous NaX zeolites and subsequent chemistry" Meng, Qingguo, Doetschman, David, Rizos, Apostolos, Lee, Min-Hong, Schulte, Jörgen, Spyros, Apostolos, Kanyi, Charles *Environmental Science & Technology* 45 (2011) 3000-3005.
 11. "Evidence of HIV-1 gp120/V3 — CCR5 peptide complex organization in vitro" A.K. Rizos, A. Mpountouraki, C. Logakh, P. Samolis, G. Hatzidakis, D.C. Doetschman, E. Krambovitis, *Journal of Non-Crystalline Solids*, 357 (2011) 723-725.
 12. "Polyvinyl alcohol cross-linked macroporous polymeric hydrogels: Structure formation and **regularity** investigation" A.A. Artyukhov, M.I. Shtilman, A.N. Kuskov, Apostolos K. Rizos, Ph.D.

- L.I. Pashkova, A.M. Tsatsakis and A.K. Rizos *Journal of Non-Crystalline Solids* 357 (2011) 700-706.
13. "The Adsorption and Chemistry of Tripropyl phosphate (TPP) into Microporous and Mesoporous NaX Zeolites" Meng, Qingguo, Doetschman, David, Rizos, Apostolos, Lee, Min-Hong, Schulte, Jrgen, Spyros, Apostolos, Kanyi, Charles MRS Proceedings Volume 1304 / 2011, DOI: <http://dx.doi.org/10.1557/opl.2011.431>
 14. "Amphiphilic poly-N-vinylpyrrolidone nanoparticles as carriers for non-steroidal anti-inflammatory drugs: characterization and in vitro controlled release of indomethacin" Kuskov AN, Voskresenskaya AA, Goryachaya AV, Shtilman MI, Spandidos DA, Rizos AK, Tsatsakis AM. *Int J Mol Med.* **26(1)** (2010) 85-94.
 15. "NMR evidence of charge-dependent interaction between various PND V3 and CCR5 N-terminal peptides" Galanakis PA, Kandias NG, Rizos AK, Morikis D, Krambovitis E, Spyroulias GA. *Biopolymers.* **92(2)** (2009) 94-109.
 16. "Biophysical characterization of V3-lipo peptide liposomes influencing HIV-1 infectivity" Apostolos K. Rizos, Stavroula Baritaki, Ioannis Tsikalas, David C. Doetschman, Demetrios A. Spandidos, Elias Krambovitis *Biochemical and Biophysical Research Communications* 355 (2007) 963-969.
 17. "Self-assembling Nanoscaled Drug Delivery Systems Composed of Amphiphilic Poly-N-vinylpyrrolidones" A.K. Rizos, A. N. Kuskov, M. I. Shtilman, A. Goryachaya, R.Tashmuhamedov, A. Yaroslavov, V. P. Torchilin, A. M. Tsatsakis *J. of Non-Cryst. Solids* 353 (2007) 3969–3975.
 18. "A comparative approach towards thylakoid membrane proteome analysis of unicellular green alga *Scenedesmus obliquus*" K. Kantzilakis, M. Aivaliotis, C. Kotakis, F. Krasanakis, A. K. Rizos, K. Kotzabasis and G. Tsiotis *BBA – Biomembranes* 1768 (2007) 2271-2279.
 19. "Amphiphilic poly-N-vinylpyrrolidone nanocarriers with incorporated model proteins" A.N. Kuskov, A.L. Vilemson, M.I. Shtilman, N.I. Larionova, A.M. Tsatsakis, I. Tsikalas and A. K. Rizos *J. Physics Condens. Matter* 19 (2007) 205139.
 20. "Biophysical characterization of V3-lipo peptide liposomes influencing HIV-1 infectivity" Apostolos K. Rizos, Stavroula Baritaki, Ioannis Tsikalas, David C. Doetschman, Demetrios A. Spandidos, Elias Krambovitis *Biochemical and Biophysical Research Communications* 355 (2007) 963–969.
 21. "Electrostatic Modelling of Peptides Derived from the V3-Loop of HIV-1 gp120: Implications for their Interactions with the N-Terminal Peptide of CCR5" Dimitrios Morikis, Apostolos K. Rizos, Demetrios A. Spandidos, Elias Krambovitis *Int. J. Mol. Medicine* **19** (2007) 343-351.
 22. "NMR structural analysis of the HIV-1 GP120 V3 - CCR5 co-receptor N-terminal interaction" Galanakis PA, Kandias N, Spyroulias GA, Sioumpara M, Morikis D, Rizos A, Krambovitis E *J. of Peptide Sc.* 12 (2006) 196.

