# **Dr Christoforos G. Kokotos**

Date of Birth: **Place of Birth:** Address:

24 September 1981 Athens Greece Laboratory of Organic Chemistry Department of Chemistry National and Kapodistrian University of Athens Panepistimiopolis 15771 Athens. Greece +30 210 72774281 Email address: ckokotos@chem.uoa.gr



# Education

**Telephone:** 

September 1999 - June 2003

Bachelor in Chemistry: National and Kapodistrian University of Athens, Greece, Graduated from the Department of Chemistry at the National and Kapodistrian University of Athens with the Grade of 8.02 on a 10-point scale.

October 2003 - January 2007

PhD in Organic Synthesis: University of Bristol, UK, Research Supervisor: Professor Varinder K. Aggarwal, Title: "Applications of Sulfur Ylides in Asymmetric Synthesis".

# **Professional Experience**

January 2007 - September 2008

Postdoctoral Researcher: National and Kapodistrian University of Athens, Greece, Research Associate in the Department of Chemistry (Prof. George Kokotos).

October 2008 - October 2009

Postdoctoral Researcher: Princeton University, USA, Research Associate in the Department of Chemistry (Prof. David W. C. MacMillan).

November 2009 - November 2010

Military Service: Naval Base of Crete, Chania, Greece, Served my military service in Greek Navy providing Gas Free Certificates, allowing repairs in Battleships.

#### November 2010 - December 2013

Lecturer in Organic Chemistry (elected but not hired), Postdoctoral Researcher: <u>National and Kapodistrian University of Athens, Greece</u>, Laboratory of Organic Chemistry, Department of Chemistry. Working on the development of new methodologies mainly in organocatalysis within the Post-doctoral Research Grant, *"PEPCAT-Novel Organocatalysts Based on Peptides and Amino Acids and their Application in Asymmetric Organic Transformations"*.

#### January 2014 - March 2016

Lecturer in Organic Chemistry: <u>National and Kapodistrian University of Athens</u>, <u>Greece</u>, Laboratory of Organic Chemistry, Department of Chemistry. Working on the development of new methodologies mainly in organocatalysis and photocatalysis and their applications in the synthesis of bioactive compounds.

#### March 2016 - till present

Assistant Professor in Organic Chemistry: <u>National and Kapodistrian University of</u> <u>Athens, Greece</u>, Laboratory of Organic Chemistry, Department of Chemistry. Working on the development of new methodologies mainly in organocatalysis and photocatalysis and their applications in the synthesis of bioactive compounds.

January 2017 - till present

#### Greek Representative in the Organic and Biomolecular Division of IUPAC.

January 2017 – July 2018

Member of the General Assembly of the Greek Institute of Research and Innovation.

December 2018 – till present

Greek Representative in the EuCheMS, Division of Organic Chemistry.

#### **Scholarships-Awards**

(1) "PAPADAKIS" four-year undergraduate studies scholarship (1999–2003), obtained after written examinations.

(2) IKY (State Foundation of Scholarships), one-year scholarships for undergraduate students ranked in the top five of their year (2000, 2001, 2002, 2003).

(3) MARI KAMARA award, awarded to the student that finished first in his year (2002-2003).

(4) Industrial sponsorship (2003-2006), joint sponsorship from Avecia (MPhil Pharma), Syngenta, Johnson-Matthey and DTI.

(5) Award for the best oral presentation in Syngenta Collaborative Research Conference 2006, Bracknell, UK, entitled "Applications of Sulfur Ylides in Organic Chemistry".

(6) IKY (State Foundation of Scholarships), one-year post-doctoral scholarship (year **2011**).

(7) Prize for Young Chemists (IUPAC), Award to encourage outstanding young researchers at the beginning of their career (year **2011**).

(8) ACS Young Academic Investigators Award (ACS), 9<sup>th</sup> Young Academic Investigators, 248<sup>th</sup> ACS National Meeting, Organic Division, San Francisco, USA, August 2014. (Europe's representative). Award to encourage outstanding young academic investigators at the beginning of their career (year 2014). The intent of the Symposium is to have the program composed of Assistant Professor speakers. Sixteen speakers are invited to give 30-minute presentations on their work. Only 2 European Young Investigators were selected.

(9) **Young Investigators Workshop (EuCheMS)**, Workshop to encourage outstanding young academic investigators at the beginning of their career (**year 2014**). EuCheMS workshops promote and recognize academic excellence. Each National Chemical Society (European countries, USA, Canada, Japan, and China) nominates one young investigator, for which a total of not more than 30 can be chosen.

(10) Scientific scholarships from the Latsis Foundation (year 2015, 12.000 €).

(11) JSP (Junior Scientist Programme) Fellowship to attend the Burgenstock Conference 2016. A very famous conference that you can attend only after invitation. JSP fellowships are to promote the participation of promising European scientists at the beginning of their academic careers (2016).

(12) **Hildegard Zervas Award from the Academy of Athens** (National Academy of Science and Arts) for the promotion of Organic Chemistry (December **2016**).

(13) Young Investigators Workshop (EuCheMS), Workshop to encourage outstanding young academic investigators at the beginning of their career (year **2017**). EuCheMS workshops promote and recognize academic excellence. Each National Chemical Society (European countries, USA, Canada, Japan, and China) nominates one young investigator, for which a total of not more than 30 can be chosen.

