



## Curriculum Vitae: FYLAKTAKIDOU KONSTANTINA

### Professor, Field of Expertise: «Chemistry of Organic Compounds»

2002-2019: Faculty Member of Molecular Biology and Genetics Department, DUTH, Professor since 2016; 2019-present: Faculty Member of Chemistry Department, AUTH

#### Current Position

April 2021: 56 Publications in International Peer Review Journals, Average Impact Factor (2021): ~4.6, H-index: 25, Hetero-citations: ~2300 (Source: Scopus.com). 63 Abstracts at 44 International and Local Congresses

**ORCID iD:** <https://orcid.org/0000-0002-2186-2617>, Scopus ID: 6701683905

#### Undergraduate Education

B.Sc in Chemistry, Aristotle University of Thessaloniki (AUTh), Greece, July 1991, Degree: Very Well, 8.01/10

**PhD** in Organic Chemistry, Chemistry Dept, AUTh, Greece, January 1997, Title: «Synthesis and study of fused linear and 4-substituted coumarin derivatives», Degree: Excellent, Supervisor: Prof. D.N. Nicolaides

**Postdoctoral Research** (Apr. 1998 - Aug. 2001) in «Total Synthesis of Natural Products, Everninomicin 13,384-1 and Apoptolidin», at The Scripps Research Institute, La Jolla, USA, Supervisor: Prof. K.C. Nicolaou

**Postdoctoral Research** (Aug. 2001 - Aug. 2002) in «Medicinal Chemistry of Polar molecules and their salts-Synthesis of ITPP- and Supramolecular Chemistry» at University Louis Pasteur, Strasbourg, France, Supervisor: Prod. Jean-Marie Lehn (Nobel Prize in Chemistry, 1987)

**Sabbatical leave** (Oct. 2007 - Mar. 2008) for research in «Chemistry of Sugar Phosphates and Pyrophosphates» at Institut de Science et d' Ingénierie Supramoléculaires, Strasbourg, France, Hosted by: Laboratory of Supramolecular Chemistry, Prof. Jean-Marie Lehn

**Sabbatical leave** (Sept. 2015 - Aug. 2016) for education in «Microwave irradiation in Organic Synthesis», Hosted by: Laboratory of Organic Chemistry, AUTh, Prof. K. Litinas, and «DNA binding studies», Hosted by: Laboratory of Inorganic Chemistry, AUTh, Assoc. Prof. G. Psomas

#### Post-graduate Education

- Synthetic Organic Chemistry, Natural Products
- Carbohydrate, Heterocyclic and Green Chemistry
- Medicinal Chemistry and Chemical Biology
- Photochemistry-Photobiology

#### Areas of Interest

- Fellow of «The George Hewitt Foundation for Medical Research» for Post Doctoral Research at The Scripps Research Institute, USA
- Fellow of «GMP Companies Inc», for Post Doctoral Research at University Louis Pasteur, France
- «Complex Oligosaccharide Made by Total Synthesis», Stu Borman, *Chemical and Engineering News*, 22 Nov. 1999, vol 77(47). Comments on the accomplishment of the Total Synthesis of Everninomicin 13,384-1, the most complex oligosaccharide ever synthesized in a Laboratory
- The book «*The Organic Chemistry of Sugars*» D. E. Levi, P. Fugedi, Ed. Taylor and Francis, CRC Press, 2006, ISBN 9780824753559 has as a cover picture Everninomicin 13,384-1, and extensively comments its synthesis
- Publication «*Total Synthesis of Apoptolidin: Construction of Enantiomerically Pure Fragments*», J. Am. Chem. Soc., 125, 15433-15442 (2003) in 2004 was the 8th most downloaded publication among the users of SciFinder, SciFinder Scholar, STN, and CA on CD, for chemistry and related sciences, (ref: <http://info.cas.org/spotlight/rlist4q04j/rlist4q04j.html>)



