

## Stylios Hamilakis

Dr. in Chemistry-Associate Professor of NTUA

### Personal data

Born 1961 in Crete, married with one child

Languages: English

### Professional activities

- June 2013-: Associate Professor of NTUA in "Synthetic Organic Chemistry"
- September 2006-May 2013: Assistant Professor of NTUA in "Synthetic Organic Chemistry"
- January 2001-August 2006: Lecturer of NTUA in "Organic Chemistry"
- December 1995-January 2000: Technical Advisor in the S.G.S. Hellas S.A. of the S.G.S. (Société Générale de Surveillance) group in Switzerland

### Teaching

- 2001-: *Organic Chemistry I* (3<sup>rd</sup> semester, School of Chemical Eng., NTUA) (except 2008-2009)
- 2001-: *Organic Chemistry II* (4<sup>th</sup> semester, School of Chemical Eng., NTUA)
- 2000-2004: *Laboratory Exercises of Organic Chemistry II* (4<sup>th</sup> semester, School of Chemical Eng., NTUA)
- 2000-: *Laboratory Exercises of Organic Chemistry I* (3<sup>rd</sup> semester, School of Chemical Eng., NTUA)
- 2011-2012 and 2013-2014: *Principles of Cell Biology and Biochemistry* (5<sup>rd</sup> semester, School of Chemical Eng., NTUA)
- 2013-: *Special Topics in Organic Chemistry* (5<sup>rd</sup> semester, School of Chemical Eng., NTUA Mandatory –one selection Lesson)
- 1988-1995: *Laboratory Exercises of Organic Chemistry I* (3<sup>rd</sup> semester, School of Chemical Eng., NTUA) (teaching assistant as PhD student)
- 1988- 1995: *Laboratory Exercises of Organic Chemistry II* (4<sup>th</sup> semester, School of Chemical Eng., NTUA) (teaching assistant as PhD student)
- 2002-2008 and 2010, 2011: Seminars in the interdisciplinary postgraduate (MSc) program "Materials Science & Technology".

### PhD Student Supervision

Already finished: Marina Roussaki (2009-2014)

Ongoing: - Karmen Milonakou-Koufoudaki (2014)

-Spyridon Bousias (2015)

### Translation and Writing

#### Translation

- 2003-2006 Translation in Greek of the scientific book of J. Harte, C. Holdren, R. Schneider and C. Shirley: "Toxics from A to Z: A guide to everyday pollution hazards", University of California Press, USA (1991). "Toxics from A to Z: A guide to everyday pollution hazards", Ed. NTUA, GR (2006), p. 535, 2002.

#### Writing

- Hellenic Academic E-Books-Kallipos: "Organic Chemistry–Basic Principles and Mechanisms in Organic Reactions"
- *Teaching notes for the lesson of 5<sup>th</sup> semester "Principles of cell biology biochemistry", p. 49.*
- *Teaching notes for the lesson of 5<sup>th</sup> semester "Special Topics in Organic Chemistry", p.22.*
- *Teaching notes for Seminars in the interdisciplinary postgraduate (MSc) program "Materials Science & Technology", p. 37.*

### Principal Research Interests

- Design, synthesis and determination of bioactive behavior of new organic compounds.
- Design, synthesis and determination of physical properties of new organic compounds with photoconducting behavior.
- Development of new hybrid organic-inorganic semiconductors.