(14) Outstanding Reviewer 2017, Green Chemistry (impact factor 9.13).

(15) Young Investigators Workshop (EuCheMS), Workshop to encourage outstanding young academic investigators at the beginning of their career (year **2018**). EuCheMS workshops promote and recognize academic excellence. Each National Chemical Society (European countries, USA, Canada, Japan, and China) nominates one young investigator, for which a total of not more than 30 can be chosen.

(16) **Hildegard Zervas Award from the Academy of Athens** (National Academy of Science and Arts) for the promotion of Organic Chemistry (E. Voutyritsa, A. Theodorou and Dr. M. G. Kokotou) (December **2018**).

# **Current Research Grants - Participation in Research Programmes**

(a) Post-doctoral Research Grant, "PEPCAT-Novel Organocatalysts Based on Peptides and Amino Acids and their Application in Asymmetric Organic Transformations", Action Post-doc (2012-2015, 150.000  $\in$ ).

(b) Organocatalysis – ORCA, Cost Action CM0905 funded by the intergovernmental framework for European Cooperation in Science and technology (*2011-2014*), Management Committee Substitute and co-Organizer of the third ORCA meeting in Athens, 2012. Action Chair: Prof. P. Pihko, university of Jyvskyl, Finland.

(c) Scientific Studies 2015, Latsis Foundation "PhotoOrganocatalysis: Development of new environmentally-friendly methods for the synthesis of compounds for the pharmaceutical and chemical industry" (2015,  $12.000 \in$ ).

(d) C-H Activation in Organic Synthesis – CHAOS, Cost Action CM15106 funded by the intergovernmental framework for European Cooperation in Science and technology (*2016-2020*), Management Committee Substitute. Action Chair: Prof. M. Schnurch, Technical University of Vienna, Austria.

# **Teaching Experience**

(1) Laboratory supervision on 1<sup>st</sup> level General Chemistry during the academic years 2004 and 2005, University of Bristol.

(2) Teaching "Named Reactions in Organic Chemistry" the students of the masters course "Organic Synthesis and Applications in Chemical Industry", University of Athens, Greece during the academic year 2007 and 2008, National and Kapodistrian University of Athens.

(3) Supervision of 6 PhD students, National and Kapodistrian University of Athens.

(4) Supervision of 21 Masters' students, National and Kapodistrian University of Athens.

(5) Supervision of 15 undergraduate final year projects, National and Kapodistrian University of Athens.

(6) Supervision of 1 visiting PhD student, National and Kapodistrian University of Athens.

(7) Teaching of "Organic Chemistry" and Laboratory supervision on the 1<sup>st</sup> year students in the Department of Molecular Biology and Genetics, Democritus University of Thrace, Greece as a Lecturer ( $\Pi\Delta$  407) (2<sup>nd</sup> semester, 2009-2010).

(8) Teaching "Advanced Organic Synthesis: Organocatalysis" for the students of the masters course "Organic Synthesis and Applications in Chemical Industry", National and Kapodistrian University of Athens, Greece (2010 till today).

(9) Laboratory supervision "Organic Chemistry II" for the undergraduate students of the Department of Chemistry, National and Kapodistrian University of Athens, Greece (since 2013).

(10) Teaching "Organic Chemistry" for the first-year students of the Department of Biology of the National and Kapodistrian University of Athens, Greece (2014 till today).

(11) Teaching "Advanced Organic Synthesis" for the fourth-year students of the Department of Chemistry of the National and Kapodistrian University of Athens, Greece (2014 till today).

(12) Teaching "Organic Chemistry II" for the second-year students of the Department of Chemistry of the National and Kapodistrian University of Athens, Greece (2017 till today).

(13) Supervision of 1 visiting undergraduate Erasmus Plus student, National and Kapodistrian University of Athens.

#### **Teaching Notes**

**1**) "Named Reactions in Organic Chemistry" (Greek), C. G. Kokotos, 2008. Notes (78 pages) for the students of the masters course "Organic Synthesis and Applications in Chemical Industry", National and Kapodistrian University of Athens, Greece.

**2**) "Advanced Organic Synthesis: Organocatalysis" (Greek), C. G. Kokotos, 2011. Notes (84 pages) for the students of the masters course "Organic Synthesis and Applications in Chemical Industry", National and Kapodistrian University of Athens, Greece.

**3**) "Ureas and Thioureas as Asymmetric Organocatalysts", D. Limnios, C. G. Kokotos, 2015. Book Chapter 2.19, "Sustainable Catalysis", 4-volume book, Eds. M. North, RSC press.

**4**) "Organic Chemistry", Translation in Greek of the "Organic Chemistry", Clayden, Greeves, Warren", 2017. Chapters 25-30, Utopia Press.

LanguagesEnglish language: (Excellent). Degree: Cambridge Proficiency<br/>in English (2001), Advanced Proficiency Certificate in English<br/>(1997)French language: (Very good). Degree: DELF 2<sup>nd</sup> Degree<br/>(1998)German language: (Poor).<br/>Greek language: (Mother tongue).