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- Publication «*Enhanced exercise capacity in mice with severe heart failure treated with an allosteric effector of hemoglobin, myo-inositol trispyrophosphate*», *Proc Nat Acad Sci USA*, **106**, 1926-1929 (2009) has been extensively reviewed in media like Bioworld, New Scientist, Reuters and RSC. (<http://www.bioworld.com/content/loosening-hemoglobins-grip-oxygen-may-help-heart-failure>, <https://www.newscientist.com/article/dn16564-chemical-drink-breathes-life-into-damaged-hearts/>, <http://www.reuters.com/article/2009/02/09/us-heart-drug-idUSTRE51884020090209>, <http://www.rsc.org/chemistryworld/News/2009/February/09020902.asp>)

**Distinctions  
(continued)**

- ITPP project, owned by Normoxys company with the name OXY111A (code comes from my lab notebook reaction code 111A) in 2011 was recognized as one of the Windhovers Information Inc.'s top 10 Cardiovascular/Metabolic Projects to watch. (<http://www.businesswire.com/news/home/20101103005733/en/NormOxys%20%99-Oxygen-Enhancing-Drug-Candidate-OXY111A-Recognized-Windover%20%99s#.VhY24m7o4ig>).
- ITPP is in Human Clinical Trials phase 2 from 2014 and is commercially available. [https://en.wikipedia.org/wiki/Myo-inositol\\_trispyrophosphate](https://en.wikipedia.org/wiki/Myo-inositol_trispyrophosphate)
- Publication «*Polyphosphates and Pyrophosphates of Pentopyranoses and Pentofuranoses as Allosteric Effectors of Human Hemoglobin: Synthesis, Molecular Recognition and Oxygen Release*», *ChemMedChem*, **6**, 1495-1508 (2011), has been recognized by the Journal as **VIP** (Very Important Paper).

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- «Chemical Synthesis of myo-Inositol Derivatives», Bilateral Collaboration with University Louis Pasteur, Code RC: 1124, 2003, 40.000 €, 1/1/2003-30/6/2003, PI: Assist. Prof. Fylaktakidou Konstantina.
  - GSRT, PENED 2003, «The role of biological membranes in plant responses to cold stress. Identification and characterization of phospholipids associated factors». 200.000 €, PI: Dr. Farmaki Theodora, Researcher D, Farm Biotechnology Institute, Thessaloniki.
  - PYTHAGORAS II 2004, «Synthesis of novel pyran[2,3-h]chromen-6(6H)-ones (pyranonecoumarines) and of their 4-aza-analogues and study of their biological action», 50.000 €, PI: Prof. K. E. Litinas.
  - INTERREG IIIA Greece-Bulgaria, Measure 3.1.: «Development of infrastructure for the identifications of carriers of inherited diseases». 2006, 300.000 €, PI: Assist. Prof. M. Grigoriou.

**Funding**

- FP7-Research Capacities-REGPOT-2008-1. Title: «Strengthening Regional Bioresearch Potential in Greece: advanced scientific performance at the Department of Molecular Biology and Genetics in Thrace» (2009-2012). 1.000.000 €, PI: Assist. Prof. Bogos Agianian.
- «Production of Probiotic Ice-cream with immobilized cells L. Casei in nuts and pasty products». Code RC: 80842, 2011, 140.000 €, PIs: Assoc. Prof. K. Fylaktakidou, Assist. Prof. Y. Kourkoutas.
- «Use of biologically active essential oils in the production of alcoholic beverages and pastry products with possible health benefits». Code RC: 81114, 2012, 133.000 €, PIs: Assoc. Prof. K. Fylaktakidou, Assist. Prof. Y. Kourkoutas.
- «Harmful Implications of Pesticide Use: specified biomarkers in Public Health service and public information campaign», 2014, 370.000 €, PI: Assoc. Prof. A. Chatzaki. <http://biopest.med.duth.gr>
- «KALLIPOS» 2<sup>nd</sup> call for «Electronic Academic Books for Natural Sciences». 2015, Book Title: «Mechanisms of Organic Reactions». Co-author, Main Author: Prof. Koumbis Alexandros.
- «Young Researchers Support». Project Title: «Induced Antibiotic Biosynthesis via micro-organism's co-culture and investigation of their secondary metabolism gene arrays», 2019, PI: Assoc. Prof. Boukouvala Sotiria.



