CURRICULUM VITAE

Name:	**Sofia D. Koulocheri**
Date of Birth:	29 October 1969
Place of Birth:	Athens, Greece
Marital Status:	Married, two children
Work Address:	Laboratory of Nutritional Physiology and Feeding Department of Animal Sciences Agricultural University of Athens Iera odos 75, Athens 11855
Position:	Laboratory Teaching Staff (E.DI.P)
Tel.:	+30 210 5294246
FAX :	+30 210 5294457
E-mail :	skoul@aua.gr, skoul10@gmail.com

Education

- Ph.D. , awarded in 2001
  Agricultural University of Athens
  Thesis title: «Synthesis of Azaheterocycles with Biological and Agricultural Interest»
  Advisor: Prof. S.A. Haroutounian

- *Diplôme d' Études Approfondies (DEA)*, awarded in 1995
  Institut National Polytechnique de Toulouse - École Nationale Supérieure de Chimie (I.N.P.-E.N.S.T.C.) – France
  Specialty: «Agro resources Sciences»

- B.Sc. Chemistry, awarded in 1994
  University of Patras - Chemistry Department

- Oenological education program, awarded in 1994
  University of Patras - Chemistry Department

Experience

6/2014 to date *Laboratory Teaching Staff (E.DI.P.)*
Agricultural University of Athens
Department of Animal Sciences
Laboratory of Nutritional Physiology and Feeding

2002 – 2014 *Chemist - Teaching Assistant*
Agricultural University of Athens
2013 – 2014 Faculty of Animal Sciences and Aquaculture
Department of Nutritional Physiology and Feeding
2002 – 2013 Department of Sciences - Chemistry Laboratory

3/1998 – 1/2001 Research Assistant

& 3/2001 – 5/2001 Agricultural University of Athens
Advisor: Prof. S.A. Haroutounian
FAIR 96, «Terpenes as natural chiral starting material for the synthesis of flavors, fragrances, pharmaceuticals and biocontrole agents»
Subject: Synthesis of Santonin analogues

1995 – 2001 *Research Assistant - PhD Student*
Agricultural University of Athens - Department of Sciences - Chemistry Laboratory

Advisor: Prof. S.A. Haroutounian

Subject: Organic Synthesis - Synthesis of new molecules with pharmaceutical, biological and agricultural interest:

- Asymmetric synthesis of alpha-furfurylamines and their oxidative cyclization to dihydropyridones.
- Asymmetric synthesis of 2,6-disubstituted piperidin-3-oles: Application in the synthesis of alkaloid lipids.
- 2-Piperidones as substrates for the synthesis of piperidine alkaloids, peptidomimetics and aza-sugars.
- Derivatives of 2,3-diaryl-indoles as fluorescent probes for detecting ER.

7/1997 *Research Assistant*
Centre Nationale de la Recherche Scientifique du Gif- sur-Yvette.
Institut de Chimie de Substance Naturelles.
Advisor: Dr J. Royer (Directeur de recherche)
Subject: «New Methods for the Asymmetric Synthesis of Polyhydroxylated Pyrrolidines, Piperidines and Indolizidines»

1994 – 1995 *Research Assistant - Graduate Student*
Institut National Polytechnique de Toulouse – École Nationale Supérieure de Chimie (Prof. A. Gaset)
Laboratoire des Mécanismes d'Action des Substances à Visée Antiparasitaire et Laboratoire de Chimie Pharmaceutique du Université Paul Sabatier de Toulouse
Advisors: Prof. J.C. Dousset, Prof. M. Payard
Subject: «Synthesis of Cotinine and *N*-Oxide-cotinine
1. Determination and
2. Biological Activity»

1991 – 1992 *Research Assistant - Undergraduate Student*
University of Patras - Chemistry Department
Advisor: Prof. Kl. Barlos
Subject: Application of solid phase peptide synthesis on Calcitonin production.