## **Publications in journals**

**69**) "Photo-organocatalytic Synthesis of Acetals from Aldehydes" N. F. Nikitas, I. Triandafillidi and <u>C. G. Kokotos</u>\*, *Green Chem.*, **2019**, *21*, 669-674. (citations: 0) (Impact factor: 8.58)

**68**) "Photocatalytic Synthesis of  $\gamma$ -Lactones from Alkenes: High-Resolution Mass Spectrometry as a Tool to Study Photoredox Reactions" I. Triandafillidi, M. G. Kokotou and <u>C. G. Kokotos</u>\*, *Org. Lett.*, **2018**, *20*, 36-39. (citations: 8) (Impact factor: 6.58)

**67**) "Organocatalytic Synthesis of Oxazolines and Dihydrooxazines from Allyl-Amides: Bypassing the Inherent Regioselectivity of the Cyclization" A. Theodorou, I. Triandafillidi and <u>C. G. Kokotos</u>\*, *Adv. Synth. Catal.*, **2018**, *360*, 951-957. (citations: 0) (Impact factor: 5.65)

**66**) "Green Photo-Organocatalytic C–H Activation of Aldehydes: Selective Hydroacylation of Electron-Deficient Alkenes" G. N. Papadopoulos, E. Voutyritsa, N. Kaplaneris and <u>C. G. Kokotos</u>\*, *Chem. Eur. J.*, **2018**, *24*, 1726-1731. (citations: 2)

(Impact factor: 5.32)

**65**) "Expanding the Scope of Photocatalysis: Atom Transfer Radical Addition of Bromoacetonitrile to Aliphatic Olefins" E. Voutyritsa, I. Triandafillidi and <u>C. G.</u> <u>Kokotos</u>\*, *ChemCatChem*, **2018**, *10*, 2466-2470. (citations: 1) (Impact factor: 4.80)

**64**) "Photoorganocatalysis, Small Organic Molecules and Light in the Service of Organic Synthesis: the Awakening of a Sleeping Giant" I. K. Sideri, E. Voutyritsa and <u>C. G. Kokotos</u>\*, *Org. Biomol. Chem.*, **2018**, *16*, 4596-4614. Invited Review. (citations: 7) (Impact factor: 3.56)

**63**) "Combining Organocatalysis with Photoorganocatalysis: Photocatalytic Hydroacylation of Asymmetric Organocatalytic Michael Addition Products" A. Schiza, N. Spiliopoulou, A. Shahu and <u>C. G. Kokotos</u>\*, *New J. Chem.*, **2018**, *42*, 18844-18849. (citations: 7) (Impact factor: 3.20)

**62)** "Proline Dipeptides Containing Fluorine Moieties as Organocatalysts for the Asymmetric Aldol Reaction" A. Ahmetlli, N. Spiliopoulou, A. Magi-Oikonomopoulou, D.-T. Gerokonstantis, P. Moutevelis-Minakakis\* and <u>C. G. Kokotos</u>\*, *Tetrahedron*, **2018**, *74*, 5987-5995. (citations: 0) (Impact factor: 2.65)

**61**) "Green Organocatalytic Oxidative Methods using Activated Ketones" I. Triandafillidi, D. I. Tzaras, and <u>C. G. Kokotos</u>\*, *ChemCatChem*, **2018**, *10*, 2521-2535. (citations: 1) (Impact factor: 4.80)

**60**) "Combining Prolinamides with 2-Pyrrolidinone: Novel Organocatalysts for the Asymmetric Aldol Reaction" I. Vlasserou, M. Sfetsa, D. T. Gerokonstantis, <u>C. G. Kokotos</u>\* and P. Moutevelis-Minakakis\*, *Tetrahedron*, **2018**, *74*, 2338-2349. (citations: 3) (Impact factor: 2.65)

**59**) "Photoorganocatalytic Atom Transfer Radical Addition of Bromoacetonitrile to Aliphatic Olefins" E. Voutyritsa, N. F. Nikitas, M. K. Apostolopoulou, A. D. D. Gerogiannopoulou and <u>C. G. Kokotos</u>\*, *Synthesis*, **2018**, *50*, 3395-3401. Invited Contribution for Special Issue: Photoredox Methods and their Strategic Applications in Synthesis (citations: 0) (Impact factor: 2.65).

**58**) "Green Photoorganocatalytic Synthesis of Phenols from Arylboronic Acids" I. K. Sideri, E. Voutyritsa and <u>C. G. Kokotos</u>\*, *Synlett*, **2018**, *29*, 1324-1328. Invited Contribution for Special Issue: 9<sup>th</sup> EuCheMS Organic Division Young Investigator Workshop (citations: 3) (Impact factor: 2.15)

**57**) "Organocatalytic Synthesis of Lactones by the Oxidation of Alkenoic Acids" I. Triandafillidi, M. Raftopoulou, A. Savvidou, and <u>C. G. Kokotos</u>\*, *ChemCatChem*,

**2017**, *9*, 4120-4124. (citations: 3) (Impact factor: 4.80)

**56**) "Photoorganocatalytic Synthesis of Lactones via a Selective C–H Activation– alkylation of Alcohols" N. Kaplaneris, A. Bisticha, G. N. Papadopoulos, D. Limnios and <u>C. G. Kokotos</u>\*, *Green Chem.*, **2017**, *19*, 4451-4456. (citations: 11) (Impact factor: 9.13)

