

## DIONYSIOS A. PAPAIOANNOU

### ▪ Emeritus Professor of Organic Chemistry

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### Education:

- 1974-1977: PhD in Organic Chemistry, Imperial College of Science and Technology, University of London, UK; Supervisor: Prof. D.H.R. Barton (Nobel Prize in Chemistry, 1969)
- 1970-1974: Diploma (Ptychion) in Chemistry, University of Patras, Greece

### Previous Employment/Occupation:

- 1996-2019: Professor, Department of Chemistry (Chem. Dept.), University of Patras (UoP)
- 2002-2008: Collaborating Faculty Member and Coordinator for the Thematic Unit "Organic Chemistry" of the undergraduate program "Studies in Physical Sciences" of the Hellenic Open University
- 1990-1996: Associate Professor, Chem. Dept., UoP
- 1985-1990: Assistant Professor, Chem. Dept., UoP
- 1982-1985: Lecturer, Chem. Dept., UoP
- 1980-1982: Research and Teaching Fellow, Chem. Dept., UoP

### Visiting Faculty Member:

- 10/1991: Chem. Dept., Univ. of Bergen, Bergen, Norway
- 4/1991-9/1991: Chem. Dept., Imperial College of Science and Technology, Univ. of London, UK
- 1988-1989: Chem. Dept., University of Bergen, Bergen, Norway
- 7/1987 and 7/1988: Chem. Dept., Imperial College of Science and Technology, Univ. of London, UK

### Invited Lectures:

- (1) Chem. Dept. of the Universities of (a) Athens, (b) Thessaloniki, (c) Ioannina, (d) Crete, (e) Imperial College of Science and Technology, London (UK), (f) Calabria (Italy), (g) Leipsig (Germany), (2) National Research Institute (Athens, Greece), and (3) Department of Pharmacy of the Universities of (a) Calabria, (b) Messina (Italy), (c) Bath (UK).

### Current Research Activities:

- Total synthesis of non-peptide selective agonists of the Bradykinin B<sub>2</sub> receptor
- Total synthesis of modified dioxins suitable for developing aptamers
- Chemical modification of surfaces for analytical purposes
- Total synthesis of polyamine derivatives and polyamine toxins with medicinal interest
- Organic ligand rearrangements upon complexation to metallic ions

### Participation in Research Projects as a coordinator: (total budget: 154,000 €)

- Financial support from **BIOMEDICA Life Sciences S.A** (2005): Title: Preparation of spermine conjugates with acidic retinoids
- Basic Research Program "**PYTHAGORAS II**" - General Secretariat for Research and Technology (2004-2007); Title: Syntheses of novel medicinally interesting polyamine conjugates
- Basic Research Program "**IRAKLEITOS I**" - European Social Fund (ESF), Operational Program for Educational and Vocational Training II (EPEAEK II) (2002-2004); Title: Syntheses of novel retinoids suitable for structure activity relationship studies
- Basic Research Program "**CONSTANTIN CARATHÉODORY**" - University of Patras, Research Committee (2000-2003); Title: Development of methodologies for the synthesis of sterical hindered and hybrid polyamine derivatives and conjugates with biological interest, suitable for structure-activity relationship studies
- Research Enhancement Programs "**PENED**" - General Secretariat for Research and Technology (1995); Title: Total syntheses of novel dideoxynucleoside analogues and biological evaluation of them as inhibitors of reverse-transcriptase (RT) of HIV virus.
- Research Enhancement Programs "**PENED**" - General Secretariat for Research and Technology (1995); Title: Total syntheses and biological evaluation of analogs of glutamic, kainic and  $\gamma$ -aminobutyric acid.

**Participation in Research Projects (as leader of the synthesis research group): (budget: 498,200 €)**

- Research Program "Search-Create-Innovate" (2017)-Special Management Service of the Operational Program for Competitiveness, Business and Innovation; Title: PHOTOXENS.