23. "Characterization of the interaction between peptides derived from the gp120/V3 domain of HIV-1 and the amino terminal of the chemokine receptor CCR5 by NMR spectroscopy and light scattering" Apostolos K. Rizos, Ioannis Tsikalas, Dimitrios Morikis, Petros Galanakis, Georgios A. Spyroulias, Elias Krambovitis *Journal of Non-Crystalline Solids* 352 (2006) 4451–4458.
24. "Characterization of amphiphilic poly-N-vinylpyrrolidone derivatives by Dynamic Light Scattering" Apostolos K. Rizos, Ioannis Tsikalas, Aristidis M. Tsatsakis and Michail I. Shtilman *Journal of Non-Crystalline Solids* 352 (2006) 5055-5059.
25. "Conformational Properties of HIV-1 gp120/V3 Immunogenic Domains" Petros A. Galanakis, Georgios A. Spyroulias, Apostolos K. Rizos, Panagiotis Samolis and Elias Krambovitis *Current Medicinal Chemistry*, 12 (2005) 1551-1568.
26. "NMR conformational studies of the interaction between the V3 loop of HIV-1 coat glycoprotein gp120 and chemokine receptor CCR5, at peptide level" Galanakis PA, Kandias N, Spyroulias GA, Sioumpara M, Morikis D, Rizos A, Krambovitis E *FEBS J.* 272 (2005) 548.
27. "Molecular size determination of a membrane protein in surfactants by light scattering" Michalis Aivaliotis, Panagiotis Samolis, Eleftheria Neofotistou, Herve Remigy, Apostolos K. Rizos and Georgios Tsiotis *Biochimica et Biophysica Acta* 1615 (2003) 69–76.
28. "Light Scattering Characterization of Synthetic MUC-1 Peptides and their Behavior in Dilute Solution" Apostolos K. Rizos, D. Spandidos and Elias Krambovitis *International Journal of Molecular Medicine* 12 (2003) 559-563.
29. "Structure vs release-rate relationships in polymeric esters of plant growth regulators" M. I. Shtilman A. M. Tsatsakis., A. K. Alegakis, P. S. Voskanyan, I. M. Shaskova, A. K. Rizos and E. Krambovitis *J. of Materials Science* 37 (2002) 1– 6.
30. "New polymeric systems with controlled release action: a light scattering investigation" J. Alifragis, A. K. Rizos, A. M. Tsatsakis, M. Tzatzarakis and Michail Shtilman, *J. of Non-Cryst. Solids* 307-310, 882-886 (2002).
31. "Immunoreactivity and light scattering studies of polyvinyl pyrrolidone polymeric derivatives", S. Baritaki, E. Krambovitis, J. Alifragis, A. K. Rizos, M. Shtilman and A. M. Tsatsakis, *J. of Non-Cryst. Solids* 307-310, 898-904 (2002).
32. "Light scattering and in vitro biocompatibility studies of polyvinylpyrrolidone derivatives with amino acid-dependent groups" Stavroula Baritaki, George N. Tzanakakis, John Alifragis, Alexis Zafiropoulos, Ravshan I. Tashmukhamedov, Aristidis Tsastakis , Mikhail I. Shtilman, Apostolos K. Rizos , Elias Krambovitis. *J. of Biomedical Materials Research* 63(6), 830 (2002).
33. "Amphiphilic poly-N-vinylpyrrolidones: synthesis, properties and liposome surface modification" V.P. Torchilin, T.S. Levchenko, K.R. Whiteman, A.A. Yaroslavov, A.M. Tsatsakis, A.K. Rizos, E.V. Michailova, M.I. Shtilman., *Biomaterials*, 22, 3035-3044 (2001).
34. "Optical Birefringence of Polyisobutylene during Creep and Recovery"