- List of Publications**
1. D. N. Nicolaides, K. C. Fylaktakidou, C. Bezergianidou-Balouktsi and K. E. Litinas. «Reactions of 4,6-Bis(acetyl)resorcinol with Alkoxy carbonylalkylidene-(triphenyl)-phosphoranes. Preparation of Coumarin Derivatives», *J. Heterocyclic Chem.*, **31**, 173-176 (1994), DOI: 10.1002/jhet.5570310129.
  2. D. N. Nicolaides, K. C. Fylaktakidou, K. E. Litinas and D. Hadjipavlou-Litina. «Synthesis and Biological Evaluation of some 4-(Isoxazolinyl or 1,2,4-Oxadiazolyl) Coumarins», *J. Heterocyclic Chem.*, **33**, 967-971 (1996), DOI: 10.1002/jhet.5570330367.
  3. D. N. Nicolaides, K. C. Fylaktakidou, K. E. Litinas and S. G. Adamopoulos. «The Synthesis of Some Pyrano[2,3-g]chromene-2,7-diones and Furo[2,3-g]chromene-6-ones», *J. Heterocyclic Chem.*, **35**, 91-96 (1998), DOI: 10.1002/jhet.5570350117.
  4. D. N. Nicolaides, K. C. Fylaktakidou, K. E. Litinas, G. K. Papageorgiou and D. Hadjipavlou-Litina. «1,3-Cycloaddition Reactions of 2-oxo-2H-[1]benzopyran-4-carbonitrile N-oxide. Synthesis of Several New 4-Substituted Coumarins», *J. Heterocyclic Chem.*, **35**, 619-625 (1998), DOI: 10.1002/jhet.5570350321.
  5. D. N. Nicolaides, K. C. Fylaktakidou, K. E. Litinas and D. Hadjipavlou-Litina. «Synthesis and Biological Evaluation of Several Coumarin-4-Carboxamidoxime and 3-(Coumarin-4-yl)-1,2,4-oxadiazole Derivatives», *Eur. J. Med. Chem.*, **33**, 715-724 (1998), DOI: 10.1016/S0223-5234(98)80030-5.
  6. K. C. Nicolaou, H. J. Mitchell, H. Suzuki, R. M. Rodriguez, O. Baudoin, K. C. Fylaktakidou. «Total synthesis of Everninomicin 13,384-1. Part 1: Synthesis of the A<sub>1</sub>B(A)C Fragment», *Angew. Chem. Int. Ed.*, **38**, 3334-3339 (1999), DOI: 10.1002/(SICI)1521-3773(19991115)38:22<3334::AID-ANIE3334>3.0.CO;2-H.
  7. K. C. Nicolaou, R. M. Rodriguez, K. C. Fylaktakidou, H. Suzuki, H. J. Mitchell. «Total synthesis of Everninomicin 13,384-1. Part 2: Synthesis of the FGHA<sub>2</sub> Fragment», *Angew. Chem. Int. Ed.*, **38**, 3340-3345 (1999), DOI: 10.1002/(SICI)1521-3773(19991115)38:22<3340::AID-ANIE3340>3.0.CO;2-2.
  8. K. C. Nicolaou, H. J. Mitchell, R. M. Rodriguez, K. C. Fylaktakidou, H. Suzuki. «Total synthesis of Everninomicin 13,384-1. Part 3: Synthesis of the DE Fragment and Completion of the Total Synthesis», *Angew. Chem. Int. Ed.*, **38**, 3345-3350 (1999), DOI: 10.1002/(SICI)1521-3773(19991115)38:22<3345::AID-ANIE3345>3.0.CO;2-9.
  9. K. C. Nicolaou, H. J. Mitchell, K. C. Fylaktakidou, H. Suzuki, R. M. Rodriguez. «1,2-Seleno-migrations in Carbohydrate Chemistry: Solution and Solid Phase Synthesis of 2-Deoxy-Glycosides, Orthoesters and Allylic Orthoesters», *Angew. Chem. Int. Ed.*, **39**, 1089-1093 (2000), DOI: 10.1002/(SICI)1521-3773(20000317)39:6<1089::AID-ANIE1089>3.0.CO;2-V.