**Participation in Educational Funded Projects as a coordinator: (total budget: 496,000 €)**

- Reform of the Curriculum of the Chemistry Dept., University of Patras, Project Scientific Leader (1995)
- Erasmus Intensive Programs (IP) – Erasmus Bureau, European Union.  
Modules: Special Topics in Organic and Inorganic Chemistry, Analytical Chemistry, Biochemistry and Biotechnology, Physical Chemistry, Environmental Chemistry, Polymer Chemistry (1995-2000)

**Research Summary**

**Publications:** 112 refereed journal papers

**Book Chapters:** 2

**Conference Participation:** 15 international and 50 national conferences

**Patents:** 1) [PCT WO2004/018001/2004; US 7,517,913 B2/2009; EP 1569694/2009] and  
2) [EP3878840A1 (2021/09/15) ; GR1009980B]

**Citations** [Google Scholar: 23/10/2023]: 1776 (h factor: 23)

For details visit: <http://www.chem.upatras.gr/soclab/eng/eng/people.html>;

<http://www.researcherid.com:80/rid/F-3384-2010>

<https://scholar.google.gr/citations?user=4jdSR6IAAAAJ&hl=e>

**Post-Docs:** 3

**Completed PhD theses:** 8

**Completed MSc theses:** 24

**Completed Undergraduate Diploma Theses:** 36

**Visiting European Students:** 5

**Current Teaching Activities (up to June 2023):****Undergraduate**

- "Structure, Reactivity and Mechanism in Organic Chemistry" (Chem. Dept., UoP, Greece)
- "Synthetic Organic Chemistry" (Chem. Dept., UoP, Greece)

**Postgraduate**

- "Organic Synthesis of Drugs" (Interdepartmental MSc: «Medicinal Chemistry & Chemical Biology» (MCCB), Departments of Chemistry and Medicine, UoP; <http://www.msc.chembiol.chem.upatras.gr>)
- "Biomacromolecular and Combinatorial Chemistry" (MSc: MCCB)
- "Organic Chemistry of Biological Processes" (MSc: MCCB)
- "Chemical Biology" (MSc: MCCB)

**Other Activities:**

- 1997 – 2019: Director of the "Laboratory of Instrumental Analysis", School of Natural Sciences, UoP
- 1993-1995: Vice-Head of Chem. Dept., UoP
- 1995-1997: Head of Chem. Dept., UoP
- 2015-2017: Director of Postgraduate Studies, MSc in «CHEMICAL BIOLOGY»

**Referee of international journals**

*Eur. J. Org. Chem.*; *Eur. J. Med. Chem.*; *ChemMedChem*; *J. Org. Chem.*; *Org. Lett.*; *Synthesis*; *Chem. Biol. Drug Des.*; *Bioorg. Med. Chem. Lett.*; *Bioorg. Med. Chem.*; *Evid.-Based Compl. Alter. Med.*; *ACS Sust. Chem. Engineer*; *Molecules*; *Monatsch. Chem*; *Lett. Drug Des. Disc.*; *Lett. Org. Chem.*

**Member of advisory board:** *Eur. J. Org. Chem.* (1999-2008)

**Complete list of publications:**

1. A.G.M. Barrett, D.H.R. Barton, J.R. Falck, D. Papaioannou and D.A. Widdowson  
**Phenol Oxidation and Biosynthesis. Part 26. Isonitriles in the Synthesis of Benzyloquinoline Derivatives**

