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WORKING EXPERIENCE

07/2018-present **Assistant Professor**, Organic Chemistry, Chemistry Department, Aristotle University of Thessaloniki
12/2012- 06/2018 **Research Scientist**, R&D API Operations Thessaloniki, Pharmathen S.A.

EDUCATION

08/2011-11/2012: **Post Doctoral Appointment**, Ludwig-Maximilians-Universität, Munich, Germany.
Research Director: *Prof. Dr. P. Knochel*.
09/2009-02/2011: **Post Doctoral Appointment**, Research Assistant, N.C.S.R. "Demokritos", Athens, Greece (Research Director: *Dr. D. Vourloumis*).
03/2008-08/2009: **Post Doctoral Appointment**, Columbia University, New York, USA
Research Director: *Prof. S. A. Snyder*.
2002-2007: **PhD**, Aristotle University of Thessaloniki, Greece
Supervisor: *Prof. J. K. Gallos*
Doctoral Thesis: «Solid and Solution phase Synthesis of Cyclitols and Aminocyclitols».
05-08/2005: **Exchange Student** at "The Scripps Research Institute", La Jolla, San Diego, USA. Prof. K. C. Nicolaou.
1996-2001: **Basic Degree in Chemistry**, Aristotle University of Thessaloniki, Greece.
Undergraduate Thesis: «Synthesis of a novel polyhydroxylated pyrrolizidine derivative».

RESEARCH EXPERIENCE

- ▶ Rational design, feasibility studies and optimization of *Routes of Synthesis* (RoSs) of *Active Pharmaceutical Ingredients* (APIs) in *industrial scale* preparations.
- ▶ *Organometallic Chemistry*: Synthesis and reactivity of organozinc compounds. Preparation of new, solid, *air-stable* organozinc species and implementation in cross coupling reactions.
- ▶ *Heterocyclic Chemistry*: Synthesis of Polyfunctional Heterocyclic Building Blocks and applications thereof.
- ▶ Total synthesis of natural products and analogues thereof. Structure Activity Relationship Studies for the discovery of new aminoglycoside type antibiotics targeting the ribosomal RNA.
- ▶ *Chemistry of polyphenols*: Total synthesis of resveratrol oligomers with anti-oxidative activity.
- ▶ Synthesis of cyclitols and aminocyclitols using starting materials from the chiral pool. *Carbohydrate chemistry* and *Intramolecular Nitrene-Olefin Cycloadditions* (INOCs) on sugar derived substrates.
- ▶ *Solid Phase Synthesis* of small libraries of carbocyclic scaffolds with potential biological activity.

TEACHING EXPERIENCE

- 2003-2006:** Teaching assistance in general Organic Chemistry and Practice in an Organic Laboratory. Supervision of undergraduate students on their synthetic projects for diploma thesis.
- 2-8/2009:** Teaching assistance of spring semester course "General Organic Chemistry II", Columbia University.
- 2-8/2012:** Teaching assistance at Organic Chemistry Laboratory section: "*Chemistry of Heterocyclic Compounds*", Ludwig-Maximilians-Universität (LMU).
- 2016-2017:** Teaching of Organic Chemistry Class (7th semester, Chemistry Department): Section "*Organic Reactions Mechanisms and Chemistry of Heterocyclic Compounds*".

POSTER PRESENTATIONS/ NAMED LECTURES

- "A trip to the magic world of polyphenols. Total Synthesis of (±)-Vaticanol A.", Jepsen T. H., Thomas S. B., Lin Y., Stathakis C. I., de Miguel I., Snyder S. A., Young Investigator Workshop, Vienna, **July 2019**.
- "A new method for the selective methylation of an advanced intermediate amide toward the synthesis of Raltegravir. C. I. Stathakis, E. Alexandraki, P. L. Gkizis, S. Trakossas, E. Neokosmidis, T. Koftis, 22^o Hellenic Chemistry Conference, Thessaloniki, Greece, **December 2016**.
- "Synthesis of Polyfunctional Heterocyclic Building Blocks and Stereoselective Cross-Couplings." C. I. Stathakis, P. Knochel, , invited talk at *Chemetall Company*, Munich, Germany, **April 2012**.
- "Exploring the magic world of Polyphenols." C. I. Stathakis, invited talk, *Ludwig-Maximilians-Universität*, Munich, Germany, **September 2011**.
- "Targeting bacterial RNA: Design and synthesis of novel rigid structures with antibiotic activity", C. I. Stathakis, I. A. Katsoulis, T. Cottin, A. Papakyriakou, A. L. Zografos, G. Kythreoti, D. Vourloumis, 14th Hellenic Symposium on Medicinal Chemistry, Thessaloniki, **April 2010**.
- "A general approach for the synthesis of enantiomerically pure Gabosines", C. I. Stathakis, M. N. Athanadou, J. K. Gallos, 10th Greece-Cyprus Chemistry Symposium, Iraklio, **July 2009**.
- "Solid phase synthesis of chiral cyclopentenones", 2nd Symposium of Organic Synthesis, C. I. Stathakis, J. K. Gallos Athens, Greece, **April 2007**.
- "Solid phase synthesis of chiral cyclopentenone derivatives using N-substituted hydroxylamines on solid support" C. I. Stathakis, J. K. Gallos, International Symposium on Chemistry Biology and Medicine, Cyprus, **June 2006**.
- "C-2 Hydroxymethyl Erythroses: Versatile Intermediates in the Synthesis of Natural Occurring Chiral Tertiary Alcohols", E. Koumbis, J. K. Gallos, C. I. Stathakis, International Symposium on Advances in Synthetic, Combinatorial and Medicinal Chemistry, Moscow, **May 2004**, P109.
- "A new approach to (-) Neplanocin A", C. I. Stathakis, J. K. Gallos 11th Hellenic Symposium of Medicinal Chemistry, Patra, Greece, **January 2004**.