- P. H. Mott, A. K. Rizos and C. M. Roland *Macromolecules* 34, 4476, (2001).
35. "Near Constant Loss from Conductivity Relaxation Measurements in Glassy and Crystalline $\text{LiAlSi}_2\text{O}_6$ " A. K. Rizos, J. Alifragis, K. L. Ngai and P. Heitjans *J. Chem. Phys.* 114, 931 (2001).
36. "Amphiphilic Poly-N-vinylpyrrolidones, Synthesis, Properties and Liposome Surface Modification" K. R. Whiteman, T. S. Levchenko, M. I. Shtilman, E. V. Mikhailova, A. A. Yaroslavov, A. M. Tsatsakis, A. K. Rizos and V. P. Torchilin *Control. Rel. Bioact. Mater.* 27, 8144 (2000).
37. "Study of Dichlophenac Polymeric Derivative with 12-Doxyl Spin Probe" A. K. Rizos, D.C. Doetschman, D. W. Dwyer, A. M. Tsatsakis and M.I. Shtilman *Polymer* 41, 1131 (2000).
38. "A Positronium Annihilation Lifetime and Dynamic Mechanical Study of TOP Plasticized BPA-PC and TMBPA-PC" C. Xiao, J. Wu, L. Yang, A. F. Yee, L. Xie, D. Gidley, K. L. Ngai and A. K. Rizos *Macromolecules* 32, 7913 (1999).
39. "Amphiphilic derivatives of poly(N-vinylpyrrolidone)" M.I. Shtilman, II Tverdokhlebova, M.Y. Yarmysh, E.V. Mikhailova, A.M. Tsatsakis, V.P. Torchilin, A. K. Rizos *VYSOKOMOLEKULYARNYE SOEDINENIYA SERIYA A & SERIYA B* 41 (5), 906 (1999).
40. "A Dielectric Relaxation Study of tris(2-ethyl-hexyl)phosphate (TOP) plasticized tetramethyl bisphenol-A-polycarbonate (TMBPA-PC)" A. K. Rizos, L. Petihakis, K. L. Ngai, J. Wu and A. F. Yee *Macromolecules* 32, 7921 (1999).
41. "Amphiphilic Derivatives of Poly(N-vinylpyrrolidone)" M. I. Shtilman, I.I. Tverdokhlebova, M. Yu. Yarmysh, E. V. Mikhailova, A. M. Tsatsakis, V. P. Torchilin and A. K. Rizos *Polymer Science, Ser. B*, 41, 906 (1999).
42. "Experimental Determination of the Cooperative Length Scale of a Glass-forming Liquid near the Glass Transition" A. K. Rizos and K. L. Ngai *Physical Review E* 59, 612 (1999).
43. "Amphiphilic polymers of N-vinylpyrrolidone as potential modifiers for liposome membranes" Shtilman M.I.; Torchilin V.P.; Tsatsakis A.M.; Mihailova E.V.; Rizos A.; Yaroslavov A.A.; Shashkova I.M. *Proc. Controlled Release Soc.* 26, 1068, (1999)
44. "Local Segmental Dynamics of Low Molecular Weight Polystyrene: New Results and Interpretation" A. K. Rizos, and K. L. Ngai *Macromolecules* 31, 6217 (1998)
45. "Reduction of the Glass Temperature of Thin Freely-Standing Polymer Films Caused by the Decrease of the Coupling Parameter in the Coupling Model" K. L. Ngai, A. K. Rizos and D. J. Plazek *J. Non-Cryst. Solids* 235-237, 435 (1998).

46. "Dynamic Light Scattering Study of 1-Naphthylacetic Acid Polymeric Derivative, a Novel Plant Hormone" A. K. Rizos, A. M. Tsatsakis, M. I. Shtilman, W. Brown *Polymer* 39, 4729 (1998).
47. "Light Scattering Investigation of Self-Release Polymeric Derivatives" A. K. Rizos, A. M. Tsatsakis, M. I. Shtilman, W. Brown *J. Non-Cryst. Solids* 235-237, 652 (1998).
48. "Dynamic Light Scattering Study of 3-indolbutyric Acid Polymeric Derivative" A. K. Rizos, A. M. Tsatsakis, M. I. Shtilman, W. Brown *Polymer* 39, 1753 (1998).
49. "Cooperative Length Scale of Aroclor near its Dynamic Glass Transition" A. K. Rizos and K. L. Ngai *Materials Res. Soc.* 455, 141 (1997).
50. "Possible Causes of the Change of Dynamics in Glass-Forming Materials Subjected to Reduced Dimension" K. L. Ngai and A. K. Rizos *Materials Res. Soc.* 455, 147 (1997).
51. "Distribution of Reorientational Times of Optically Anisotropic Molecular Liquids from Depolarized Light Scattering Studies" K. L. Ngai, G. Floudas and A. K. Rizos *J. Chem. Phys.* 106, 6957, (1997).
52. "Viscoelastic Properties of Amorphous Polymers V: a Coupling Theory Analysis of the Thermorheological Complexity of Polyisobutylene in the Glass-Rubber Transition Zone" K. L. Ngai, D. J. Plazek and A. K. Rizos *J. Polym. Sci. Polym. Phys. Ed.*, 35, 599 (1997).
53. "Local Segmental and sub-Rouse Modes in Polyisobutylene by Photon Correlation Spectroscopy" A. K. Rizos, K. L. Ngai and D. J. Plazek *Polymer* 38, 6103 (1997)
54. "A New Depolarized Mode in a Binary Polymer Blend in the Critical Region" A. K. Rizos *Polymer* 37, 5743 (1996).
55. "Parameterless Explanation of the Non-Arrhenius Conductivity in Glassy Fast Ionic Conductors" K. L. Ngai and A. K. Rizos *Physical Review Letters* 76, 1296 (1996)
56. "Dynamic Heterogeneity and Complexity of Chemical Structure in Amorphous Side Chain Polymers" G. Meier, F. Kremer, G. Fytas and A. K. Rizos *J. Polym. Sci. Polym. Phys. Ed.* 34, 1391 (1996).
57. "Component Dynamics in Polystyrene/Bis-2-ethylhexyl phthalate Solutions by Polarized and Depolarized Light Scattering and Dielectric Spectroscopy" A. K. Rizos, R. M. Johnsen, W. Brown and K. L. Ngai *Macromolecules* 28, 5450 (1995).