- Journal of the Chemical Society Perkin I*, **1979**, 652-661.
2. A.G.M. Barrett, D.H.R. Barton, G. Frankowiak, D. Papaioannou and D.A. Widdowson  
**Phenol Oxidation and Biosynthesis. Part 27. Reactions of Relevance to the Formation of Erysodienone *in vitro***  
*Journal of the Chemical Society Perkin I*, **1979**, 662-668.
  3. K. Barlos, D. Papaioannou and D. Theodoropoulos  
**Efficient One-Pot Synthesis of N-Tritylamino Acids**  
*Journal of Organic Chemistry*, **1982**, *47*, 1324-1326.
  4. K. Barlos, D. Papaioannou, P. Cordopatis and D. Theodoropoulos  
**Convenient Synthesis of N-Trityl-O-alkyl-L-hydroxyamino Acids and Derivatives. Application to the Synthesis of Related Peptides**  
*Tetrahedron*, **1983**, *39*, 475-478.
  5. K. Barlos, D. Papaioannou and D. Theodoropoulos  
**Preparation and Properties of N-Tritylamino Acid 1-Hydroxybenzotriazole Esters**  
*International Journal of Peptide and Protein Research*, **1984**, *23*, 300-305.
  6. K. Barlos, D. Papaioannou and Ch. Sanida  
**Anwendung von N-Tritylaminosäure-(1-benzotriazolylestern) bei der Synthese von Peptiden**  
*Liebigs Annalen der Chemie*, **1984**, 1308-1318.
  7. K. Barlos, D. Papaioannou, S. Voliotis, R. Prewo and J.H. Bieri  
**Crystal Structure of 3-(N<sup>α</sup>-Tritylmethionyl)benzotriazole 1-Oxide, a Synthone in Peptide Synthesis**  
*Journal of Organic Chemistry*, **1985**, *50*, 696-697.
  8. K. Barlos, D. Papaioannou and Ch. Sanida  
**Peptide synthetisch Interessante derivate von L-Canalin**  
*Liebigs Annalen der Chemie*, **1985**, 287-291.
  9. K. Barlos, D. Papaioannou, S. Patrianakou and Th. Tsegenidis  
**Darstellung von Tritylaminoalkoholen**  
*Liebigs Annalen der Chemie*, **1986**, 952-955.
  10. K. Barlos, M. Lampropoulou, V. Marmaras, D. Papaioannou and Ch. Sanida  
**Redox-Alkylierung von Tyrosin-Derivaten**  
*Liebigs Annalen der Chemie*, **1986**, 1407-1412.
  11. K. Barlos, D. Papaioannou and Ch. Sanida  
**Synthesis and Chemical Modification of Homoserine Peptides**  
*Journal of Chemical Society, Chemical Communications*, **1986**, 1258-1259.
  12. K. Barlos, D. Papaioannou, S. Patrianakou and Th. Tsegenidis  
**Racemisierungsfreie Peptidsynthese bei Erhöhter Temperatur**  
*Liebigs Annalen der Chemie*, **1986**, 1950-1955.
  13. K. Barlos, D. Papaioannou, S. Patrianakou, Ch. Sanida and Th. Tsegenidis  
**Preparation of Optically active Cyclic Ether derivatives of Amino Acids and Peptides**  
*Journal of Chemical Society, Chemical Communications*, **1987**, 474-475.
  14. M. Lampropoulou, A. Zacharopoulou, S. Tsakas, K. Barlos, D. Papaioannou and V. Marmaras

**Effect of O-Allyl-Hydroxyamino Acids on Protein Synthesis and Secretion by Cultured Fat Body and Salivary Glands in the Fruit Fly *Ceratitis Capitata***

*International Journal of Biochemistry*, **1987**, *19*, 89-92.