  10. K. C. Nicolaou, R. M. Rodriguez, H. J. Mitchell, H. Suzuki, K. C. Fylaktakidou, O. Baudoin, F. van Delft. «Total synthesis of Everninomicin 13,384-1. Part 1: Retrosynthetic Analysis and Synthesis of the A<sub>1</sub>B(A)C Fragment», *Chem. Eur. J.*, **6**, 3095-3115 (2000), DOI: 10.1002/1521-3765(20000901)6:17<3095::AID-CHEM3095>3.0.CO;2-4.
  11. K. C. Nicolaou, H. J. Mitchell, K. C. Fylaktakidou, R. M. Rodriguez, H. Suzuki. «Total synthesis of Everninomicin 13,384-1. Part 2: Synthesis of the FGHA<sub>2</sub> Fragment», *Chem. Eur. J.*, **6**, 3116-3148 (2000), DOI: 10.1002/1521-3765(20000901)6:17<3116::AID-CHEM3116>3.0.CO;2-8.
  12. K. C. Nicolaou, H. J. Mitchell, R. M. Rodriguez, K. C. Fylaktakidou, H. Suzuki, S. R. Conley. «Total synthesis of Everninomicin 13,384-1. Part 3: Synthesis of the DE Fragment and Completion of the Total Synthesis», *Chem. Eur. J.*, **6**, 3149-3165 (2000), DOI: 10.1002/1521-3765(20000901)6:17<3149::AID-CHEM3149>3.0.CO;2-L.
  13. K. C. Nicolaou, K. C. Fylaktakidou, H. J. Mitchell, F. van Delft, R. M. Rodriguez, S. R. Conley, Z. Jin. «Total synthesis of Everninomicin 13,384-1. Part 4: Explorations of Methodology. Stereocontrolled Synthesis of 1,1'-Disaccharides, 1,2-Selenomigrations in Carbohydrate Chemistry, and Solution and Solid Phase Synthesis of 2-Deoxy Glycosides and Orthoesters», *Chem. Eur. J.*, **6**, 3166-3185 (2000), DOI: 10.1002/1521-3765(20000901)6:17<3166::AID-CHEM3166>3.0.CO;2-Z.
  14. A. Emmanuel-Giota, K. C. Fylaktakidou, D. Hadjipavlou-Litina, K. E. Litinas, D. N. Nicolaides «Synthesis and Biological Evaluation of Several 3-(Coumarin-4-yl)tetrahydroisoxazole and 3-(Coumarin-4-yl)dihydropyrazole Derivatives», *J. Heterocyclic Chem.*, **38**, 717-722 (2001), DOI: 10.1002/jhet.5570380329.
  15. K. C. Nicolaou, Y. Li, K. C. Fylaktakidou, H. J. Mitchell, H.-X. Wei, B. Weyershausen. «Total Synthesis of Apoptolidin 1. Retrosynthetic Analysis and Construction of Building Blocks», *Angew. Chem. Int. Ed.*, **40**, 3849-3854 (2001), DOI: 10.1002/1521-3773(20011015)40:20<3849::AID-ANIE3849>3.0.CO;2-M.
  16. K. C. Nicolaou, Y. Li, K. C. Fylaktakidou, H. J. Mitchell, K. Sugita. «Total Synthesis of Apoptolidin 2. Coupling of Key Building Blocks and Completion of the Synthesis», *Angew. Chem. Int. Ed.*, **40**, 3854-3857 (2001), DOI: 10.1002/1521-3773(20011015)40:20<3854::AID-ANIE3854>3.0.CO;2-D.
  17. D. N. Nicolaides, D. R. Gautam, K. E. Litinas, C. Manouras, K. C. Fylaktakidou. «Reactions of 2-(Methoxyimino)benzen-1-ones with a-Alkyl-ethoxycarbonyl-methylene(triphenyl)phosphoranes», *Tetrahedron*, **57**, 9469-9474 (2001), DOI: 10.1016/S0040-4020(01)00942-5.
  18. K. C. Fylaktakidou, D. R. Gautam, D. Hadjipavlou-Litina, C. A. Kontogiorgis, K. E. Litinas, D. N. Nicolaides. «Reactions of 4-Methylchromene-2,7,8-trione with Phosphonium Ylides. Synthesis and Evaluation of Fused 1,3-Dioxolanocoumarins as Antioxidants and Antiinflammatories», *J. Chem. Soc., Perkin Trans. 1*, 3073-3079 (2001), DOI: 10.1039/b103092m.



