

Curriculum Vitae

Personal data:

Name: Emmanuel A. Bouzas
Date and place of birth: March 5, 1978; Athens, Greece
Citizenship: Greek
Current Address: Agricultural University of Athens / School of Food and Nutritional Sciences / Department of Food Science & Human Nutrition / Laboratory of General Chemistry
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Education:

1/02 – 6/07 Ph.D. in Synthetic Organic Chemistry (2007), (*excellent*).
Institution: Department of Science, Agricultural University of Athens,
9/97 – 11/01 B.Sc. in Chemistry (2001), (*grade 7.753, very good*).
Institution: Department of Chemistry, University of Patras, Greece

Foreign languages First Certificate in English (*grade C*)
Institution: University of Cambridge

Appointments:

6/14 – current
Position held: Laboratory Teaching Staff (Organic Chemistry, General and Inorganic Chemistry, Analytical Chemistry, Instrumental Analysis, Natural Products)
Institution: Agricultural University of Athens, Laboratory of General Chemistry
5/07 – 5/14
Position held: Assistant Laboratory Teaching Staff
Institution: Agricultural University of Athens, Laboratory of General Chemistry
1/02 – 1/05
Position held: Teaching Assistant
Institution: Agricultural University of Athens, Laboratory of General Chemistry
11/02 – 11/05
Position held: Scientific Collaborator
Institution: Agricultural University of Athens, Laboratory of General Chemistry
Research Program title: "Synthesis and evaluation of bioactive naphthoquinones and colorless derivatives for application as wound healing agents"
Supervisor: Prof. E. A. Couladouros
1/02 – 6/02
Position held: Associate Researcher
Institution: National Center for Scientific Research "DEMOKRITOS", Institute of Physical Chemistry, Laboratory of Natural Product Synthesis and Bioorganic Chemistry, Greece
Research Program title: "Interference of Synthetic Bastadins with Intracellular Calcium Stores in Brain Neurons *in vitro* and *in vivo*"
Supervisors: Prof. E. A. Couladouros and Dr. E. Pitsinos

Research experience:

12/16 – 1/23	Scientific Collaborator
Institution:	Agricultural University of Athens, Laboratory of General Chemistry
Scientific Coordinator:	Prof. V. Constantinou-Kokotou
Project:	“Determination of Selenium in foods with Atomic Absorption Spectroscopy”
9/18 – 7/20	Scientific Collaborator
Institution:	1. National Center for Scientific Research “DEMOKRITOS”, Laboratory of Natural Product Synthesis & Bioorganic Chemistry 2. Agricultural University of Athens, Laboratory of General Chemistry
Scientific Coordinator:	Dr. V. Vidali
Project:	“Improved, scalable Synthesis of Abyssomycin C and <i>atrop</i> -Abyssomycin C”
10/07 – 2/08	Scientific Collaborator
Institutions:	1. Agricultural University of Athens, Laboratory of General Chemistry 2. Benaki Phytopathological Institute
Collaborator Researcher:	Dr. A. Michaelakis
Project:	“Synthesis of colorless Shikonin derivatives with larvicidal activity against mosquito <i>Culex pipiens</i> ”
1/02 – 7/07	Postgraduate Scholar (PhD candidate)
Institutions:	1. Agricultural University of Athens, Laboratory of General Chemistry 2. National Center for Scientific Research “DEMOKRITOS”, Laboratory of Natural Product Synthesis & Bioorganic Chemistry
Supervisor:	Prof. E. A. Couladouros
Projects:	1. Synthesis of resorcylic type macrolides: <i>trans</i> -Resorcylic, <i>cis</i> -Resorcylic and Monocillin I. 2. Synthesis of polyketide Abyssomycin C 3. Synthesis and biological evaluation of naphthoquinone Sikalkin derivatives
9/00 – 7/01	Undergraduate Research Assistant.
Institution:	University of Patras, Department of Chemistry, Laboratory of Synthetic Organic Chemistry.
Supervisor:	Prof. D. A. Papaioannou
Subject:	“Studies on the synthesis of polyamine conjugates with retinoids”