15. K. Barlos, P. Mamos, D. Papaioannou, S. Patrianakou, Ch. Sanida and W. Schaefer  
**Einsatz von Trt- und Fmoc-Gruppen zum Schutz Polyfunktioneller  $\alpha$ -Aminosäuren**  
*Liebigs Annalen der Chemie*, **1987**, 1025-1030.
16. K. Barlos, D. Gatos, J. Kallitsis, D. Papaioannou, P. Sotiriou and W. Schaefer  
**Verknüpfung von Aminosäuren mit Hydroxygruppen Enthaltenden Harzen und Ihre Anwendung zur Synthese von Peptiden mit N-Triethylaminosäure-(1-benzotriazolylestern)**  
*Liebigs Annalen der Chemie*, **1987**, 1031-1035.
17. K. Barlos, P. Mamos, D. Papaioannou, and S. Patrianakou  
**Simple Syntheses of (S)-2- and 4-Amino-5-hydroxypentanoic Acids**  
*Journal of Chemical Society, Chemical Communications*, **1987**, 1583-1584.
18. K. Barlos, D. Gatos, J. Kallitsis, D. Papaioannou, and P. Sotiriou  
**Anwendung von 4-Polystyryltriphenylmethyl Chloride zur Synthese von Peptiden und Aminosäure-derivaten**  
*Liebigs Annalen der Chemie*, **1988**, 1079-1081.
19. K. Barlos, D. Papaioannou, and S. Voliotis  
**Anwendung von N-tritylmethionin zur Darstellung von Biologisch und Synthetisch Interessanten Heterocyclen**  
*Liebigs Annalen der Chemie*, **1988**, 1127-1133.
20. D. Papaioannou, E. Sivas, V. Nastopoulos, M. Semertzidis and S. Voliotis  
**Structure of N-(tert-Butoxycarbonyl)kainic Acid 2-Diphenylmethyl Ester**  
*Acta Crystallographica, Section C*, **1989**, 1649-1651.
21. D. Papaioannou, G. Stavropoulos, V. Nastopoulos, and S. Voliotis  
**Structure of N-Triphenylmethyl-2-oxa-5-azabicyclo[2.2.1]heptan-3-one**  
*Acta Crystallographica, Section C*, **1989**, 1651-1652.
22. D. Papaioannou, G.W. Francis, D.W. Aksnes, T. Brekke and K. Maartmann-Moe  
**Studies on the Oxidation of Methyl 2,3-O-Isopropylidene- $\beta$ -D-ribofuranoside with Pyridinium Dichromate. Identification of Unexpected By-products**  
*Acta Chemica Scandinavica Series B*, **1990**, *44*, 90-95.
23. D. Papaioannou, G.W. Francis, and K. Maartmann-Moe  
**Structure of (1R, 5S, 8R)-3,3-Dimethyl-8-methoxy-2,4,7-trioxabicyclo[3,3,0]-octan-6-one**  
*Acta Crystallographica, Section C*, **1990**, 156-158.
24. D. Papaioannou, G. Stavropoulos, K. Karagiannis, G.W. Francis, T. Brekke and D.W. Aksnes  
**Simple Synthesis of cis-4-Hydroxy-L-proline and Derivatives Suitable for Use as Intermediates in Peptide Synthesis**  
*Acta Chemica Scandinavica Series B*, **1990**, *44*, 243-251.
25. G. Stavropoulos, D. Papaioannou, K. Karagiannis, M. Vlassi and V. Nastopoulos  
**Structure of cis-N-Triphenylmethyl-4-hydroxy-L-proline Methyl Ester**

- Acta Crystallographica, Section C*, **1990**, 1461-1464.
26. D. Papaioannou, K. Barlos, G.W. Francis, T. Brekke, D.W. Aksnes and K. Maartmann-Moe  
**Reinvestigation of the Base Induced Ring Closure of Methylsulfonium Salts of N-Triyl-(S)-methioninehydroxamide and Derivatives**  
*Acta Chemica Scandinavica Series B*, **1990**, 44, 189-194.
27. D. Papaioannou, K. Barlos, G. Stavropoulos, G.W. Francis, D.W. Aksnes and K. Maartmann-Moe  
**Synthesis of Conformationally Restricted Chiral  $\gamma$ -Aminobutyric Acid (GABA) Analogs**  
*Acta Chemica Scandinavica Series B*, **1991**, 45, 99-104.
28. D. Papaioannou, G.W. Francis and K. Maartmann-Moe  
**Crystal Structure of Methyl (2S, 3S)-3-Triphenylmethylaminooxolan-2-ylacetate**  
*Acta Chemica Scandinavica Series B*, **1991**, 45, 327-328.
29. G.W. Francis, D. Papaioannou, D.W. Aksnes, T. Brekke, K. Maartmann-Moe and N. Taelnes  
**Approaches to the Synthesis of Terpenyl Carbohydrates**  
*Acta Chemica Scandinavica Series B*, **1991**, 45, 652-654.
30. D. Stavropoulos, K. Karagiannis, D. Vynios, D. Papaioannou, D.W. Aksnes, N.A. Froystein and G.W. Francis  
**Solid-Phase Synthesis and Spectroscopic Studies of TRH Analogs Incorporating cis- and trans-4-Hydroxy-L-proline**  
*Acta Chemica Scandinavica Series B*, **1991**, 45, 1047-1054.
31. D.W. Aksnes, G.W. Francis and D. Papaioannou  
**Assignments of the  $^1\text{H}$  and  $^{13}\text{C}$  NMR Spectra of trans-4-Hydroxy-N-9-fluorenyl-methoxycarbonyl-L-proline Using One- and Two-Dimensional NMR Spectroscopy**  
*Magnetic Resonance in Chemistry*, **1993**, 31, 876-877.
32. N. Karamanos, E. Sivvas and D. Papaioannou  
**Rapid Assay for the Determination of two Photoactivatable Kainic Acid Analogs by High-Performance Liquid Chromatography**  
*Journal of Liquid Chromatography*, **1994**, 17(3), 521-532.
33. E. Sivvas, G. Voukelatou, E. Kouvelas, G.W. Francis, D.A. Aksnes and D. Papaioannou  
**Synthesis of a New Kainic Acid Based Selective Ligand as a Photoaffinity Label of non-NMDA Excitatory Amino Acid Receptors in Chicken Brain**  
*Acta Chemica Scandinavica Series B*, **1994**, 48, 76-79.
34. D. Papaioannou, C. Athanassopoulos, V. Magafa, N. Karamanos, G. Stavropoulos, A. Napoli, G. Sindona, G.W. Aksnes and G.W. Francis  
**Redox N-Alkylation of Tosyl Protected Amino Acid and Peptide Esters**  
*Acta Chemica Scandinavica Series B*, **1994**, 48, 324-333.
35. D. Papaioannou, M. Sivas, E. Kouvelas, G. W. Francis and D. W. Aksnes  
**Synthesis and NMR Studies of N-Substituted Derivatives of Kainic Acid Dimethyl Ester**  
*Acta Chemica Scandinavica Series B*, **1994**, 48, 831-836.
36. E. Sivvas, G. Voukelatou, D. Papaioannou, A. Aletras and E.D. Kouvelas  
**A Novel Photoaffinity Ligand for Kainate Sites Labels Two Polypeptides with**