- 19.** D. R. Gautam, K. E. Litinas, K. C. Fylaktakidou, D. N. Nicolaides. «Reactions of *o*-Quinones with  $\alpha$ -Methyl-(or Methylene) Substituted Phosphorous Ylides. Synthesis of Benzo[*b*]furan Derivatives», *J. Heterocycl. Chem.*, **40**, 399-404 (2003), DOI: 10.1002/jhet.5570400301.
- 20.** D. R. Gautam, K. E. Litinas, K. C. Fylaktakidou, D. N. Nicolaides. «Synthesis of Some [1,3]Benzodioxoles via the Reactions of *o*-Quinones with Phosphorus Ylides», *Phosphorous, Sulfur*, **178**, 1851-1864 (2003), DOI: 10.1080/10426500390220862.
- 21.** K. C. Nicolaou, K. C. Fylaktakidou, H. Monenschein, Y. Li, B. Weyershausen, H. J. Mitchell, H.-X. Wei, P. Guntupalli, D. Hepworth, K. Sugita. «Total Synthesis of Apoptolidin: Construction of Enantiomerically Pure Fragments», *J. Am. Chem. Soc.*, **125**, 15433-15442 (2003), DOI: 10.1021/ja0304953.
- 22.** K. C. Nicolaou, Y. Li, K. Sugita, H. Monenschein, P. Guntupalli, H. J. Mitchell, K. C. Fylaktakidou, D. Vourloumis, P. Giannakakou, A. O'Brate. «Total Synthesis of Apoptolidin: Completion of the Synthesis and Analogue Synthesis and Evaluation», *J. Am. Chem. Soc.*, **125**, 15443-15454 (2003), DOI: 10.1021/ja030496v.
- 23.** D. N. Nicolaides, D. R. Gautam, K. E. Litinas, D. J. Hadjipavlou-Litina, K. C. Fylaktakidou. «Synthesis and Biological Evaluation of Some Benzo[1]khellactone Derivatives and Analogues», *Eur. J. Med. Chem.*, **39**, 323-332 (2004), DOI: 10.1016/j.ejmchem.2004.01.003.
- 24.** D. N. Nicolaides, K. E. Litinas, I. Vrasidas, K. C. Fylaktakidou. «Thermal Transformation of Arylamidoximes in the Presence of Phosphorous Ylides. Unexpected Formation of 3-Aryl-5-Arylamino-1,2,4-Oxadiazoles», *J. Heterocyclic Chem.*, **41**, 499-503 (2004), DOI: 10.1002/jhet.5570410404.
- 25.** K. C. Fylaktakidou, D. J. Hadjipavlou-Litina, K. E. Litinas, D. N. Nicolaides. «Natural and Synthetic Coumarin Derivatives with Antiinflammatory/Antioxidant Activities», *Curr. Pharm. Design*, **10**, 3813-3833 (2004), DOI: 10.2174/1381612043382710.
- 26.** D. N. Nicolaides, K. E. Litinas, T. Papamehael, H. Grzeskowiak, D. R. Gautam, K. C. Fylaktakidou. «An Easy Transformation of 2-Amino-2-(hydroxyimino)acetates to Carbamoylformamidoximes», *Synthesis*, 407-410 (2005), DOI: 10.1055/s-2004-837285.
- 27.** K. C. Fylaktakidou, J.-M. Lehn, R. Greferath, Y. Nicolau. «Inositol Tripyrophosphate-a new, Membrane Permeant Allosteric Effector of Hemoglobin», *Bioorg. Med. Chem. Lett.*, **15**, 1605-1608 (2005), DOI: 10.1016/j.bmcl.2005.01.064.
- 28.** K. C. Fylaktakidou, K. E. Litinas, A. Saragliadis, S. G. Adamopoulos, D. N. Nicolaides. «Synthesis of oxadiazoloquinoxaline, oxathiadiazoloquinoxaline and oxadiazolobenzothiazine derivatives», *J. Heterocyclic Chem.*, **43**, 579-583 (2006), DOI: 10.1002/jhet.5570430309.