Tutorial experience:

Teaching laboratory exercises of the following courses at the Agricultural University of Athens:

2007 – current: Organic Chemistry

General and Inorganic Chemistry

2010 – current: Analytical Chemistry

2014 – current: Instrumental Chemical Analysis

2018 – current: Natural Products: Chemistry and Bioactivity

SCIENTIFIC WORK

PhD Thesis:

“Synthesis and exploitation of natural products”

- Total Synthesis of resorcylic type macrolides: trans-Resorcylic, cis-Resorcylic and Monocillin I. Macrocyclization via Enone-Ene Ring Closing Metathesis
- Synthesis of new MRSA- & VRSA-antibiotic Abyssomicin C via a biomimetic intramolecular [4+2] cycloaddition
- Synthesis and biological evaluation of Sikalkin derivatives for application to wound-healing agents

Emmanuel A. Bouzas

PhD Thesis, Agricultural University of Athens, **2007**

Publications:

1. “First Total Synthesis of trans- and cis-Resorcylic: Remarkable Hydrogen-Bond-Controlled, Stereospecific Ring Closing Metathesis”
E. A. Couladouros, A. P. Mihou and E. A. Bouzas
Org. Lett. **2004**, *6*, 977-980. (citations: 51, IF₂₀₀₄ 4.508)
2. “Formal Synthesis of Abyssomicin C”
E. A. Couladouros, E. A. Bouzas and A. D. Magos
Tetrahedron **2006**, *62*, 5272-5279. (citations: 43, IF₂₀₀₆ 2.990)
3. “Larvicidal activity of naturally occurring naphthoquinones and derivatives against the West Nile virus vector *Culex pipiens*”
A. Michaelakis, A. T. Strongilos, E. A. Bouzas, G. Koliopoulos and E. A. Couladouros
Parasitol. Res. **2009**, *104*, 657-662. (citations: 34, IF₂₀₀₉ 1.835)
4. “An Improved Biomimetic Formal Synthesis of Abyssomicin C and atrop-Abyssomicin C”
V. P. Vidali, A. Canko, A. D. Peroulis, E. T. Georgas, E. Bouzas, J. M. Herniman and E. A. Couladouros
Eur. J. Org. Chem. **2020**, *29*, 4547-4557. (citations: 3, IF₂₀₂₀ 2.728)
5. “Floret Biofortification of Broccoli Using Amino Acids Coupled with Selenium under Different Surfactants: A Case Study of Cultivating Functional Foods”
Bouranis, D.L.; Stylianidis, G.P.; Manta, V.; Karousis, E.N.; Tzanaki, A.; Dimitriadi, D.; Bouzas, E.A.; Siyiannis, V.F.; Constantinou-Kokotou, V.; Chorianopoulou, S.N.; Bloem, E.
Plants **2023**, *12*, 1272-1292 (citations: 1, IF₂₀₂₃ 4.658)

Conferences:

1. “Natural products – Total synthesis, designed derivatives, biological studies”, E. A. Couladouros, E. Pitsinos, M. Sagnou, I. Soufli, Z. Plyta, A. Mihou, G. Saracinos, V. Moutsos, A. Strogilos, V. Vidali, A. Magos, E. Bouzas, A. Michaelakis (poster communication). “Biodiversity and the effects on health and nutrition” Goulandris Museum of Natural History, Kifisia, 12 December **2001**.
2. “Synthetic Approaches Towards Radicicol”, E. A. Bouzas, A. P. Mihou, E. A. Couladouros (oral presentation). “8th Postgraduate Conference in Chemistry - University of Crete”, Anogia Crete, 28-30 June **2002**.
3. “Synthetic Approaches Towards Radicicol”, E. A. Bouzas, A. P. Mihou, E. A. Couladouros (poster communication). “Ischia Advanced School of Organic Chemistry - IASOC 2002”, Ischia Italy, 21-26 September **2002**.
4. “Application of carbonylative Stille cross coupling reaction en route to the Synthesis of Radicicol”, E. A. Bouzas, A. P. Mihou, E. A. Couladouros (poster communication). “19th Panhellenic Chemistry Conference: The diversity of Chemistry and its Applications”, Herakleio Crete, 6-10 November **2002**.