**Molecular Mass 45 and 33.5 KDa in Chick Cerebellum**

*Journal of Neurochemistry*, **1994**, *63*, 1544-1550.

37. D. Papaioannou, C. Athanassopoulos, V. Magafa, G. Karigiannis, N. Karamanos, G. Stavropoulos, A. Napoli, G. Sindona, G.W. Aksnes, G.W. Francis and A. Aaberg  
**Facile Preparation of the 1-Hydroxybenzotriazolyl Ester of N-Tritylpyroglutamic Acid and its Applications to the Synthesis of TRH, [D-His<sup>2</sup>]TRH and Analogues Incorporating cis and trans-4-Hydroxy-L-Proline**  
*Acta Chemica Scandinavica Series B*, **1995**, *49*, 103-114.
38. C. Athanassopoulos, Ch. Tzavara, D. Papaioannou, G. Sindona and H.L.S. Maia  
**Model Studies towards the Applicability of the Readily Available (S)-N-Tritylaspartic Anhydride in the Synthesis of Amino Acids and Peptides.**  
*Tetrahedron*, **1995**, *51*, 2679-2688.
39. T. Duvold, D. Papaioannou and G.W. Francis  
**Benzyl 2,3-O-isopropylidene-β-D-ribo-1,4-pentodialdofuranoside as a D-Ribose Chiron for the Synthesis of Terpenyl Tetraols and Aminotriols.**  
*Tetrahedron Letters*, **1995**, *36*, 3153-3156.
40. P. Mamos, G. Karigiannis, C. Athanassopoulos, S. Bichta, D. Kalpaxis and D. Papaioannou  
**Simple Total Syntheses of N-Substituted Polyamine Derivatives Using N-Tritylated Amino Acids**  
*Tetrahedron Letters*, **1995**, *36*, 5187-5190.
41. C. Athanassopoulos, D. Papaioannou, A. Napoli, C. Siciliano and G. Sindona  
**The Formation by Fast Atom Bombardment of Radical Molecular Cations by Electron-Donor-Acceptor (EDA) Complexes from Tosylated Amino Acid Esters**  
*Journal of Mass Spectrometry*, **1995**, *30*, 1284-1290.
42. F. Artuso, G. Sindona, C. Athanassopoulos, G. Stavropoulos and D. Papaioannou  
**Kainic Acid as Conformationally Constrained Glutamic Acid Analog in Peptide Synthesis**  
*Tetrahedron Letters*, **1995**, *36*, 9309-9312.
43. D. W. Aksnes, C. Athanassopoulos, V. Magafa, A. Aaberg, G.W. Francis and D. Papaioannou  
**NMR Studies of TRH and Analogues Incorporating D-Histidine and 4-Hydroxy-L-Proline**  
*Acta Chemica Scandinavica Series B*, **1996**, *50*, 411-416.
44. V. Nastopoulos, C. Athanassopoulos, D. Papaioannou and E. Gavuzzo  
**(S), (E)-5-Methoxycarbonyl-2-triphenylmethylaminohex-4-en-4-olide**  
*Acta Crystallographica, Section C*, **1996**, *52*, 3227-3229.
45. P. Mamos, D. Papaioannou, C. Kavounis and V. Nastopoulos  
**(S)-3-(O<sup>γ</sup>-Methyl-N<sup>α</sup>-triphenylmethylglutamyl)benzotriazole 1-Oxide**  
*Acta Crystallographica, Section C*, **1997**, *53*, 1973-1975.
46. V. Nastopoulos, O. Gourgoti, G. Balayiannis, G. Karigiannis, D. Papaioannou and C. Kavounis  
**(3aR, 7aS)-N-Triphenylmethyl-1,2,3,3a,5,6,7,7a-octahydropyrano[3,2-b]pyrrol-2-one**  
*Acta Crystallographica, Section C*, **1997**, *53*, 1971-1973.