- 29.** C. Kieda, R. Greferath, C. C. Da Silva, K. C. Fylaktakidou, J.-M. Lehn, Y. Nicolau. «Suppression of hypoxia-induced HIF-1 $\alpha$  and of angiogenesis in human endothelial cells under hypoxia by erythrocytes loaded with inositol tripyrophosphate», *Proc Nat Acad Sci USA*, **103**, 15576-15581 (2006), DOI: 10.1073/pnas.0607109103.
- 30.** K. C. Fylaktakidou,\* D. J. Hadjipavlou-Litina,\* K. E. Litinas, E. Varella, D. N. Nicolaides. «Recent developments in the chemistry and in the biological applications of amidoximes», *Curr. Pharm. Design*, **14**, 1001-1047 (2008), DOI: 10.2174/138161208784139675.
- 31.** M. Ispicoudi, K. E. Litinas, K. C. Fylaktakidou,\* «A convenient synthesis of 5-amino-substituted-1,2,4-oxadiale derivatives via reactions of amidoximes with carbodiimides», *Heterocycles*, **75**, 1321-1328 (2008), DOI: 10.3987/COM-08-11340.
- 32.** D. D. R. Gautam, J. Protopapas, K. C. Fylaktakidou, K. E. Litinas, D. N. Nicolaides, K. Tsoleridis. «Unexpected one-pot synthesis of new polycyclic coumarin[4,3-*c*]pyridine derivatives via tandem hetero-Diels-Alder and 1,3 dipolar cycloaddition reaction», *Tetrahedron Lett.*, **50**, 448-451 (2009), DOI: 10.1016/j.tetlet.2008.11.033.
- 33.** A. Biolo, R. Greferath, D. A. Siwik, F. Qin, E. Valsky, K. C. Fylaktakidou, S. Pothukanuri, C. D. Duarte, R. P. Schwartz, J.-M. Lehn, C. Nicolau, W. S. Colucci. «Enhanced exercise capacity in mice with severe heart failure treated with an allosteric effector of hemoglobin, myo-inositol trispyrophosphate», *Proc Nat Acad Sci USA*, **106**, 1926-1929 (2009), DOI: 10.1073/pnas.0812381106.
- 34.** T. Symeonidis, K. C. Fylaktakidou, D. J. Hadjipavlou-Litina, K. E. Litinas. «Synthesis and anti-inflammatory evaluation of novel angularly or linearly fused coumarins», *Eur. J. Med. Chem.*, **44**, 5012-5017 (2009), DOI: 10.1016/j.ejmchem.2009.09.004.
- 35.** M. Ispicoudi, M. Amvrazis, C. Kontogiorgis, A. E. Koumbis, K. E. Litinas, D. J. Hadjipavlou-Litina, K. C. Fylaktakidou,\* «Convenient Synthesis and Biological Profile of 5-Amino-substituted 1,2,4-oxadiazole Derivatives», *Eur. J. Med. Chem.*, **45**, 5635-5645 (2010), DOI: 10.1016/j.ejmchem.2010.09.016.
- 36.** K. C. Fylaktakidou, C. D. Duarte, A. E. Koumbis, C. Nicolau, J.-M. Lehn. «Polyphosphates and Pyrophosphates of Hexopyranoses as Allosteric Effectors of Human Hemoglobin: Synthesis, Molecular Recognition and Effect on Oxygen Release», *ChemMedChem*, **6**, 153-168 (2011), DOI: 10.1002/cmdc.201000366.
- 37.** M. Aprahamian, G. Bour, C. Y. Akladios, K. C. Fylaktakidou, R. Greferath, L. Soler, J. Marescaux, J.-M. Egly, J.-M. Lehn, C. Nicolau, «Myo-InositolTrisPyroPhosphate Treatment Leads to HIF-1 $\alpha$  Suppression and Eradication of Early Hepatoma Tumors in Rats», *ChemBioChem*, **12**, 777-783 (2011), DOI: 10.1002/cbic.201000619.