**55**) "Visible-Light-Mediated Catalytic Hydroacylation of Dialkyl Azodicarboxylates by Graphite Flakes" G. S. Koutoulogenis, M. G. Kokotou, E. Voutyritsa, D. Limnios, <u>C. G. Kokotos\*</u>, *Org Lett.*, **2017**, *19*, 1760-1763. (citations: 11) (Impact factor: 6.58)

**54**) "Organocatalytic Oxidation of Substituted Anilines to Azoxybenzenes and Nitro Compounds: Mechanistic Studies Excluding the Involvement of a Dioxirane Intermediate" E. Voutyritsa, A. Theodorou, M. G. Kokotou and <u>C. G. Kokotos</u>\*, *Green Chem.*, **2017**, 1291-1298. (citations: 14) (Impact factor: 9.13) **2017 Green Chemistry Hot** 

53) "Green Organocatalytic Synthesis of Indolines and Pyrrolidines from Alkenes" A. Theodorou and <u>C. G. Kokotos</u>\*, *Adv. Synth. Catal.*, 2017, *359*, 1577-1581. (citations: 9) (Impact factor: 5.65)

**52**) "Green Organocatalytic Synthesis of Isoxazolines via a One-Pot Oxidation of Allyloximes" I. Triandafillidi and <u>C. G. Kokotos</u>\*, *Org. Lett.*, **2017**, *19*, 106-109. (citations: 17) (Impact factor: 6.58)

**51**) "Photoinitiated Thiol-Ene "Click" Reaction: An Organocatalytic Alternative" D. Limnios and <u>C. G. Kokotos</u>\*, *Adv. Synth. Catal.*, **2017**, *19*, 1291-1298. (citations: 20) (Impact factor: 5.65)

**50**) "Organocatalytic Synthesis of Polysubstituted Tetrahydrofurans from Alkenes" A. Theodorou and <u>C. G. Kokotos</u>\*, *Green Chem.*, **2017**, *19*, 670-674. (citations: 11) (Impact factor: 9.13)

**49)** "Green Organocatalytic Dihydroxylation of Alkenes" A. Theodorou, I. Triandafillidi and <u>C. G. Kokotos</u>\*, *Eur. J. Org. Chem.*, **2017**, *11*, 1502-1509. (citations: 5) (Impact factor: 2.83)

**48**) "Green Organocatalytic Synthesis of Dihydrobenzofurans by Oxidation– Cyclization of Allylphenols" I. Triandafillidi, I. K. Sideri, D. I. Tzaras, N. Spiliopoulou and <u>C. G. Kokotos</u>\*, *Synthesis*, **2017**, *49*, 4254-4260. Invited Contribution for Special Issue: Modern Strategies in Cyclization Reactions (citations: 2) (Impact factor: 2.65). **47**) "Green Organocatalytic Oxidation of Sulfides to Sulfoxides and Sulfones" E. Voutyritsa, I. Triandafillidi and <u>C. G. Kokotos</u>\*, *Synthesis*, **2017**, *49*, 917-924. Invited Contribution for Burgenstock Conference (citations: 13) (Impact factor: 2.65).

**46**) "Enantioselective Organocatalytic Synthesis of 2-Oxopiperazines from Aldehydes: Identification of the Elusive Epoxy Lactone Intermediate" N. Kaplaneris, C. Spyropoulos, M. G. Kokotou and <u>C. G. Kokotos</u>\*, *Org. Lett.*, **2016**, *18*, 5800-5803. (citations: 5) (Impact factor: 6.58)

**45**) "One-Pot Amide Bond Formation from Aldehydes and Amines via a Photoorganocatalytic Activation of Aldehydes" G. N. Papadopoulos and <u>C. G.</u> <u>Kokotos</u>\*, *J. Org. Chem.*, **2016**, *81*, 7023-7028. (citations: 17) (Impact factor: 4.79)

**44**) "Photoorganocatalytic One-pot Synthesis of Hydroxamic Acids from Aldehydes" G. N. Papadopoulos and <u>C. G. Kokotos</u>\*, *Chem. Eur. J.*, **2016**, *22*, 6964-6967. (citations: 27) (Impact factor: 5.32)

**43**) "Green Organocatalytic  $\alpha$ -Hydroxylation of Ketones" E. Voutyritsa, A. Theodorou and <u>C. G. Kokotos</u>\*, *Org. Biomol. Chem.*, **2016**, *14*, 5708-5713. Invited Article for the Special Thematic issue "New Talent in Organic and Medicinal Chemistry". (citations: 10) (Impact factor: 3.56)

**42)** "(Thio)urea-mediated synthesis of functionalized six-membered rings with multiple chiral centers" G. Koutoulogenis, N. Kaplaneris and <u>C. G. Kokotos</u>\*, *Beilstein J. Org. Chem.*, **2016**, *12*, 462-495. Invited Article for the Special issue "Multifunctional Organocatalysis". (citations: 19) (Impact factor: 2.34)