## International scientific publications (last 5 years)

- M. Rousaki, C.A. Kontogiorgis, D. Hadjipavlou-Litina, S. Hamilakis, A. Detsi: «A novel synthesis of 3-aryl coumarins and evaluation of their antioxidant and lipoxygenase inhibitory activity». *Bioorganic & Medicinal Chemistry Letters*, **20** (2010) 3889-3892.
- C. Mitzithra, V. Kaniaris, S. Hamilakis, K. Kordatos, C. Kollia and Z. Loizos: «Development and Study of New Hybrid Semiconducting Systems Involving Cd Chalcogenide Thin Films Coated by a Fullerene Derivative». *Mater. Lett.*, **65** (2011) 1651-1654.
- C. Mitzithra, S. Hamilakis, C. Kollia and Z. Loizos: «CdSe Semiconducting Layers Produced By Pulse Electrolysis». *Semiconductors*, **46**(5) (2012) 615-618.
- Efrosini Teli-Kokalari, V. Stefanou, D. Matiadis, G. Athanasellis, O. Igglessi-Markopoulou, S. Hamilakis and J. Markopoulos: «Synthesis of six membered fused and five membered heterocycles, possessing the  $\beta,\beta'$ -tricarbonyl functionality: coordination mode against selected environmental ions», *Fresenius Environmental Bulletin*, **21** (11) (2012) 3215-3223.
- E. Chountoulesi, C. Mitzithra, S. Hamilakis, K. Kordatos, C. Kollia and Z. Loizos: «A Low Cost Synthesis of Fullerene Derivatives»: *Synthetic Communications*, **43** (2013) 1-8.
- E. Chountoulesi, C. Mitzithra, S. Hamilakis, K. Kordatos, C. Kollia and Z. Loizos «One-step electro-codeposition for developing new hybrid semiconductors», *Materials Letters*, **93** (2013) 45-48.
- C. Mitzithra, E. Chountoulesi, S. Hamilakis, K. Kordatos, C. Kollia and Z. Loizos «Development of New CdTe Based Hybrid Semiconducting Layers Produced in One Step by Electro-codeposition», *Semiconductors* **47**(10) (2013) 1303-1307.
- D. Matiadis, V. Stefanou, G. Athanasellis, S. Hamilakis, V. McKee, O. Igglessi-Markopoulou, J. Markopoulos «Synthesis, X-ray crystallographic study, and biological evaluation of coumarin and quinolinone carboxamides as anticancer agents», *Monatsh Chem.* **144**(7) (2013) 1063-1069.
- Stylianos Hamilakis, Marina Roussaki, Christina Mitzithra, Maria Myrto Dardavila, Catherina P. Raptopoulou, Vassilis Psycharis, Constantina Kollia, Zaphirios Loizos «Study of the Relation existing between Photoresistivity and Substituents Characteristics of some Coumarin Derivatives», *Chemical Engineering Transactions* **41** (2014) (265 DOI: 10.3303/CET1441045).
- Marina Roussaki, Konstantinos Zelianaios, Eleni Kavetsou, Stylianos Hamilakis, Dimitra Hadjipavlou Litina, Christos Kontogiorgis, Thalia Liargkova, Anastasia Detsi «Structural modifications of coumarin derivatives: Determination of antioxidant and lipoxygenase (LOX) inhibitory activity», *Bioorganic & Medicinal Chemistry* **22** (2014) 6586–6594.
- S. Hamilakis, N. Gallias, C. Mitzithra, K. Kordatos, C. Kollia and Z. Loizos «Hexagonal Electrodeposited CdSe in New Multi-Layer Hybrid Organic-Inorganic Semiconductive Systems with Remarkable High Photoconductivity», *Mater. Lett.*, **143** (2015) 63–66.
- S. Hamilakis, D. Balgis, K. Milonakou-Koufoudaki, C. Mitzithra, C. Kollia and Z. Loizos «Electrodeposition of CdSe photoabsorber thin films in the presence of selected organic additives», *Mater. Lett.*, **145** (2015) 11–14.
- M.M. Dardavila, S. Hamilakis, Z. Loizos, C. Kollia: «Ni/ZrO<sub>2</sub> composite electrodeposition in the presence of coumarin: textural modifications and properties», *Journal of Applied Electrochemistry* **45** (2015) 503–514.

## Reviewer in research journals (last 5 years)

Chemical Papers (12/10/2010)

Monatshefte für Chemie –Chemical Monthly (5/11/2010)

Letters in Drug Design & Discovery-Online (12/11/2010)

Bioorganic & Medicinal Chemistry Letters (09/03/2011)

Journal of the Serbian Chemical Society (04/04/2011)

Molecules (04/07/2011)

Marine Drugs (13/03/2012)

Letters in Organic Chemistry (4/7/2013)

Thin Solid Films (24/7/2015)

## Industrial Experience

As technical advisor I had the duty to:

- Design and apply total business plans
- Design and apply quality assurance systems, special adjusted for pharmaceutical industries
- Design and apply environmental plans according to ISO 1400 and EMAS
- Inspect the above systems as sector expert.

**Memberships**

Member of the Association of Greek Chemists (1985-)

Member of *New York Academy of Sciences* (1995-2000)

Member of *American Association for the Advancement of Science (AAAS)* (1996-2000).