

**CURRICULUM VITAE**

**Eftichia Kritsi**

**Chemist, MSc, PhD**

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# CURRICULUM VITAE

## 1. PERSONAL INFORMATION

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FULL NAME: Eftichia Kritsi  
DATE OF BIRTH: 09/04/1985  
PLACE OF RESIDENCE: Athens, Greece  
EMAIL: [ekritsi@uniwa.gr](mailto:ekritsi@uniwa.gr)  
ORCID: <https://orcid.org/0000-0002-3975-0832>  
SCOPUS Author ID: 52163993900  
*h-index*: 9  
WEBSITES:  
UNIWA <https://fst.uniwa.gr/en/profile/eftichia-kritsi/>  
(School of Food Sciences – Department of Food Science and Technology)  
Google Scholar: <https://scholar.google.com/citations?user=5hBJLGIAAAAJ&hl=el>  
Research Gate: <https://www.researchgate.net/profile/Eftichia-Kritsi>

## 2. EDUCATION

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**2017** PhD in Chemistry  
National Technical University of Athens (NTUA), School of Chemical Engineering  
National Hellenic Research Foundation (NHRF), Institute of Chemical Biology  
**Title:** «*Computational tools for exploring novel bioactive compounds for selected protein targets*».  
doi: 10.12681/eadd/40331  
Handle: <http://hdl.handle.net/10442/hedi/40331>

**2012** MSc in Chemistry  
National and Kapodistrian University of Athens (UOA), School of Science, Department of Chemistry  
National Hellenic Research Foundation (NHRF), Institute of Chemical Biology  
**Title:** «*Conformational analysis and pharmacophore model generation of AT1 antagonists*».

**2010** BSc in Chemistry  
National and Kapodistrian University of Athens (UOA), School of Science, Department of Chemistry  
**Title of dissertation thesis:** «*Identification and conformational analysis of the antihypertensive drug telmisartan*».

## 3. FOREIGN LANGUAGES – COMPUTER SKILLS

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English language Certificate of Competency in English, University of Michigan  
French language DELF 1<sup>er</sup> degré - Level B2  
Excellent computer skills ECDL Hellas  
Excellent IBM SPSS Statistics & ChemDraw – PerkinElmer Informatics

## 4. PROFESSIONAL EXPERIENCE

<b>2023-Today</b> <i>(current position)</i>	<b>Assistant Professor</b> Department of Food Chemistry and Technology School of Food Sciences University of West Attica (UNIWA)
31.03.2021-12.07.2021 & 24.03.2022-08.07.2022 & 27.03.2023-04.05.2023	<b>Lecturer (P.O. 407/1980)</b> Department of Food Chemistry and Technology School of Food Sciences University of West Attica (UNIWA)
24.02.2020-03.07.2020 & 05.10.2020-28.02.2021 & 01.03.2021-12.07.2021 & 11.10.2021-25.02.2022 & 01.03.2022-08.07.2022 & 10.10.2022-17.02.2023 & 01.03.2023-04.05.2023	<b>Academic Fellow (Issue.29 N.4009/2011)</b> Department of Food Chemistry and Technology School of Food Sciences University of West Attica (UNIWA)
18.12.2017-17.06.2018 & 01.08.2018-30.11.2018 & 10.12.2018-09.08.2020 & 15.02.2021-14.07.2021 & 15.07.2021-14.12.2021	<b>Postdoctoral Researcher</b> Institute of Chemical Biology (ICB) National Hellenic Research Foundation (NHRF)
01.09.2015-30.11.2015	<b>PhD Candidate</b> Institute of Chemical Biology (ICB) National Hellenic Research Foundation (NHRF)

## 5. RESEARCH ACTIVITIES

### 5.1 PARTICIPATION IN RESEARCH PROGRAMS

#### A1. As PhD candidate

- Title:** "Targeted therapeutic approaches against ageing and degenerative diseases, cancer in particular - Project STHENOS"

**Program Title:** Research Funding Program KRIPIS

**Funding Source:** Operational Programme Competitiveness- Entrepreneurship-Innovation, **EPANEK 2007-2013**

**Research Objective:** "In silico Screening"

**Duration:** 01.09.2015-30.11.2015

**Host:** Institute of Chemical Biology (ICB), National Hellenic Research Foundation (NHRF)

#### A2. As Postdoctoral Researcher

- Title:** "Analysis Services".