5. *"General Methodology for the Synthesis of Resorcylic Macrolides using Ring Closing Metathesis. Application to the Syntheses of trans-Resorcylic, cis-Resorcylic and Radicicol"*, E. A. Bouzas, A. P. Mihou, E. A. Couladouros (poster communication). "1st Hellenic Symposium - Organic Synthesis - From Chemistry to Biology, Medicine and Material Science", Athens, 4-6 November **2004**.
6. *"Synthesis and in vitro Activity of Shikalkin Derivatives"*, H. Pratsinis, D. Kletsas, E. A. Bouzas, A. Michaelakis, A. T. Strongilos and E. A. Couladouros (poster communication). "8th International Conference of Medicinal Chemistry - Design and development of pharmaceutical products", Patra, 15-17 March **2007**.
7. *"New routes towards the synthesis of natural products and designed derivatives"* E. A. Couladouros, A. Strongilos, V. Vidali, A. D. Magos, E. Bouzas, E. Neokosmidis, V. Moutsos, M. Lampropoulou, M. Dakanali (poster communication) "International Symposium on Chemistry, Biology and Medicine", Cyprus, 28 May - 1 June, **2006**.
8. *"Studies of Enone - Ene Ring Closing Metathesis. Total Synthesis of Monocillin II."*, A. G. Maranti, E. A. Bouzas, E. A. Couladouros (poster communication). "8th International Conference of Medicinal Chemistry - Design and development of pharmaceutical products", Patra, 15-17 March **2007**.
9. *"Synthetic Studies towards Monocillins I, II & III"*, A. G. Maranti, E. A. Bouzas, E. A. Couladouros (poster communication). "2nd Hellenic Symposium - Organic Synthesis - From Chemistry to Biology, Medicine and Material Science", Athens, 19-21 April **2007**.
10. *"Studies towards an Improved Synthesis of the new anti-MRSA & VRSA polyketide, Abyssomicin C"*, E. A. Bouzas, A. D. Magos, A. E. Chiotellis, T. A. Salama, E. A. Couladouros (poster communication). "2nd Hellenic Symposium - Organic Synthesis - From Chemistry to Biology, Medicine and Material Science", Athens, 19-21 April **2007**.
11. *"An Improved Synthetic Route to Abyssomicin C"*, V. P. Vidali, A. Petroulias, A. Canko, E. A. Bouzas, Elias A. Couladouros "30th International Symposium on the Chemistry of Natural Products", Athens, **2018**.
12. *"An Improved Synthetic Route to Abyssomicin C"* A. Canko, V. P. Vidali, A. Peroulias, E. A. Bouzas, E. A. Couladouros "International Summer School on Organic Synthesis", Università degli Studi di Milano, Gargnano, Italy, **2019**.
13. *"Selenium assimilation by broccoli: Effect of Se inputs on the biosynthesis of secondary metabolites under normal or reduced S inputs"* M. Adamopoulou, E. A. Bouzas, M. Perouli, M. G. Kokotou, S. N. Chorianopoulou, V. F. Siyiannis, V. Constantinou-Kokotou, D. L. Bouranis, "28th International Symposium of the Scientific Centre for Fertilizers (CIEC)", Athens Greece, November **2020**.

Text books:

1. *"Natural Products: Chemistry and Bioactivity - laboratory exercises"*
Emmanuel Bouzas, Anastasia Mihou, Dimitra Daferera
Agricultural University of Athens, Laboratory of General Chemistry, **2018**, Votanikos