FELLOWSHIPS/DISTINCTIONS

- 2019** Selected to represent Greece at the Young Investigators Workshop, Organic Chemistry Division, in Vienna YIW 2019.
- 2011** Ludwig-Maximilians-Universität, Postdoctoral Fellowship; ERC Grant.
- 2009** Marie Curie Excellence Grants Fellow: "Study of RNA components by the Synthesis of Small Molecules" Contract No. MEXT-CT-2006-039149.
- 2008** Columbia University Postdoctoral Fellowship.
- 2002** General Committee of Research and Technology and the Hellenic Ministry of Education doctoral fellowship.
- 2001** "The Papamichalopoulos Foundation" prize for excellence in undergraduate studies.

SCIENTIFIC PUBLICATIONS

21. *Synthesis and Biological Evaluation of Novel 2-Substituted Analogues of Pentenomycin I.*
S. A. Zisopoulou, S. Bousis, J. Hauptenthal, J. Herrmann, R. Müller, A. K. H. Hirsch,* D. Komiotis, J. K. Gallos, C. I. Stathakis* *Synlett*, **2020**, 31, 475.
20. *(Chloromethyl)dimethylchlorosilane-KF a two-step solution to the selectivity problem in the methylation of a pyrimidone intermediate en route to raltegravir.*
C. I. Stathakis*, P. L. Gkizis, E. S. Alexandraki, S. Trakossas, M. Terzidis, E. Neokosmidis, C. K. Zacharis, C. Vasiliadou, E. Vastardi, T. Andreou, A. Zitrou, A.-A. Varvogli, and T. V. Koftis* *Org. Proc. Res. Dev.*, **2017**, 21, 1413.
19. *Metal-catalyzed cycloisomerization as a powerful tool in the synthesis of complex sesquiterpenoids.*
C. I. Stathakis, P. L. Gkizis, A. L. Zografos., *Nat. Prod. Rep.*, **2016**, 33, 1093.
18. *A Scalable Synthesis of the Antidepressant Agomelatine by a Tandem Allylic Chlorination–Isomerization Process.*
C. I. Stathakis, E. Neokosmidis, T. V. Koftis *Eur. J. Org. Chem.* **2014**, 6376.
17. *Air-stable solid aryl and heteroaryl organozinc pivalates: Syntheses and applications in organic synthesis.*
S. M. Manolikakes, M. Ellwart, C. I. Stathakis, P. Knochel *Chem. Eur. J.* **2014**, 20, 12289.
16. *Harnessing quinone methides: Total synthesis of (±)-Vaticanol A.*
T. H. Jepsen, S. B. Thomas, Y. Lin, C. I. Stathakis, I. de Miguel, S. A. Snyder *Angew. Chem., Int. Ed.* **2014**, 53, 6747.

Editor's choice as Very Important Paper.
15. *Synthesis of solid 2-pyridylzinc reagents and their application in Negishi reactions*
J. R. Colombe, S. Bernhardt, C. I. Stathakis, S. L. Buchwald, P. Knochel *Org. Lett.* **2013**, 15, 5754.
14. *TMPZnOPiv•LiCl: A New Base for the Preparation of Air-Stable Solid Zinc Pivalates of Sensitive Aromatics and Heteroaromatics.*
C. I. Stathakis, S. M. Manolikakes, P. Knochel *Org. Lett.* **2013**, 15, 1302.
13. *Improved Air-Stable Solid Aromatic and Heterocyclic Zinc Reagents by Highly Selective Metalations for Negishi Cross-Couplings.*
C. I. Stathakis, S. Bernhardt, V. Quint, P. Knochel *Angew. Chem., Int. Ed.* **2012**, 51, 9428.
12. *Total syntheses of (-)-α-Kainic Acid.*
C. I. Stathakis, E. G. Gioti, J. K. Gallos *Eur. J. Org. Chem.* **2012**, 4661.