58. "Concentration Fluctuation Effects on the Chain Orientation in Polymer Blends in the Critical Region" A. K. Rizos, G. Fytas and A. N. Semenov, *J. Chem. Phys.* 102, 6931 (1995).
59. "Determination of the coupling parameter of local segmental motion in poly(isobutylene) by photon correlation spectroscopy" A. K. Rizos, T. Jian and K. L. Ngai, *Macromolecules* 28, 517 (1995).
60. "Solvent Rotational Mobility in 1,2-Polybutadiene/Aroclor Solutions by Dielectric Relaxation and Fabry-Perot Interferometry" A. K. Rizos and K. L. Ngai *Macromolecules* 27, 7076 (1994).
61. "Viscous Liquids and Glass Transitions" K. L. Ngai, G. Floudas and A. K. Rizos *J. Non-Cryst. Solids* 172-174, 420 (1994).
62. "A connection between the Modification of Solvent Dynamics by Polymer in Polymer Solutions and Component Dynamics in Miscible Polymer Blends" K. L. Ngai and A. K. Rizos *Macromolecules* 27, 4493 (1994).
63. "Dielectric and Mechanical Relaxation in PMPS, BMC, and their Mixtures" P. G. Santangelo, C. M. Roland, K. L. Ngai, A. K. Rizos and H. Katerinopoulos *J. of Non-Cryst. Solids* 172-174, 1084 (1994).
64. "Interdiffusion in Dilute Polymer Mixtures. A Subtle Concentration Effect" T. Jian, S. H. Anastasiadis, A. K. Rizos, G. Fytas and A. Z. Akcasu *J. Chem. Phys.* 101, 3222 (1994).
65. "Dynamics in Concentrated Solutions of Poly(methyl methacrylate)/Bis(2-ethylhexyl phthalate)" G. Floudas, A. K. Rizos, W. Brown and K. L. Ngai *Macromolecules* 27, 2719 (1994).
66. "Modification of Solvent Relaxation Dynamics in Block Copolymer Solutions" A. K. Rizos, N. Hadjichristidis and S. Pispas *Polymer Prep.* 35, 636 (1994).
67. "Solvent Reorientation in Block Copolymer Solutions" A. K. Rizos, K. L. Ngai, S. Pispas and N. Hadjichristidis *J. of Non-Cryst. Solids* 172-174, 790 (1994).
68. "Local Motions in Concentrated Solutions of Poly(Methyl methacrylate)/Bis(2-ethylhexyl phthalate)" A. K. Rizos, G. Floudas and W. Brown *J. Non-Cryst. Solids* 172-174, 786 (1994).
69. "Local Molecular Motion in Polyurethane-Poly(methyl methacrylate) Interpenetrating Polymer Networks" A. K. Rizos, G. Fytas, R. J. Ma, C. H. Wang, V. Abetz and G. C. Meyer *Macromolecules* 26, 1869 (1993).
70. "Segmental and Chain Dynamics in a Diblock Copolymer Melt near the Microphase Separation Transition" G. Fytas, A. K. Rizos, I. Alig, F. Kremer and J. Roovers *Polymer* 34, 2263 (1993).