9/1992 *Research Assistant - Undergraduate Student*
Oenological Laboratory (Advisor: A. Gikas, Spata-Attikis)
Subject: Chemical Analyses

Teaching Experience

2014 to date Agricultural University of Athens - Department of Animal Sciences
Laboratory of Nutritional Physiology and Feeding
Theoretical Courses
Principles in Organic Chemistry (*2018 to date*)
Inorganic Chemistry (*2019 to date)*
Analytical Toxicology- Xenobiotics (*2019 to date)*
Laboratory Courses
- Inorganic Chemistry (*2014 to date*)
- Organic Chemistry (*2014–2015*) & Principles in Organic Chemistry (*2015 to date*)
- Analytical Toxicology- Xenobiotics (*2018 to date)*

2002 – 2014 Agricultural University of Athens - Department of Sciences -
1995 – 1999 Chemistry Laboratory
Teaching Assistant
- Inorganic Chemistry (A semester)
- Organic Chemistry (*2014–2015*) (B semester) for students of all Departments of A.U.A)

2012 – 2014 Teaching Assistant
Analytical Chemistry (for students of Department of Food Science)

Participation in research projects

A) Principal Investigator
«EstroFish: Development and comparison of methods for detection and quantification of phytoestrogens in fish feed raw materials, fish feed and Mediterranean farmed fish species» 12/2019– *to date*

B) Researcher

«THALIS: Development of new selective estrogen receptor modulators for preventing menopause consequences», *5/2013 – 8/2013 & 3/2015 – 4/2015* (National and Kapodistrian University of Athens - Principal Investigator: Prof. S. Mitakou)

C) Researcher, Administrative and Financial Management support.

(P. I.: Prof. S.A. Haroutounian)

- E.E., LIFE+ «CLIMATREE: A novel approach for accounting & monitoring carbon sequestration of tree crops and their potential as carbon sink areas»*, 9/2015–to date*

- E.E., LIFE+ «CONOPS: Development & demonstration of management plans against the climate change enhanced- invasive mosquitoes in S. Europe», *7/2013–11/2018*
- E.E., LIFE+ «CALCHAS: Development of an integrated analysis system for the effective fire conservancy of forests»*, 1/3/2010 – 31/8/2013*
- E.E., LIFE 03 «DIONYSOS: Development of an economically viable process for the integrated management of winemaking industry waste; production of high added value natural products and organic fertilizer», *10/2003 – 9/2006*

D) Administrative and Financial Management support.

(P. I: Prof. S.A. Haroutounian)

- Competitive Development Projects funded by the Foreign Ministry (*2006-2012*)
- Projects funded by the Ministry of Education (PENED: *2002–2005)*
- Projects funded by the General Secretariat for Research and Technology (*2006-2008 & 2012 to date)*

Research Projects (in collaboration with Prof. S.A. Haroutounian)

1. Program for Scientific Collaboration EIE-CNRS: "New Methods for the Asymmetric Synthesis of Polyhydroxylated Pyrrolidines, Piperidines and Indolizidines"*, 7/1997*
2. "Development of novel fluorescent probes for the assay of estrogen receptors: Synthesis and biological-photophysical studies", *1997*, AUA Research Committee

Administrative experience

2009-2013 Secretariat of the Internal Evaluation Group of Department of Sciences and Chemistry Laboratory.

Additional qualifications

- Use of GC-MS, FT-IR, HPLC, NMR and LC-MS-MS
- Use of computers (MSOffice: Word, Excel, PowerPoint, FrontPage, Chemistry Software: ChemDraw Ultra, HyperChem)
- Languages: Greek, French & English

Honors - Scholarships

10/95 – 2000 Scholarship from the Greek State Scholarships Foundation as PhD student.

9/89 – 6/90 Scholarship from the Greek State Scholarships Foundation as undergraduate student.

Scientific Society

Member of the Association of Greek Chemists

Scientific Publications

Monographs

1. Synthesis of Aza-heterocycles with Biological and Agricultural Interest
S. D. Koulocheri
Ph.D. Thesis **2001**, *Agricultural University of Athens*

2. Laboratory Courses of Inorganic Chemistry
S. D. Koulocheri
2017, *Agricultural University of Athens*

3. Laboratory Courses of Organic Chemistry
S. D. Koulocheri
2017, *Agricultural University of Athens*

Publications

4. Electron impact mass spectrometry of azinyl and diazinyl ethanol derivatives
C. D. Apostolopoulos, S. D. Koulocheri, E. A. Couladouros and S. A. Haroutounian *European Journal of Mass Spectrometry* **1996**, *2*, 301–304