**41**) "4-Fluoro and 4-hydroxy pyrrolidine-thioxotetrahydropyrimidinones: Organocatalysts for green asymmetric transformations in brine" N. Kaplaneris, G. Koutoulogenis, M. Raftopoulou and <u>C. G. Kokotos</u>\*, *J. Org. Chem.*, **2015**, *80*, 5464-6473. (citations: 21) (Impact factor: 4.79)

40) "*tert*-Butyl esters of peptides as organocatalysts for the asymmetric aldol reaction" A. Bisticha, I. Triandafillidi and <u>C. G. Kokotos</u>\*, *Tetrahedron: Asymmetry*, 2015, 26, 102-108. (citations: 15) (Impact factor: 2.13)

**39**) "One-pot synthesis of O-allylhydroxylamines through the organocatalytic oxidation of tertiary allylic amines followed by a [2,3]-Meisenheimer rearrangement" A. Theodorou, D. Limnios and <u>C. G. Kokotos</u>\*, *Chem. Eur. J.*, **2015**, *21*, 5238-5241. (citations: 20) (Impact factor: 5.32)

38) "tert-Butyl ester or benzylamide of the dipeptide Pro-Gly as organocatalysts for

the asymmetric aldol reaction" I. Triandafillidi, A. Bisticha, E. Voutyritsa, G. Galiatsatou and <u>C. G. Kokotos</u>\*, *Tetrahedron*, **2015**, *71*, 932-940. (citations: 20) (Impact factor: 2.65)

37) "Conjugating proline derivatives onto multi-walled carbon nanotubes: Preparation, characterization and catalytic activity in water" D. D. Chronopoulos, <u>C.</u>
<u>G. Kokotos</u>, M. Tsakos, N. Karousis, G. Kokotos and N. Tagmatarchis, *Mat. Lett.*,
2015, *157*, 212-214. (citations: 5) (Impact factor: 2.57)

**36**) "Functionalized multi-walled carbon nanotubes in an aldol reactions" D. D. Chronopoulos, <u>C. G. Kokotos</u>, N. Karousis, G. Kokotos\* and N. Tagmatarchis\*, *Nanoscale*, **2015**, *7*, 2750-2757. (citations: 8) (Impact factor: 7.37)

**35**) "Organocatalytic Oxidation Reactions" D. Limnios and <u>C. G. Kokotos</u>\*, *Current Organocatalysis*, **2015**, *2*, 171-190. (citations: 3) (Impact factor: -)

**34**) "Fullerene-proline hybrids: Synthesis, characterization and organocatalytic properties in aldol reactions" D. D. Chronopoulos, M. Tsakos, N. Karousis, <u>C. G. Kokotos</u>\* and N. Tagmatarchis\*, *Mat. Lett.*, **2014**, *137*, 343-346. (citations: 11) (Impact factor: 2.57)

**33**) "Photoorganocatalytic hydroacylation of dialkyl azodicarboxylates by utilizing activated ketones as photocatalysts" G. N. Papadopoulos, D. Limnios and <u>C. G. Kokotos</u>\*, *Chem. Eur. J.*, **2014**, *20*, 13811-13814. (citations: 24) (Impact factor: 5.32)

**32)** "2,2,2-Trifluoroacetophenone: An organocatalyst for an environmentally friendly epoxidation of alkenes" D. Limnios and <u>C. G. Kokotos</u>\*, *J. Org. Chem.*, **2014**, *79*, 4270-4276. (citations: 37). Feature Article, ACS Editors Choice Article, Top Read Article for the last 12 months, Highlighted at TCI catalogue for 2,2,2-trifluoroacetophenone. (Impact factor: 4.79)

**31**) "One-pot synthesis of ureas from Boc-protected amines" C. Spyropoulos and <u>C. G.</u> <u>Kokotos</u>\*, *J. Org. Chem.*, **2014**, *79*, 4477-4483. (citations: 30) (Impact factor: 4.79)

**30**) "2,2,2-Trifluoroacetophenone as an organocatalyst for the oxidation of tertiary amines and azines to N-oxides" D. Limnios and <u>C. G. Kokotos</u>\*, *Chem. Eur. J.*, **2014**, 20, 559-563. (citations: 34) (Impact factor: 5.32)

**29**) "*tert*-Butyl esters of tripeptides based on Pro-Phe as organocatalysts for the asymmetric aldol reaction in aqueous or organic medium" A. Psarra, <u>C. G. Kokotos</u>\* and P. Moutevelis-Minakakis\*, *Tetrahedron*, **2014**, *70*, 608-615. (citations: 29) (Impact factor: 2.66)

**28**) "Primary and secondary amine-(thio)ureas and squaramides and their applications in asymmetric organocatalysis" M. Tsakos and <u>C. G. Kokotos</u>\*, *Tetrahedron*, **2013**, *69*, 10199-10222. (citations: 91) (Impact factor: 2.66)

**27**) "Organocatalytic oxidation of organosilanes to silanols" D. Limnios and <u>C. G.</u> <u>Kokotos</u>\*, *ACS Catalysis*, **2013**, *3*, 2239-2243. (citations: 33) (Impact factor: 11.38)