71. "Dynamic Light Scattering Study of a 1,4-Isoprene-b-Styrene Copolymer" A. K. Rizos, G. Fytas, J. Roovers, K. L. Ngai
Prog. Coll. and Polym. Sci. 91, 72 (1993).
72. "Solvent Reorientation Dynamics in Aroclor/Polymer Solutions" A. K. Rizos, K. L. Ngai and G. Fytas
Prog. Coll. and Polym. Sci. 91, 135 (1993).
73. "Anomalous Reduction of Solvent Friction in Aroclor Solutions of 1,2-Polybutadiene" A. K. Rizos and K. L. Ngai
Phys. Rev. B 46(13), 8126 (1992).
74. "Segmental Motion in Poly(styrene-b-1,4-isoprene) Block Copolymers in the Disordered State" A. K. Rizos, G. Fytas and J. C. Roovers
J. Chem. Phys. 97, 6925 (1992).
75. "Solvent Reorientation Dynamics in Aroclor/Polymer Systems" A. K. Rizos
Polymer Prep. 33, 132, (1992).
76. "Segmental and Chain Dynamics in Disordered Block Copolymers" G. Fytas, A. K. Rizos, I. Alig, J. Kanetakis, F. Kremer and J. Roovers
Polymer Prep. 33, 86, (1992).
77. "Fast Segmental Dynamics in Poly(Methyl Methacrylate)/Polyurethane interpenetrating Polymer Networks" A. K. Rizos, G. Fytas, C. H. Wang and G. C. Meyer
Prog. Colloid Polym. Sci. 90, 232 (1992).
78. "Brillouin Light Scattering and Ultrasonic Study of the curing reaction in epoxy resins" I. Alig, Katja Nancke, A. K. Rizos and G. Fytas.
J. of Appl. Polym. Sci. 44, 829 (1992).
79. "Solvent Mobility in Polystyrene/Aroclor and Polybutadiene/Aroclor Solutions 2. A Photon Correlation Study" A. K. Rizos, G. Fytas, T.P. Lodge and K.L. Ngai
J. Chem. Phys. 95, 2980 (1991).
80. "Dynamic Light Scattering and Low Frequency Raman Scattering Study of Ionic KNO_3 - $Ca(NO_3)_2$ mixtures" E. A. Pavlatou, G. N. Papatheodorou, A. K. Rizos and G. Fytas
J. of Non-Crystal. Solids 88, 131 (1991).
81. "Dynamic Light Scattering Study of Ionic KNO_3 - $Ca(NO_3)_2$ Mixtures" E. A. Pavlatou, A. K. Rizos, G. N. Papatheodorou and G. Fytas
J. Chem. Phys. 94, 224 (1991).
82. "Solvent Mobilities in Polystyrene/Aroclor Solutions. A Depolarized Rayleigh Scattering Study" G. Fytas, A. K. Rizos, G. Floudas and T. P. Lodge
J. Chem. Phys. 93, 5096 (1990).
83. "Diffusion in dilute Polystyrene/ Poly(phenylmethyl siloxane) Blends" A. K. Rizos and G. Fytas
Macromolecules 22, 4136 (1989).

84. "Resonance Raman Studies of Myoglobin Single Crystals" D. Morikis, T. Sage, A. K. Rizos and P. Champion
J. Am. Chem. Soc. 110, 6341 (1988).
85. "Resonance Raman Detection of Bound Dioxygen in Cytochrome P-450_{cam}" O. Bangcharoenpaurpong, A. K. Rizos and P. Champion
J. Biol. Chem. 261, 8089 (1986).
86. "The Cooperativity of Nitric Oxide Hemoglobin Ligand Exchange in Single Crystals as studied by EPR" D. C. Doetschman, A. K. Rizos and J. Szumowski
J. Chem. Phys. 81, 1185 (1984).
87. "EPR Study of the Structure and Spin Distribution at the Binding Site in Human Nitrosyl-Hemoglobin Single Crystals" S. Utterback, D. C. Doetschman, J. Szumowski and A. K. Rizos
J. Chem. Phys. 78, 5874 (1983).

ΑΛΛΕΣ ΑΗΜΟΣΙΕΥΣΕΙΣ

- 1) "Application of Photon Correlation Spectroscopy to study Diffusional Dynamics in Polymer Blends" J. Kanetakis, A. K. Rizos and G. Fytas in *Reactive and Flexible Molecules in Liquids* Th. Dorfmueller (ed) Kluwer Academic Publishers 1989.
- 2) "Recent Applications of Laser Light Scattering to the Dynamics of Polymer Systems" G. Fytas, G. Floudas, J. Kanetakis and A. K. Rizos in *Laser and Applications* C. Siomos (ed) 1989.
- 3) "Interactions between Poly(styrene-co-styrene sulfonic acid) and Poly(methyl methacrylate-co-4-vinyl pyridine) in Dimethyl Sulfoxide Solution by Photon Correlation Spectroscopy" A. K. Rizos and G. Fytas. NATO-ASI in *Large-Scale Molecular Systems: Quantum and Stochastic Aspects. Beyond the Simple Molecular Picture*. W. Gans, A. Blumen, A. Amann (Editors) Plenum Publishing Company 1990.
- 4) "Segmental and Chain Dynamics in Disordered Block Copolymers" G. Fytas, I. Alia, A. K. Rizos, J. Kanetakis and F. Kremer *ABS Papers American Chemical Society* **203**, 154 (1992).
- 5) "Reorientation Dynamics in Aroclor/Polymer Systems" A. K. Rizos *ABS Papers American Chemical Society* **203**, 338 (1992).
- 6) "Modification of Solvent Relaxation Dynamics in Block-Copolymer Solutions" A. K. Rizos, N. Hadjichristidis, S. Pispas and K.L. Ngai *ABS Papers American Chemical Society* **207**, 385 (1994).
- 7) "Concentration Fluctuation Effects on the Chain Orientation in Polymer Blends in the Critical Region" A. K. Rizos, G. Fytas and A. N. Semenov, *ABS Papers American Chemical Society* **209**, 357 (1995).
- 8) "Dynamics in a Polystyrene/additive Mixture as Studied by Dynamic Light Scattering and Dielectric Relaxation" A. K. Rizos, R. M. Johnsen, W. Brown and K. L. Ngai *ABS Papers American Chemical Society* **209**, 194 (1995).