**List of  
Publications  
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38. K. C. Fylaktakidou, C. D. Duarte, R. Jogireddy, A. E. Koumbis, C. Nicolau, J.-M. Lehn. «Polyphosphates and Pyrophosphates of Pentopyranoses and Pentofuranoses as Allosteric Effectors of Human Hemoglobin: Synthesis, Molecular Recognition and Oxygen Release», *ChemMedChem*, **6**, 1495-1508 (2011), **VIP paper**, DOI: 10.1002/cmde.201100110.
39. A-A. C. Varvogli, K. C. Fylaktakidou, T. Farmaki, J. G. Stefanakis, A. E. Koumbis. «Versatile Synthesis of 1-O-( $\omega$ -Aminolauryl)-I(4,5)P2», *Eur. J. Org. Chem.*, 5855–5862 (2012), DOI: 10.1002/ejoc.201200726.
40. C. Kieda, B. El Hafny-Rahbi, G. Collet, N. Lamerant-Fayel, C. Grillon, A. Guichard, J. Dulak, A. Jozkowicz, J. Kotlinowski, K. C. Fylaktakidou, A. Vidal, P. Auzeloux, E. Miot-Noirault, J.-C. Beloeil, J.-M. Lehn, C. Nicolau. «Stable tumor vessel normalization with pO<sub>2</sub> increase and endothelial PTEN activation by inositol trispyrophosphate brings novel tumor treatment», *J. Mol. Med.*, **91**, 883-899 (2013), DOI: 10.1007/s00109-013-0992-6.
41. I. Doulou, C. Kontogiorgis, A. E. Koumbis, E. Evgenidou, D. J. Hadjipavlou-Litina, K. C. Fylaktakidou. \* «Synthesis of Stable Aromatic and Hetero-aromatic Sulfonyl-amidoximes and Evaluation of their Antioxidant and Lipid Peroxidation Activity», *Eur. J. Med. Chem.*, **80**, 145-153 (2014), DOI: 10.1016/j.ejmech.2014.04.040.
42. P. Karamtzioti, A. Papastergiou, J. G. Stefanakis, A. E. Koumbis, I. Anastasiou, M. Koffa, K. C. Fylaktakidou. \* «O-Benzoyl pyridine aldoxime and amidoxime derivatives: novel efficient DNA photo-cleavage agents», *Med. Chem. Commun.*, **6**, 719-726 (2015), DOI: 10.1039/c4md00548a.
43. N.-P. Andreou, K. Dafnopoulos, C. Tortopidis, A. E. Koumbis, M. Koffa, G. Psomas, K. C. Fylaktakidou. \* «Alkyl and Aryl Sulfonyl p-Pyridine Ethanone Oximes are Efficient DNA Photo-cleavage Agents», *J. Photochem. Photobiol. B Biology*, **158**, 30-38 (2016), DOI: 10.1016/j.jphotobiol.2016.02.017.
44. A. Papastergiou, S. Perontsis, P. Gritzapis, A. E. Koumbis, M. Koffa, G. Psomas, K. C. Fylaktakidou. \* «Evaluation of O-Alkyl and Aryl Sulfonyl Aromatic and Heteroaromatic Amidoximes as Novel Potent DNA Photo-Cleavers», *Photochem. Photobiol. Sci.*, **15**, 351-360 (2016), DOI: 10.1039/C5PP00439J.
45. V. Konieczny, J. G. Stefanakis, E. X. Sitsanidis, N.-A. T. Ioannidou, N. V. Papadopoulos, K. C. Fylaktakidou, C. W. Taylor, A. E. Koumbis. «Synthesis of Inositol Phosphate-Based Competitive Antagonists of Inositol 1,4,5-Trisphosphate Receptors», *Org. Biomol. Chem.*, **14**, 2504-2514 (2016), DOI: 10.1039/C5OB02623G.
46. M. Pasolli, K. Dafnopoulos, N.-P. Andreou, P. S. Gritzapis, M. Koffa, A. E. Koumbis, G. Psomas, K. C. Fylaktakidou, \* «Pyridine and p-Nitrophenyl Oxime Esters with Possible Photochemotherapeutic Activity: Synthesis, DNA Photocleavage and DNA Binding Studies», *Molecules*, **21**, No 864 (2016), DOI: 10.3390/molecules21070864.
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