**26**) " $\beta$ -*tert*-Butyl Aspartate as an Organocatalyst for the Asymmetric  $\alpha$ -Amination of  $\alpha, \alpha$ -Disubstituted Aldehydes" A. Theodorou, G. N. Papadopoulos and <u>C. G. Kokotos</u>\*, *Tetrahedron*, **2013**, *69*, 5438-5443. (citations: 23) (Impact factor: 2.66)

**25**) "An Asymmetric Michael Addition of  $\alpha,\alpha$ -Disubstituted Aldehydes to Maleimides leading to a One-pot Enantioselective Synthesis of Lactones Catalyzed by Amino Acids" <u>C. G. Kokotos</u>\*, *Org. Lett.*, **2013**, *15*, 2406-2409. (citations: 49) (Impact factor: 6.58)

**24**) "Microwave-Assisted Organocatalytic Cross-Aldol Condensation of Aldehydes" D. Limnios and <u>C. G. Kokotos</u>\*, *RSC Adv.*, **2013**, *3*, 4496-4499. (citations: 16) (Impact factor: 3.11)

**23**) "Organocatalytic Asymmetric Domino Michael-Henry reaction for the Synthesis of Substituted Bicyclo[3.2.1]octan-2-ones" M. Tsakos, M. R. J. Elsegood and <u>C. G. Kokotos</u>\*, *Chem. Commun.*, **2013**, *49*, 2219-2221. (citations: 45) (Impact factor: 6.32)

**22**) "Novel Prolinamide-Ureas as Organocatalysts for the Asymmetric Aldol Reaction" P. Revelou, <u>C. G. Kokotos</u>\* and P. Moutevelis-Minakakis\*, *Tetrahedron*, **2012**, *68*, 8732-8738. (citations: 28) (Impact factor: 2.66)

**21**) "Pyrrolidine-thioxotetrahydropyrimidinone as an Efficient Organocatalyst for the Enantioselective Michael Addition of Cyclic Ketones to Nitrodienes" M. Tsakos. M. Trifonidou and <u>C. G. Kokotos</u>\*, *Tetrahedron*, **2012**, *68*, 8630-8635. (citations: 13) (Impact factor: 2.66)

20) "A Tripeptide-like Prolinamide-Thiourea as an Aldol Reaction Catalyst" S. Fotaras, <u>C. G. Kokotos</u> and G. Kokotos, *Org. Biomol. Chem.*, 2012, *10*, 5613-5619. (citations: 35) (Impact factor: 3.56)

**19)** "Primary Amine-Thioureas with Improved Catalytic Properties for "Difficult" Michael Reactions. Efficient Organocatalytic Syntheses of (*S*)-, (*R*)-Baclofen and (*S*)-Phenibut" M. Tsakos, <u>C. G. Kokotos</u> and G. Kokotos, *Adv. Synth. Catal.*, **2012**, *354*, 740-746. (citations: 47) (Impact factor: 5.65)

**18**) "Enantioselective Organocatalytic  $\alpha$ -Alkylation of Ketones Utilising S<sub>N</sub>-1 Type Reaction of Alcohols" M. Trifonidou and <u>C. G. Kokotos</u>\*, *Eur. J. Org. Chem.*, **2012**, 1563-1568. (citations: 33) (Impact factor: 2.83)

**17**) "Construction of Tertiary Alcohols Bearing Perfluoroalkyl Chains Catalyzed by Prolinamide-Thioureas" <u>C. G. Kokotos</u>\*, *J. Org. Chem.*, **2012**, *77*, 1131-1135. (citations: 46) (Impact factor: 4.79)

**16**) "Organocatalytic "Difficult" Michael Reaction of Ketones with Nitrodienes Utilising Primary Amine-Thioureas Based on di-*tert*-Butyl Esters of Aspartic Acid" M. Tsakos and <u>C. G. Kokotos</u>\*, *Eur. J. Org. Chem.*, **2012**, 576-580. (citations: 24) (Impact factor: 2.83)

**15**) "Novel pyrrolidine-thiohydantoins/thioxotetrahydropyrimidinones as highly effective catalysts for the asymmetric Michael addition" <u>C. G. Kokotos</u>, D. Limnios, D. Triggidou, M. Trifonidou and G. Kokotos, *Org. Biom. Chem.*, **2011**, *9*, 3386-3395. (citations: 37) (Impact factor: 3.56)

**14**) "Prolinamides bearing thiourea groups as catalysts for asymmetric aldol reactions" S. Fotaras, <u>C. G. Kokotos</u>, E. Tsandi and G. Kokotos, *Eur. J. Org. Chem.*, **2011**, 1310-1317. (citations: 50) (Impact factor: 2.83)

**13**) "Potent and selective fluoroketone inhibitors of group VIA calcium-independent phospholipase A<sub>2</sub>" G. Kokotos, Y.-H. Hsu, J. Burke, C. Baskakis, <u>C. G. Kokotos</u>, V. Magrioti and E. A. Dennis, *J. Med. Chem.*, **2010**, *53*, 3602-3610. (citations: 53) (Impact factor: 5.59)

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**10**) "Primary amine-thioureas based on tert-butyl esters of natural amino acids as organocatalysts for the Michael reaction" <u>C. G. Kokotos</u> and G. Kokotos, *Adv. Synth. Catal.*, **2009**, *351*, 1355-1362. (citations: 71) (Impact factor: 5.65)