47. V. Nastopoulos, C. Athanassopoulos, D. Papaioannou and E. Gavuzzo  
**(S), (E)-5-Methoxycarbonyl-3-triphenylmethylamino-hex-4-en-4-olide**  
*Acta Crystallographica, Section C*, **1998**, *54*, 267-269.
48. P. Karahalios, P. Mamos, D.H. Vynios, D. Papaioannou and D. Kalpaxis  
**The effect of acylated polyamine derivatives on polyamine uptake mechanism, cell growth, and polyamine pools in *Escherichia coli*, and the pursuit of structure/activity relationships**  
*European Journal of Biochemistry*, **1998**, *251*, 998-1004.
49. P. Mamos, E. Dalatsis, C. Athanassopoulos, G. Balayiannis, D. Papaioannou and G.W. Francis  
**Aminolysis of *N*-Tritylamino Acid Benzotriazolyl Esters with Concentrated Aqueous Amines and its Applications in Synthesis**  
*Acta Chemica Scandinavica Series B*, **1998**, *52*, 227-231.
50. G. Karigiannis, C. Athanassopoulos, P. Mamos, N. Karamanos, D. Papaioannou and G.W. Francis  
**Preparation and Properties of Enantiomerically Pure *N*<sup>α</sup>-Tritylamino Acid Fluorides**  
*Acta Chemica Scandinavica Series B*, **1998**, *52*, 1144-1150.
51. G. Karigiannis, P. Mamos, G. Balayiannis, I. Katsoulis and D. Papaioannou  
**Simple Fragment Syntheses of All Four Isomers of the Spermine Alkaloid Kukoamine**  
*Tetrahedron Letters*, **1998**, *39*, 5117-5120.
52. V. Nastopoulos, G. Karigiannis, P. Mamos, D. Papaioannou and C. Kavounis  
**(S)-*N*-Triphenylmethylpyroglutamyl Fluoride**  
*Acta Crystallographica, Section C*, **1998**, *54*, 1718-1720.
53. G. Balayiannis, I. Argiris, D. Papaioannou and C. Kavounis  
**(2*S*,3*S*)-and (2*R*,3*S*)-2-[2-(benzyloxy)ethyl]-3-(6-chloro-9*H*-purin-9-yl)-oxolane**  
*Acta Crystallographica, Section C*, **1999**, *55*, 1005-1008.
54. P. Karahalios, I. Amarantos, P. Mamos, D. Papaioannou and D. Kalpaxis  
**Effect of Ethyl and Benzyl Analogues of Spermine on *Escherichia Coli* Peptidyl-transferase Activity, Polyamine Transport and Cellular Growth**  
*Journal of Bacteriology*, **1999**, *181*, 3904-3911.
55. G. Karigiannis and D. Papaioannou  
**Structure, Biological Activity and Synthesis of Polyamine Analogues and Conjugates**  
*European Journal of Organic Chemistry*, **2000**, 1841-1863.
56. G. Balayiannis, G. Karigiannis, P. Gatos, E. De Clercq and D. Papaioannou  
**Total Syntheses of Novel Dideoxynucleoside Analogues Using Chiral Amino Acids**  
*Tetrahedron Letters*, **2000**, 6191-6194.
57. S. Vassis, G. Karigiannis, G. Balayiannis, M. Militsopoulou, P. Mamos, G. W. Francis and D. Papaioannou  
**Simple Syntheses of *N*-Alkylated Spermidine Fragments and Analogues of the Spermine Alkaloid Kukoamine A**  
*Tetrahedron Letters*, **2001**, 1579-1582.
58. G. Balayiannis, D. Papaioannou and N. Karamanos  
**Application of Capillary Electrophoresis in the Analysis of Novel Synthetic**

