



Short Curriculum Vitae: FYLAKTAKIDOU KONSTANTINA

Professor «Chemistry of organic compounds»

Current Position: March 2019: 49 publications, Average Impact Factor (2017): 4.759, H-index: 24, Hetero-citations: 2084 (Source: Scopus.com)

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, 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, H.I.A., Supervisor: Prof. K.C. Nicolaou

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

Post-graduate Education:

Sabbatical leave (Oct. 2007 - Mar. 2008) for research in «Chemistry of Sugar Phosphates and Pyrophosphates» at Institut de Science et d'Ingenierie 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

Areas of Interest

- Synthetic Organic Chemistry
 - Medicinal Chemistry and Chemical Biology
 - Photochemistry-Photobiology
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Distinctions

- Publications on the total synthesis of Everninomicin 13,384-1 were commented with an article at **Chemical and Engineering News**, **22 Nov. 1999**, **vol 77(47)**, from Stu Borman, under the Title "Complex Oligosaccharide Made by Total Synthesis". Everninomicin 13,384-1 was the most complex oligosaccharide synthesized in the lab. Furthermore, 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
 - In 2004 the publication concerning the total synthesis of Apoptolidin 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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- The enhancement of exercise capacity in mice with ITPP has been extensively reviewed in media like Bioworld, New Scientist, Reuters και 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>)
 - ITPP 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%E2%80%99-Oxygen-Enhancing-Drug-Candidate-OXY111A-Recognized-Windover%E2%80%99s#.VhY24m7o4ig>)
 - Review on natural and synthetic coumarin derivatives was the most cited research item from the department (Source: Research Gate, March 2019)

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 Euros. PI: Bogos Agianian

Representative publications

- 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 A₁B(A)C Fragment», *Angew. Chem. Int. Ed.*, **38**, 3334-3339 (1999)
 - 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)
 - 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)
 - 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)
 - 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)
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