5. Somatic embryogenesis and in vitro secondary metabolite production from common mallow (malva silvestris l.) collected in Greece.
E. Kintzios, E. Katsouri, D. Peppes, S. D. Koulocheri
ACTA Horticulturae **1998**, 173–175

6. 1,4-Reductive addition of hydrazoic acid on *γ*-keto-*α*,*β*-unsaturated-*δ*-lactones and lactams: A convenient route to enaminoketo *δ*-lactones and lactams.
D. Koulocheri, S. A. Haroutounian, C. D. Apostolopoulos, E. A. Couladouros and R.Chada
European Journal of Organic Chemistry **1999**, 1449–1453

7. Transformation of D-glucal to (2*S*)-hydroxymethyl-dihydropyridones as intermediates to piperidine alkaloids,
S. D. Koulocheri and S. A. Haroutounian
Synthesis **1999**, 1889–1892

8. Asymmetric total synthesis of (–)-prosophylline
S. D. Koulocheri and S. A. Haroutounian
Tetrahedron Letters **1999**, *40*, 6869–6870

9. Stereoselective Michael addition of thiophenols, amino acids and hydrazoic acid to (2*S*)-hydroxymethyl-dihydropyridone as a convenient route to novel azasugar derivatives.
S. D. Koulocheri, P. Magiatis, A.-L. Skaltsounis and S. A. Haroutounian
Tetrahedron **2000**, *56*, 6135–6141

10. Ultrasound promoted synthesis of 2,3-*bis*-(4-hydroxyphenyl)-indoles as inherently fluorescent ligands for the estrogen receptor.
S. D. Koulocheri and S. A. Haroutounian
European Journal of Organic Chemistry **2001**, 1723–1729

11. Asymmetric synthesis of *γ*-keto-*δ*-lactam derivatives: Application to the synthesis of a conformationally constrained surrogate of Ala-Ser dipeptide.
S. D. Koulocheri, P. Magiatis and S. A. Haroutounian
Journal of Organic Chemistry **2001**, *66*, 7915–7918

12. A convenient route to alkaloid lipids: Application to the synthesis of *leptophyllin A* analog.
S. D. Koulocheri, E. N. Pitsinos and S. A. Haroutounian
Synthesis **2002**, 111–115

13. Asymmetric synthesis of (2*R*, 3*R*)-3-hydroxypipecolic acid-□-lactam derivatives.
S. D. Koulocheri , P. Magiatis, A.-L. Skaltsounis and S. A. Haroutounian
Tetrahedron **2002**, *38*, 6665–6671

14. An expedient asymmetric synthesis of calystegine B_4 analogues.
S.D. Koulocheri, E. N. Pitsinos and S.A. Haroutounian
Synthesis **2002**, 1707–1710

15. A fast entry to furanoditerpenoid-based Hedgehog signaling inhibitors: Identifying essential structural features.
M. Chatzopoulou, A. Antoniou, E.N. Pitsinos, M. Bantzi, S.D. Koulocheri, S.A. Haroutounian, A. Giannis.
Organic Letters **2014,** *16* (12), 3344–3347

16. Pomegranate juice consumption increases GSH levels and reduces lipid and protein oxidation in human blood.
C. M. Matthaiou, N. Goutzourelas, E. Sarafoglou, D. Stagos, S. D. Koulocheri, S. A. Haroutounian, D. Kouretas,
Food and Chemical Toxicology **2014**, *73,* 1–6

17. Antiangiogenic potential of grape stem extract through inhibition of vascular endothelial growth factor expression.
D. Stagos, A. Apostolou, E. Poulios , E. Kermeliotou, A. Mpatzilioti, K. Kreatsouli, S.D. Koulocheri, S.A. Haroutounian, D. Kouretas
Journal of Physiology Pharmacology **2014**, *65 (6),* 843–852

18. Exploitation of Apiaceae Family plants as valuable renewable source of essential oils containing crops for the production of fine chemicals: Part II E. Evergetis S. D. Koulocheri and S. A. Haroutounian
Industrial Crops and Products **2015**, *64*, 56–97

19. Exploitation of *Artemisia arborescens* as a Renewable Source of Chamazulene: Seasonal Variation and Distillation Conditions"
E.C. Michelakis, E. Evergetis S. D. Koulocheri and S. A. Haroutounian
Natural Product Communications **2016**, *11* (10), 1513-1516