**9**) "Sulfonamides of homoproline and dipeptides as organocatalysts for Michael and aldol reactions" E. Tsandi, <u>C. G. Kokotos</u>, S. Kousidou, V. Ragoussis and G. Kokotos, *Tetrahedron*, **2009**, *65*, 1444-1449. (citations: 50) (Impact factor: 2.66)

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**6**) "Aminals as substrates for sulfur ylides: A synthesis of functionalised aziridines and *N*-heterocycles" <u>C. G. Kokotos</u> and V. K. Aggarwal, *Org. Lett.*, **2007**, *9*, 2099-2102. (citations: 39) (Impact factor: 6.58)

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**2**) "Systemic and intrathecal effects of a novel series of phospholipase A<sub>2</sub> inhibitors on hyperalgesia and spinal PGE<sub>2</sub> release" T. L. Yaksh, G. Kokotos, C. I. Svensson, D. Stephens, <u>C. G. Kokotos</u>, B. Fitzsimmons, D. Hadjipavlou-Litina, X. Y. Hua and E. A. Dennis, *J. Pharmacol. Exp. Ther.*, **2006**, *316*, 466-475. (citations: 56) (Impact factor: 3.03)

**1**) "Synthesis and activity of 2-oxoamides containing long chain  $\beta$ -amino acids" V. Constantinou-Kokotou, A. Peristeraki, <u>C. G. Kokotos</u>, D. A. Six and E. A. Dennis, *J. Peptide Sci.*, **2005**, *11*, 431-435. (citations: 18) (Impact factor: 1.97)

# Patents

**2**)"Pyrrolidine-thioxopyrimidinone/thiohydantion organocatalysts" G. Kokotos, <u>C. G.</u> <u>Kokotos</u>, D. Limnios, European Patent application, EP10386007. 8, 19-3-2010.

1) "Perfluoroketone compounds and uses thereof" S. David, A. Kalyvas, R. Lopez-Vales, G. Kokotos, V. Constantinou-Kokotou, C. Baskakis, <u>C. G. Kokotos</u>, D. Stephens, E. A. Dennis, WO 2008122119 A1, 2008-10-16.

# **Invited Oral presentations**

**17**) ""Phenylglyoxylic Acid: Shedding More Light in Organic Transformations" University of Oxford, Oxford, UK, August **2018**. Young Investigators Workshop of EuCheMS. (Greek representative). EuCheMS workshops promote and recognize academic excellence. Each National Chemical Society (European countries, USA, Canada, Japan, and China) nominates one young investigator, for which a total of not more than 30 can be chosen.

**16**) "Organocatalysis and Photocatalysis: Learning Old Reagents New Tricks" University of Bristol, Bristol, UK, Septemeber **2017**.

**15**) "PhotoOrganocatalysis and Sunlight-Promoted Processes Mediated by Phenylglyoxylic Acid" Young Investigators Workshop of EuCheMS, Gladbach, Germany, July **2017**. (Greek representative). EuCheMS workshops promote and recognize academic excellence. Each National Chemical Society (European countries, USA, Canada, Japan, and China) nominates one young investigator, for which a total of not more than 30 can be chosen.

**14)** "Green Organocatalytic Oxidations Mediated by Hydrogen Peroxide: New Catalysts, One-pot Transformations and Mechanistic Insights" 20<sup>th</sup> European Symposium on Organic Chemistry ESOC, Koln, Germany, July **2017**.

**13**) "Organocatalysis and Photocatalysis: Learning Old Reagents New Tricks" National Research Foundation, Athens, Grece, June **2017**.

**12**) "Phenylglyoxylic Acid as the Photocatalyst for Green Visible-Light PhotoOrganocatalysis and SunlightPromoted Processes" Athens International Catalysis Symposium, Athens, Greece, November **2016**.

**11**) "Synthetic Methods to 2-Hydroxy Fatty Acids and Lipolytic Enzyme Inhibitors" 2<sup>nd</sup> International Confrerence and Epo on Lipids: Metabolism, Nutrition and Health, Orlando, USA, October **2016**.

**10**) "Organocatalysis and Photocatalysis: Green Approaches for C-H Activation" COST Action Meeting CHAOS, Vienna, Austria, September **2016**.

**9)** "Organocatalyis and PhotoOrganocatalysis: Novel Green Organocatalysts and Applications in Medicinal Chemistry" National Research Foundation, Athens, April **2016**.

**8**) "Organocatalysis and PhotoOrganocatalysis: Green Asymmetric Catalysis, One-pot Transformations and Applications in Medicinal Chemistry" Aristotle University of Thessaloniki, Greece, March **2016**.

7) "Amino Acids, their Derivatives and Activated Ketones: Organocatalysts for Asymmetric Transformations and Green Oxidations" 248<sup>th</sup> ACS Meeting, 9<sup>th</sup> Young Academic Investigators Award, San Francisco, USA, August **2014**. (Europe's representative). The intent of the Symposium is to have the program composed of Assistant Professor speakers. Sixteen speakers are invited to give 30-minute presentations on their work. Only 2 European Young Investigators were selected.