10 Most accessed articles in EurJOC in 09/2012.
25 Most Accessed articles in EurJOC between 10/2011–09/2012.
11. *Synthesis of 5,6-spiro ethers and evaluation of their affinity for the bacterial A-site.*
I. A. Katsoulis, G. Kythreoti, A. Papakyriakou, K. Koltsida, P. Anastasopoulou, C. I. Stathakis, I. Mavridis, T. Cottin, E. Saridakis, D. Vourloumis *ChemBioChem* **2011**, 12, 1188.
10. *Designed spiro-bicyclic analogues targeting the bacterial ribosome.*
T. Cottin, C. Pyrkotis, C. I. Stathakis, I. Mavridis, I. A. Katsoulis, P. Anastasopoulou, G. Kythreoti, A. L. Zografos, V. R. Nahmias, A. Papakyriakou, D. Vourloumis *ChemBioChem* **2011**, 12, 71.
9. *Second generation analogs of rigid 6,7-spiro scaffolds targeting the bacterial ribosome.*

- C. I. Stathakis, I. Mavridis, G. Kythreoti, A. Papakyriakou, I. A. Katsoulis, T. Cottin, P. Anastasopoulou, D. Vourloumis *Biorg. Med. Chem. Lett.* **2010**, *20*, 7488.
8. *Synthesis of ent-Gabosine E from d-mannose by intramolecular nitron-olefin cycloaddition.*
C. I. Stathakis, M. N. Athanatoi, J. K. Gallos *Tetrahedron Lett.* **2009**, *50*, 6916.
 7. *Synthesis of enantiomerically pure γ -lactones from 2,3-O-isopropylidene-D- or L-Erythrose.*
S. M. Totokotsopoulos, E. E. Anagnostaki, C. I. Stathakis, E. G. Yioti, C. Z. Hadjimichael, J. K. Gallos *ARKIVOC* **2009**, (x), 209.
 6. *Traceless Solid Phase Synthesis of Chiral Hydroxylated Cyclopentenones.*
C. I. Stathakis, J. K. Gallos *Tetrahedron Lett.* **2008**, *49*, 6804.
 5. *Convenient Preparations of 2-Alkyl-5-oxopyrrolidine-3-carboxylic Acids.*
A. D. Photiadou, C. I. Stathakis, J. K. Gallos *J. Heterocyclic Chem.* **2008**, *45*, 1251.
 4. *Efficient Synthesis of (\pm)-N-Boc-pregabalin via Hetero-Diels-Alder Addition of Methyl 3-Nitrosoacrylate to Ethyl Vinyl Ether.*
J. K. Gallos, E. S. Alexandraki, C. I. Stathakis *Heterocycles*, **2007**, *71*, 1127.
 3. *A Short and Alternative Preparation of the Bengazoles Polyol Side-chain Segment.*
J. K. Gallos, C. I. Stathakis, C. E. Grammatoglou, M. J. Salapassidou, A. E. Koumbis *Carbohydr. Res.*, **2007**, *342*, 744.
 2. *An Improved Approach to Chiral Cyclopentenone Building Blocks. Total Synthesis of Pentenomycin I and Neplanocin A.*
J. K. Gallos, C. I. Stathakis, S. S. Kotoulas, A. E. Koumbis *J. Org. Chem.* **2005**, *70*, 6884.
 1. *Hetero-Diels-Alder Additions to Pent-4-enofuranosides: Concise Synthesis of Hydroxylated Pyrrolizidines.*
J. K. Gallos, V. C. Sarli, C. I. Stathakis, T. V. Koftis, V. R. Nachmia, E. Coutouli-Argyropoulou *Tetrahedron* **2002**, *58*, 9351.

PATENTS

5. A novel process for the preparation of tapentadol
T. V. Koftis, E. Neokosmidis, C. I. Stathakis, P. L. Gkizis, T. Panagiotidis, *WIPO*, **2019**, WO2019238267A1
4. *Process for preparing Tapentadol oxalate.*
T. V. Koftis, E. Neokosmidis, C. I. Stathakis, P. L. Gkizis, E. A. A. Varvogli, *EPO*, **2018**, PCT/EP2018/025468
3. *Process for preparing compounds useful as intermediates for the preparation of raltegravir.*
T. V. Koftis, E. Neokosmidis, C. I. Stathakis, P. L. Gkizis, E. Alexandraki, S. Trakossas, M. Terzidis, A. Lithadioti, A.-A. Varvogli, *WIPO*, **2017**, WO2017220208A1
2. *Methods for the preparation of topiroxostat and intermediates thereof.*
T. V. Koftis, E. Neokosmidis, C. I. Stathakis, T. Andreou, C. Raptis, P. L. Gkizis, *WIPO*, **2016**, WO2016134854A1
1. *A novel process for the preparation of tetralin and naphthalene derivatives.*
T. V. Koftis, E. Neokosmidis, C. I. Stathakis, T. Andreou, C. Raptis, A.-A. Varvogli, *WIPO*, **2015**, WO2015000555A2