**Dideoxynucleoside Analogues with Potential Anti-HIV Activity**

*Biomedical Chromatography*, **2001**, *15*, 271-273.

59. G. Balayiannis, D. Papaioannou and A. Troganis  
**Assignment of the <sup>1</sup>H and <sup>13</sup>C NMR Spectra and Determination of Configuration and Conformation of the Major Diastereomer of the Novel Uridine Analogue (5'S)-1-[2'-(2-Hydroxyethyl)tetrahydropyran-5'-yl]-1H-pyrimidine-2,4-dione**  
*Magnetic Resonance in Chemistry*, **2002**, *40*, 244-246.
60. M. Militopoulou, N. Tsiakopoulos, Ch. Chochos, G. Magoulas and D. Papaioannou  
**Simple Syntheses of Cyclic Polyamines Using Selectively N-tritylated Polyamines and Succinic Anhydride**  
*Tetrahedron Letters*, **2002**, 2593-2596.
61. S. Vassis, I. Govaris, K. Voyagi, P. Mamos and D. Papaioannou  
**Simple Syntheses of the Polyamine Alkaloid Tenuilobine and Analogues Using Selectively N-Tritylated Polyamines and Dicarboxylic acids as Bridging Elements**  
*Tetrahedron Letters*, **2002**, 2597-2600.
62. N. Tsiakopoulos, C. Damianakos, G. Karigiannis, D. Vahliotis, D. Papaioannou and G. Sindona  
**Syntheses of Crowned Polyamines Using Isolable Succinimidyl Esters of N-Tritylated Linear Amino Acids and Peptides**  
*ARKIVOC*, **2002 (xiii)**, 79-104.
63. G. Magoulas and D. Papaioannou  
**Synthetic Studies towards the Development of a novel class of acitretin-type retinoids**  
*ARKIVOC*, **2003 (vi)**, 213-227.
64. C. Athanassopoulos, T. Garnelis, E. Pantazaka and D. Papaioannou  
**Efficient Guanylation of N<sup>α</sup>,N<sup>ω</sup>-Difunctionalized Polyamines at their Secondary Amino Functions**  
*Tetrahedron Letters*, **2004**, 8815-8818.
65. T. Garnelis, C. M. Athanassopoulos, D. Papaioannou, I. M. Eggleston and A. H. Fairlamb  
**Very Short and Efficient Syntheses of the Spermine Alkaloid Kukoamine A and Analogs Using Isolable Succinimidyl Cinnamates**  
*Chemistry Letters*, **2005**, *34*, 264-265.
66. C. M. Athanassopoulos, T. Garnelis, D. Vahliotis and D. Papaioannou  
**Efficient Syntheses of 5-Aminoalkyl-1H-tetrazoles and of Polyamines Incorporating Tetrazole Rings**  
*Organic Letters*, **2005**, *7*, 561-564.
67. C. M. Athanassopoulos, T. Garnelis, G. Magoulas and D. Papaioannou  
**Efficient Syntheses of Polyamines Bearing 1H-tetrazol-5-yl Units on their Amino Functions**  
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