6) "Organocatalytic Endeavors Leading to One-pot Transformations and Green Oxidations" Young Investigators Workshop of EuCheMS, Larnaca, Cyprus, August **2014**. (Greek representative). EuCheMS workshops promote and recognize academic excellence. Each National Chemical Society (European countries, USA, Canada, Japan, and China) nominates one young investigator, for which a total of not more than 30 can be chosen.

**5**) "Amino Acids, their Derivatives and Peptides as Organocatalysts for Asymmetric Transformations" 13<sup>th</sup> Chinese International Peptide Symposium, Datong, China, June **2014**.

**4**) "Organocatalysis: A Novel Approach for Asymmetric Catalysis and Green Chemistry" University of Athens, Greece, May **2014**.

**3**) "Amino Acids and their Derivatives as catalysts for Organocatalytic Cascade Transformations" 5<sup>th</sup> ORCA Meeting, Palermo, Italy, May **2014**.

**2**) "Thioureas Based on Amino Acids and Pyrrolidine/thioxopyrimidinone as Catalysts for Asymmetric Organic Transformations" Rutgers University, New Jersey, USA, February **2013**.

**1**) "Novel Efficient Organocatalysts for Difficult Asymmetric Transformations" 10<sup>th</sup> Symposium on Chiral Approaches, Tokyo, Japan, February **2012**.

## **Oral presentations in conferences**

**12**) "Photocatalysis: Shedding Light to Organic Transformations" Athens Conference on Advances in Chemistry, Athens, Greece, October **2018**.

**11**) "Phenylglyoxylic Acid as the Photocatalyst for Green Visible-Light PhotoOrganocatalysis and Sunlight-Promoted Processes" 5° Greek Symposium on Green Chemistry, Patras, Greece, October **2017**.

**10**) "Providing Solutions for Challenging Asymmetric Transformations via New Efficient Organocatalysts" 3<sup>rd</sup> CHAOS Meeting, Bath, UK, September **2017**.

**9**) "Green PhotoOrganocatalysis and Organic Transformations Catalysed by Sunlight" 22<sup>th</sup> Greek Symposium of Chemistry, Thessaloniki, Greece, December **2016**.

**8**) "Green Organocatalytic Oxidations and PhotoOrganocatalysis: New Catalysts, Onepot Transformations and Appllications in Pharmaceutical Chemistry" 12<sup>th</sup> Greece-Cyrpus Conference on Chemistry, Thessaloniki, Greece, May **2015**.

**7**) "Thioureas Based on Dipeptides and Polymer-Supported Amino Acids and Peptides as Novel Organocatalysts" 12<sup>th</sup> Chinese International Peptide Symposium, Shenyang, China, July **2012**.

**6**) "Providing Solutions for Challenging Asymmetric Transformations via New Efficient Organocatalysts" 2<sup>nd</sup> ORCA Meeting, Marseille, France, March **2012**.

**5**) "Bifunctional Thioureas as Organocatalysts for Asymmetric Organic Transformations" 43<sup>rd</sup> IUPAC World Chemistry Congress, San Juan, Puerto Rico, August **2011**.

**4**) "Advances in Enantioselective Organocatalysis: Applications of Linchpin Catalysis" 3<sup>rd</sup> Hellenic Symposium on Organic Chemistry, Athens, Greece, October **2009**.

**3)** "A novel asymmetric synthesis of NK-1 receptor antagonist CP-122,721 based on the sulfur ylide-mediated epoxidation" 9<sup>th</sup> Conference on Medicinal Chemistry, Drug Discovery and Design, Patras, March **2008**.

**2**) "Applications of Sulfur Ylides in Asymmetric Synthesis" 2<sup>nd</sup> Hellenic Symposium in Organic Synthesis, Athens, April **2007**.

**1**) "Applications of Sulfur Ylides in Organic Chemistry" Syngenta Collaborative Research Conference 2006, Bracknell, September **2006**.

## **Referee in Journals and International Proposals**

- 1. Hungarian Research Foundation
- 2. Polish Research Foundation
- 3. Green Research Foundation
- 4. Cyprus Research Foudnation
- 5. Israel Research Foundation
- 6. Slovakian Research Foundation

#### Journals

- 1) Advanced Synthesis and Catalysis
- 2) Accounts of Chemical Research
- 3) ACS Catalysis
- 4) ACS Sustainable Chemistry and Engineering
- 5) Biochemistry
- 6) Chemistry a European Journal
- 7) Chemical Papers
- 8) Chem. Commun.
- 9) ChemSusChem
- 10) E-Journal of Chemistry
- 11) European Journal of Organic Chemistry
- 12) Green Chemistry
- 13) Journal of the American Chemical Society
- 14) Journal of Chemistry
- 15) Journal of Heterocyclic Chemistry
- 16) Journal of Organic Chemistry
- 17) Journal of Molecular Catalysis B: Enzymatic
- 18) Letters in Organic Chemistry
- 19) Molecules
- 20) Monaschafte fur Chemie
- 21) Org. Biomol. Cherm.
- 22) Org. Lett.
- 23) Research on Chemical Intermediates
- 24) RSC Advances
- 25) Synlett
- 26) Synthetic Communications
- 27) Synthesis
- 28) Tetrahedron
- 29) Tetrahedron Letters