

GEORGIOS C. VOUGIOUKALAKIS

Date and place of birth: Rethimno-Crete (Greece), 17/05/1976
Nationality: Greek
Official address: National and Kapodistrian University of Athens
Department of Chemistry
Laboratory of Organic Chemistry
Panepistimiopolis, 15771 Athens, Greece
Tel.: +30-210-7274230
Fax: +30-210-7274761

E-mail: vougouk@chem.uoa.gr
Webpage: <http://users.uoa.gr/~vougouk>

PROFESSIONAL EXPERIENCE / POSITIONS

- **Aug. 2020 – today** **Associate Professor in Organic Chemistry**
National and Kapodistrian University of Athens, Department of Chemistry, Laboratory of Organic Chemistry, Athens (Greece): Associate Professor in Organic Chemistry.

- **June 2019** **Erasmus+ Teaching Staff Member**
Stockholm University, Department of Organic Chemistry, Stockholm (Sweden): Training of Post-Graduate and Doctoral Students in the Fields of Sustainable Catalysis and Advanced Functional Materials.

- **Oct. 2017 – July 2019** **Adjunct Academic Staff (2 academic years)**
Hellenic Open University, School of Science and Technology, Undergraduate Course: Studies in Natural Sciences. Open and distant teaching in the framework of the Course Organic Chemistry. Hellenic Open University's offer to teach for a third year was turned down.

- **June 2016 – Aug. 2020** **Assistant Professor in Organic Chemistry**
National and Kapodistrian University of Athens, Department of Chemistry, Laboratory of Organic Chemistry, Athens (Greece): Assistant Professor in Organic Chemistry.

- **Jan. 2014 – June 2016** **Lecturer in Organic Chemistry**
National and Kapodistrian University of Athens, Department of Chemistry, Laboratory of Organic Chemistry, Athens (Greece): Lecturer in Organic Chemistry.

- **April 2012 – July 2012** **Visiting Scholar**
University of California - Irvine, Department of Chemical Engineering and Materials Science, Irvine, California (USA): Bottom-up synthesis of graphene nanoribbons and research in the field of fullerene chemistry.

- **Oct. 2008 – Dec. 2013** **Research Associate**
National Centre of Scientific Research "Demokritos", IAMPPNM, Department of Physical Chemistry, Athens (Greece): Design, synthesis, and characterization of organic and coordination compounds with applications in dye-sensitized solar cells. Research in the field of organocatalysis.

- **Oct. 2007 – Oct. 2008** **Postdoctoral Scholar**
National and Kapodistrian University of Athens, Department of Chemistry, Athens (Greece). Collaboration with Prof. N. Hadjichristidis: Design, synthesis, and characterization of organometallic polymerization catalysts. Synthesis and characterization of organic homo- and copolymers with well-defined macromolecular architecture and narrow molecular weight distribution.

- **Oct. 2005 – Oct. 2007** **Postdoctoral Scholar**
California Institute of Technology, Division of Chemistry and Chemical Engineering, Pasadena, California (USA). Collaboration with Prof. R. H. Grubbs (Nobel Prize in Chemistry 2005) in the field of organic and organometallic chemistry: Design, synthesis, and mechanistic studies of organometallic complexes that catalyze useful chemical transformations. Applications in the field of organic and polymer chemistry.

- **July 2005 – Oct. 2005** **Postdoctoral Researcher**
University of Crete, Department of Chemistry, Heraklion (Greece). Collaboration with Prof. M. Orfanopoulos: Research in the field of fullerene chemistry, photochemistry, and physical organic chemistry.

- **Sept. 2004 – June 2005** **Military Service (Compulsory)**
Greek Air Force. Chemist – Sergeant (Scientific Officer): Quality control of fuels, oils, hydraulics, and fibers used by the Greek Air Force. Platoon leader during the basic training.

- **May 2003 – Aug. 2003** **Visiting Researcher**
University of Sussex, Department of Chemistry, Brighton (UK). Collaboration with Prof. K. Prassides in the field of fullerene and materials chemistry.

- **June 2001 – July 2001** **Visiting Researcher**
Consiglio Nazionale delle Ricerche (Italian National Research Council), Institute for the Organic Synthesis and Photoreactivity, Bologna (Italy). Collaboration with Dr. C. Chatgililoglu: Synthesis and characterization of modified nucleosides for the study of DNA oxidative cleavage.

EDUCATION

- **Oct. 2004** **D.Phil. in Chemistry:** University of Crete, Department of Chemistry, Heraklion (Greece). Research Advisor: Prof. M. Orfanopoulos. Thesis title: “New Functionalization Methods and Mechanistic Studies on the Reactions of Fullerene C₆₀ and Azafullerene (C₅₉N)₂. Application of the new C₆₀/Al₂O₃ and C₆₀/SiO₂ Surfaces in Heterogeneous Photo-Oxidations.”

- **Apr. 2002** **M.Sc. in Organic Chemistry:** University of Crete, Department of Chemistry, Heraklion (Greece). Research in the field of fullerene chemistry, organic photochemistry, and physical organic chemistry. Synthesis and characterization of modified nucleosides for the study of DNA oxidative cleavage.

- **Nov. 1999** **B.Sc. in Chemistry:** University of Crete, Department of Chemistry, Heraklion (Greece). Second highest graduation grade of the Chemistry Department class of 1999.