- 9) "Dynamics in a Polystyrene/additive Mixture as Studied by Dynamic Light Scattering and Dielectric Relaxation" A. K. Rizos, W. Brown, R. M. Johnsen and K. L. Ngai, *Polymer Prep.* 1995.
- 10) "Concentration Fluctuation Effects on Chain Orientation Dynamics of Polymer Blends in the Critical Region" A. K. Rizos, G. Fytas and A. N. Semenov, *Polymer Prep.* 1995.
- 11) "Cooperative Length Scale of Aroclor near its Dynamic Glass Transition" A. K. Rizos and K. L. Ngai in *Non Equilibrium Phenomena in Supercooled Fluids, Glasses and Amorphous Materials* M. Giordano, D. Leporini and M. P. Tosi (Editors) 1996.
- 12) "Dynamics of Self-release Polymeric Derivatives" A. K. Rizos, A. M. Tsatsakis, M. I. Shtilman, D. C. Doetschman *ABS Papers American Chemical Society* **218**, 14 (1999).
- 13) "Amorphous Polymers: Structure and Dynamics" K.L. Ngai, G. Floudas, A. Rizos, D. Plazek in *Encyclopedia of Polymer Science and Technology* DOI: 10.1002/0471440264.pst018 Ed (J. Kroschwitz), J. Wiley, N.Y. (2002)

RECENT PRESENTATIONS

1. "Interactions between Poly(styrene-co-styrene sulfonic acid) and Poly(methyl methacrylate-co-4-vinyl pyridine) in Dimethyl Sulfoxide Solution by Photon Correlation Spectroscopy" A. K. Rizos G. Fytas and A. Eiesenberg NATO-ASI in Large-Scale Molecular Systems:Quantum and Stochastic Aspects. Beyond the Simple Molecular Picture, Italy 1990.
2. "Dynamic Light Scattering and Low Frequency Raman Scattering of Ionic $\text{KNO}_3\text{-Ca(NO}_3)_2$ Mixtures" A. K. Rizos, E. A. Pavlatou, G.N. Papatheodorou and G. Fytas International Discussion Meeting on Relaxations in Complex Systems, Agia Pelagia, Heraklion, June 1990.
3. "A Photon Correlation Study of Solvent Mobility in Polystyrene/Aroclor and Polybutadiene/Aroclor Solutions" A. K. Rizos, G. Fytas, T. P. Lodge and K. L. Ngai) International Discussion Meeting on Relaxations in Complex Systems, Agia Pelagia, Heraklion, June 1990.
4. "Solvent Mobility in Polystyrene/Aroclor and Polybutadiene/Aroclor Solutions by Dynamic Light Scattering" G. Floudas, G. Fytas, A. K. Rizos and T. P. Lodge 1st Liquid Matter Conference, 7-11 July 1990, Lyon, France.
5. "Solvent Reorientation Dynamics in Aroclor/Polymer systems" A. K. Rizos, K. L. Ngai and G. Fytas) Applications of Scattering Methods to the Dynamics of Polymer Systems, Heraklion, Crete, Greece, September 1991.
6. "Dynamic Light Scattering Study of (1,4-Isoprene-b-styrene) Block Copolymers" A. K. Rizos, J. E. L. Roovers and G. Fytas) Applications of Scattering Methods to the Dynamics of Polymer Systems, Heraklion, Crete, Greece, September 1991.
7. "Relaxations in epoxy resins during the network formation as studied by ultrasonic methods, dynamic light scattering and dielectric relaxation" I. Alig, D. Lellinger, K. Nancke, G. Fytas,