20. "Gold" Pressed Essential Oil: An Essay on the Volatile Fragment from Citrus Juice Industry By-Products Chemistry and Bioactivity
V. N. Kapsaski-Kanelli, E. Evergetis, A. Michaelakis, D. P. Papachristos, E. D. Myrtsi, S. D. Koulocheri,and S. A. Haroutounian
BioMed Research International **2017**

21. Resistance-Trained Individuals Are Less Susceptible to Oxidative Damage after Eccentric Exercise
Y. Spanidis, D. Stagos, C. Papanikolaou, K. Karatza, A. Theodosi, A. S. Veskoukis, C. K. Deli, A. Poulios, S. D. Koulocheri, A. Z. Jamurtas,[2] S. A. Haroutounian, and D. Kouretas
Oxidative Medicine and Cellular Longevity **2018**

22. Induction of decay accelerating factor and membrane cofactor protein by resveratrol attenuates complement deposition in human coronary artery endothelial cells.
MG Detsika, ED Myrtsi , SD Koulocheri , SA Haroutounian, EA Lianos, C Roussos.
Biochem Biophys Rep. **2019** 27, 19, 100652

23. Polyphenolic Composition of Rosa canina, Rosa sempervivens and Pyrocantha cocci-nea Extracts and Assessment of Their Antioxidant Activity in Human Endothelial Cells
E.Kerasioti, A. Apostolou I. Kafantaris K. Chronis , E. Kokka , C. Dimitriadou, E. N. Tzanetou , A. Priftis , S. D. Koulocheri , S. A. Haroutounian , D. Kouretas D. Stagos
Antioxidants **2019**, *8*(4), 92

Review Articles

24. Synthetic studies on natural piperidine alkaloids and their derivatives.
S.D. Koulocheri and S.A. Haroutounian
Acta Phytotherapeutica **2003**, 13–20

25. Stereoselective syntheses of 2,6-disubstituted piperidin-3-oles (alkaloid lipids).
S. D. Koulocheri, E. N. Pitsinos and S. A. Haroutounian
Current Organic Chemistry **2008**, *12*, 1454–1467

Conferences

26. Ultrasound promoted Synthesis of 2,3-*bis*-(4-Hydroxyphenyl)-indoles as Inherently Fluorescent Ligands for the Estrogen Receptor
S. D. Koulocheri and S. A. Haroutounian
4th Electronic Conference of Synthetic Organic Chemistry, Bioorg. Chem. Sect. September **2000**, abstr. C18

27. Asymmetric Synthesis of 2,6-Disubstituted-3-piperidinol Alkaloids
S. D. Koulocheri and S. A. Haroutounian
18th Pan Hellenic Conference of Chemistry; Piraeus; March **2001**, p. 146–149

28. 2-Dihydropyridone: A key intermediate for the efficient access of alkaloid lipids
S.D. Koulocheri and S.A. Haroutounian
Deuxièmes Journèes Int. de l' AFERP; Athènes; Sept. **2002**, Poster 18

29. Synthesis of Taepeenin D analogues as potential cancer stem cell-targeted agents
M. Chatzopoulou, A. Antoniou, E.N. Pitsinos, M. Bantzi, S.D. Koulocheri, S.A. Haroutounian, A. Giannis.
Chemical Approaches to Targeting Drug Resistance in in Cancer Stem Cells, COST ACTION CM1106, Porto, February. **2013**.

30. Valorisation of Citrus Juicing Industries by-Products
E.D. Myrtsi, E. Evergetis, G. Kheiranov, S.D. Koulocheri and S. A. Haroutounian
30th International Symposium on the Chemistry of Natural Products, Athens, **2018**.

31. Exploitation of Citrus juicing industrial by-products as a rich source of carotenoids
E.D. Myrtsi, E. Evergetis, S.D. Koulocheri and S.A. Haroutounian στο International Conference on Carotenoid research and applications in agro-food and health, Limaessol Cyprus, **2019**.

32. Exploitation of Citrus juicing industrial by-products as a rich source of carotenoids
E.D. Myrtsi, G. Kheiranov, V. Heliopoulos, E. Evergetis, S.D. Koulocheri and S.A. Haroutounian
4th Meeting of INVALOR project, Chania, **2019**

Seminars

2nd LC/MS/MS USER MEETING, *NCSR "Demokritos" Athen,* **2008**