SELECTED RESEARCH PUBLICATIONS (2015-2020)

- Zorba, L. P.; Vougioukalakis, G. C.* *Coord. Chem. Rev. in press*. “The Ketone-Amine-Alkyne (KA²) Coupling Reaction: Transition Metal-Catalyzed Synthesis of Quaternary Propargylamines”

- McLoughlin, C. K.; Kotroni, E.; Bregnhøj, M.; Rotas, G.; Vougioukalakis, G. C.*; Ogilby, P. R.* *Sensors in press*. “Oxygen- and pH-Dependent Photophysics of Fluorinated Fluorescein Derivatives: Non-Symmetrical vs. Symmetrical Fluorination” *Invited Article*

- Adejumo, T. T.; Tzouras, N. V.; Zorba, L. P.; Radanovic, D.; Pevec, A.; Grubisic, S.; Mitic, D.; Andelkovic, K. K.; Vougioukalakis, G. C.*; Cobeljic, B.*; Turel, I.* *Molecules in press*. “Synthesis, Characterization, Catalytic Activity, and DFT Calculations of Zn(II) Hydrazone Complexes” *Invited Article*

- Neofotistos, S. P.; Tzouras, N. V.; Pauze, M.; Gomez-Bengoa, E.; Vougioukalakis, G. C.* *Adv. Synth. Catal.* **2020**, *362*, 10.1002/adsc.202000566. “Manganese-Catalyzed Multicomponent Synthesis of Tetrasubstituted Propargylamines: System Development and Theoretical Study”
- Pantelia, A.; Daskalaki, I.; Consuelo Cuquerella, M.; Rotas, G.; Miranda, M. A.*; Vougioukalakis, G. C.* *Molecules* **2019**, *24*, 3957. “Synthesis and Chemiluminescent Properties of Amino-Acylated luminol Derivatives Bearing Phosphonium Cations”
- Tzouras, N. V.; Neofotistos, S. P.; Vougioukalakis, G. C.* *ACS Omega* **2019**, *4*, 10279-10292. “Zn-Catalyzed Multicomponent KA² Coupling: One-Pot Assembly of Propargylamines Bearing Tetrasubstituted Carbon Centers”
- Papastavrou, A. T.; Pauze, M.; Gomez-Bengoa, E.; Vougioukalakis, G. C.* *ChemCatChem* **2019**, *11*, 5379-5386. “Unprecedented Multicomponent Organocatalytic Synthesis of Propargylic Esters via CO₂ Activation” Part of a Special Issue entitled “New Concepts in Homogeneous Catalysis”, showcasing “some of the best research at the frontiers of homogeneous catalysis” – Guest Editors: Lutz Ackermann and Jean-Baptiste Sortais. Featured in the “Organocatalysis” section of the “Hot Topics” list of Wiley-VCH. Among the 10% of the Most Downloaded Papers in recent publications history (April 2020).
- Liori, A.; Stamatopoulos, I. K.; Papastavrou, A. T.; Pinaka, A.; Vougioukalakis, G. C.* *Eur. J. Org. Chem.* **2018**, *2018*, 6134-6139. “A Novel, Sustainable, User-Friendly Protocol for the Pd-Free Sonogashira Coupling Reaction” Invited Article (Invited Author). 3rd “Most Accessed” article (1st “Most Accessed” research article) of Eur. J. Org. Chem. in December 2018. Part of a Special Issue entitled “C-H Activation in Organic Synthesis”. Among the 10% of the Most Downloaded Papers in recent publications history (April 2020).
- Tzouras, N. V.; Stamatopoulos, I. K.; Papastavrou, A. T.; Liori, A.; Vougioukalakis, G. C.* *Coord. Chem. Rev.* **2017**, *343*, 25-138. “Sustainable Metal Catalysis in C-H Activation”
- Manthou, V. S.; Perganti, D.; Rotas, G.; Falaras, P.*; Vougioukalakis, G. C.* *Synlett* **2017**, *28*, 929-933. “5-Alkyl-8-hydroxyquinolines: Synthesis and Application in Dye-Sensitized Solar Cells” Invited Article (Invited Author)
- Sklavounos, A. A.; Pefkianakis, E. K.; Toubanaki, D. K.; Vougioukalakis, G. C.*; Calokerinos, A. C.* *ChemPlusChem* **2016**, *81*, 913-916. “A Squaraine Derivative for Cost-Effective, Quick and Highly Sensitive Determination of Mercury and Thiols and pH Sensing”
- Pefkianakis, E. K.; Manthou, V. S.; Paraskevopoulou, P.; Sakellariou, G.; Vougioukalakis, G. C.* *ChemistrySelect* **2016**, *6*, 1232-1238. “A New Family of Fullerene Derivatives Bearing Long Alkyl and Triethyleneglycol Moieties”
- Pefkianakis, E. K.; Theodossiou, T. A.*; Toubanaki, D. K.; Karagouni, E.; Falaras, P.; Papadopoulos, K.; Vougioukalakis, G. C.* *Photochem. Photobiol.* **2015**, *91*, 1191-1202. “A Family of Potent Ru(II) Photosensitizers with Enhanced DNA Intercalation: Bimodal Photokillers” Featured in the “Research of the Day” webpages of “ChemPubSoc Europe” and “Asian Chemical Editorial Society” (August 2015).
- Manthou, V. S.; Pefkianakis, E. K.; Falaras, P.*; Vougioukalakis, G. C.* *ChemSusChem* **2015**, *8*, 588-599. “Coadsorbents: A Key Component in Efficient and Robust Dye-Sensitized Solar Cells” Featured in the “Solar Cells” section of the “Hot Topics” list of Wiley-VCH (May – Oct. 2015).
- Pinaka, A.; Vougioukalakis, G. C.* *Coord. Chem. Rev.* **2015**, *288*, 69-97. “Using Sustainable Metals to Carry out “Green” Transformations: Fe- and Cu-Catalyzed CO₂ Monetization”