- A. K. Rizos, G. P. Johari 29th Europhysics Conference on Macromolecular Physics on the Physics of Polymer Networks.
8. "Local Molecular Motion in Polyurethane-Poly(methyl methacrylate) interpenetrating Polymer Networks" A. K. Rizos SDLS II, Burg auf Fehmarn, Germany, March 3 1993.
 9. "Anomalous Reduction of Solvent Friction in Aroclor/1,2-Polybutadiene Solutions" A. K. Rizos and K. L. Ngai SDLS II, Burg auf Fehmarn, Germany, March 3 1993.
 10. "Segmental and Chain Dynamics in Multi component Polymer Melts" G. Fytas, A. K. Rizos, K. Karatasos, I. Alig and F. Kremer Regensburg, Germany, 1993.
 11. "Relaxation Dynamics of Solvent Modified by Polymer" A. K. Rizos, N. Hadjichristidis and K. L. Ngai 2nd International Discussion Meeting on Relaxations in Complex Systems, 28 June-8 July 1993, Alicante, Spain.
 12. "Density and Concentration Fluctuations in Solutions of Poly(methyl methacrylate)/Bis(2-ethylhexyl phthalate)" A. K. Rizos, G. Floudas and W. Brown 2nd International Discussion Meeting on Relaxations in Complex Systems, 28 June-8 July 1993, Alicante, Spain.
 13. "Critical Behavior in a Binary Polymer Mixture as Studied by Light Scattering and Dielectric Spectroscopy" A. K. Rizos and G. Fytas 2nd International Discussion Meeting on Relaxations in Complex Systems, 28 June-8 July 1993, Alicante, Spain.
 14. "Inelastic and Quasielastic Light Scattering from Poly(n-hexylmethacrylate)" G. Meier, G. Fytas, A. K. Rizos, L. Giebel, G. Floudas and F. Kremer 2nd International Discussion Meeting on Relaxations in Complex Systems, 28 June-8 July 1993, Alicante, Spain.
 15. "Modification of Solvent Reorientation Dynamics in Block Copolymer Solutions" A. K. Rizos and N. Hadjichristidis 6th International Symposium on Polymer Analysis and Characterization, July 11-14, 1993, Aghia Pelagia, Crete, Greece.
 16. "Modification of Solvent Relaxation Dynamics in Block Copolymer Solutions" A. K. Rizos, N. Hadjichristidis and S. Pispas National Meeting of the American Chemical Society, Symposium on Block Copolymer Dynamics, San Diego, California, March 13-18, 1994.
 17. "Dynamics in a Polystyrene/additive Mixture as Studied by Dynamic Light Scattering and Dielectric Relaxation" A. K. Rizos, W. Brown, R. M. Johnsen and K. L. Ngai, 209th National Meeting of the American Chemical Society, Anaheim, California April 2-6, 1995.
 18. "Concentration Fluctuation Effects on Chain Orientation Dynamics of Polymer Blends in the Critical Region" A. K. Rizos, G. Fytas and A. N> Semenov, 209th National Meeting of the American Chemical Society, Anaheim, California, U.S.A. April 2-6, 1995.
 19. "The Dynamics of Interacting systems: Glassy Ionic Conductors and Glass-forming Materials" K. L. Ngai and A. K. Rizos, *Materials Research Society MRS Fall Meeting, Boston, U.S.A December 1996.*
 20. "3rd International Discussion Meeting on Relaxations in Complex Systems", Vigo, Spain, July 1997.

21. *“Immunoreactivity and light scattering studies of polyvinyl pyrrolidone polymeric derivatives”*, S. Baritaki, E. Krambovitis, J. Alifragis, A. K. Rizos, M. Shtilman and A. M. Tsatsakis, in 4th International Discussion Meeting on Relaxations in Complex Systems, Hersonissos, Crete, Greece, June 2001.
22. *“New polymeric systems with controlled release action: a light scattering investigation”* J. Alifragis, A. K. Rizos, A. M. Tsatsakis, M. Tzatzarakis and Michail Shtilman, in 4th International Discussion Meeting on Relaxations in Complex Systems, Hersonissos, Crete, Greece, June 2001.
23. *“Βιοδραστικότητα συμπλόκων σορβικού οξέος και χαρακτηρισμός με σκέδαση ακτίνων Laser”* Γ. Αλιφραγκής, Α. Κ. Ρίζος, 5⁰ Πανελλήνιο Συνέδριο Πολυμερών, Ηράκλειο, 15-17 Δεκεμβρίου 2001.
24. *‘Cationic peptides can influence cell events via simple electrostatic interactions: the V3-CCR5 paradigm in human T lymphocytes’* E. Krambovitis, F. Porichis, Z. Vlata and A. K. Rizos in 5th International Discussion Meeting on Relaxations in Complex Systems, Lille, France, 7-13 July, 2005.
25. *‘Dynamic light scattering study of amphiphilic poly-n-vinylpyrrolidones: properties and connection to liposome surface modification’* A. K. Rizos, I. Tsikalas, K. Rousaki, A.M. Tsatsakis and M.I. Shtilman in 5th International Discussion Meeting on Relaxations in Complex Systems, Lille, France, 7-13 July, 2005.
26. *“Biophysical Characterization of Polycationic Peptides, Liposomes and Supramolecular Assemblies”* A. K. Rizos, I. Tsikalas, C. Logakh, A. Mpountourakh and E. Krambovitis in "IV Workshop on Non Equilibrium Phenomena in Supercooled Fluids, Glasses and Amorphous Materials" September 2006.
27. *“Biophysical Characterization of the chemokine receptor CCR5 and of peptides derived from the gp120/V3 domain of the human immunodeficiency virus HIV-1”* A. K. Rizos, I. Tsikalas, D. Morikis, A. Troganis and Elias Krambovitis in "IV Workshop on Non Equilibrium Phenomena in Supercooled Fluids, Glasses and Amorphous Materials" September 2006.

INVITED SEMINARS

1. Northeastern University, Physics Department, Boston, USA, April 1985.
2. University of Crete, Department of Chemistry, Heraklion, Crete, Greece, March 1987.
3. Technische Hochschule Merseburg, Physics Department, Merseburg, Germany, October 1989.
4. Binghamton Section of the American Chemical Society, New York, USA, December 1990.
5. EPS Conference on Polymer Networks, Alexisbad, Germany, September 1991.
6. 2nd Meeting of the Hellenic Polymer Association, Athens, Greece, December 1991.

7. epf 92 European Polymer Federation Conference in Baden-Baden, Germany, September 30, 1992.
8. University of Uppsala, Institute of Physical Chemistry, Sweden, October 1992.
9. SDLS II, Burg auf Fehmarn, March 1993, Germany.
10. Binghamton Section of the American Chemical Society, New York, USA, March 1993.
11. National Technical University of Athens, Department of Physics, May 1993.
12. Workshop in Polymer Science, University of Patras, Department of Chemical Engineering, November 1993.
13. 207th National Meeting of the American Chemical Society, Symposium on Block Copolymer Dynamics, San Diego, California, March 13-18, 1994.
14. 209th National Meeting of the American Chemical Society, Anaheim, California, April 2-6, 1995.
15. Materials Research Society FALL 96 Meeting, Boston, MA, December 1996.
16. 3rd International Discussion Meeting on Relaxations in Complex Systems, Vigo, Spain, July 1997.
17. Naval Research Laboratory, Chemistry Division, Washington, DC, April 1998.
18. Materials Research Society FALL 2000 Meeting, Boston, MA, December 2000.
19. 4th International Discussion Meeting on Relaxations in Complex Systems, Hersonissos, Crete, Greece, June 2001.
20. Materials Research Society FALL 2002 Meeting, Boston, MA, December 2002.
21. University of California at Riverside, USA, April 2003.
22. 5th International Discussion Meeting on Relaxations in Complex Systems, Lille, France, July 2005.
23. "IV Workshop on Non Equilibrium Phenomena in Supercooled Fluids, Glasses and Amorphous Materials" University of Pisa, September 2006.

ΧΡΗΜΑΤΟΔΟΤΗΣΗ

1997-1999

Research Foundation of the University of CRETE

1.048.000 drachmas

PENED 1991-93

General Secretariat for Research and Technology of Greece “*Local and Macromolecular Dynamics of polystyrene-polyisoprene diblocks*” in collaboration with University of Athens, Prof. N. Hadjichristides

4.500.000 drachmas

1992-1994	Research Foundation of the University of Crete <i>604.000 drachmas</i>
1997-1999	Program for Applied Research in collaboration with the Medical School of Heraklion <i>2.000.000 drachmas</i>
1997-1999	ΕΠΕΑΕΚ undergraduate program with Prof. Kitsopoulos and Prof. A. Salifoglou of the Chemistry Department <i>66.350.000 drachmas</i>
1997-1999	Program for Graduate Research in Applied Molecular Spectroscopy with Prof. Kitsopoulos and Prof. Farantos of the Chemistry Department <i>291.353.000 drachmas</i>
PENED 1999-01	General Secretariat for Research and Technology of Greece <i>“Νέα Πολυμερικά Υλικά Συμπολυμερή της βινυλπυρρολιδόνης με Ανοσοενεργό Δράση”</i> <i>40.000.000 drachmas</i>
EPAN 2003-06	General Secretariat for Research and Technology of Greece "PEGYLATED PEPTIDES: the new generation of therapeutic agents to disease" Euro <i>400.000</i>
ΗΡΑΚΛΕΙΤΟΣ	<i>“Διερεύνηση της σταθερότητας λιπιδικών μικροσφαιριδίων ως φορέων ανοσολογικών παραγόντων”</i> <i>31.800 Euro</i>