**Funding Source:** Institute of Chemical Biology (ICB), NHRF

**Research Objective:** "Performing NMR experiments, processing and interpreting spectral data"

**Duration:** 15.02.2021-14.07.2021 & 15.07.2021-14.12.2021

**Host:** Institute of Chemical Biology (ICB), National Hellenic Research Foundation (NHRF)

# CURRICULUM VITAE

2. **Title:** "Targeted therapeutic approaches against ageing and degenerative diseases, cancer in particular - Hit compounds optimization"

**Program Title:** KRIPIS 2-Project STHENOS-B

**Founding Source:** Operational Programme Competitiveness - Entrepreneurship - Innovation, EPANEK 2014-2020

**Research Objective:** "Enrichment of precursor bioactive compounds for the BRAFV600E protein by screening chemo-libraries. Study of selective inhibition by molecular docking and molecular dynamics techniques"

**Duration:** 18.12.2017-17.06.2018 & 01.08.2018-30.11.2018

**Host:** Institute of Chemical Biology (ICB), National Hellenic Research Foundation (NHRF)

3. **Title:** Preclinical development of innovative neuroprotective and neuroregenerative synthetic microneurotrophins for the therapy of Alzheimer's disease"

**Program Title:** DINNESMIN

**Founding Source:** European Regional Development Fund - EU, Greek Operational Programme under the call Research - Create - Innovate

**Research Objective:** "In silico design and study of novel synthetic microneurotrophins with neuroprotective and neuroregenerative activity"

**Duration:** 10.12.2018-09.08.2020

**Host:** Institute of Chemical Biology (ICB), National Hellenic Research Foundation (NHRF)

## 5.2 FELLOWSHIPS - AWARDS

### A. Fellowships

**16.02.2020-16.02.2022**

**Postdoctoral Fellowship** - State Scholarships Foundation

**Program Title:** Human Resources Development, Education and Lifelong Learning» in the context of the project "Reinforcement of Postdoctoral Researchers - 2nd Cycle" (MIS-5033021)

**Title:** "A combinatorial methodology for the discovery of novel epigenetic inhibitors"

**16.04.2017-31.08.2017**

**Postdoctoral Fellowship** - State Scholarships Foundation

**Program Title:** IKY Excellence Scholarships for Postgraduate Studies in Greece - Siemens Program

**Title:** "A combined approach for the discovery of novel compounds with repellent properties"

**01.05.2013-30.06.2014 &**

**PhD candidate**

**01.01.2012-31.03.2012**

**Program Title:** «D.156: Program K. Karatheodory 2010-2013»

**Title:** "Conformational Analysis of Novel Oxytocin Analogues using a combination of NMR-data and molecular design calculation"

### B. Awards

**2017**

**1<sup>st</sup> Prize for Poster Presentation**, "Synthesis of novel antioxidant peptides", 3<sup>rd</sup> Panhellenic Congress of Greek Pharmacy Departments, RESEARCH & APPLICATIONS, Aristotle University, Thessaloniki, Greece, February 18-19, 2017.

## 5.3 ORAL ANNOUNCEMENTS IN CONFERENCES

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1. «**Δημιουργία Φαρμακοφόρων Μοντέλων και Εικονική Σάρωση Βιβλιοθηκών Μορίων**»  
*Workshop: Σχεδιασμός Φαρμάκων - Μοριακή Δυναμική*, National Hellenic Research Foundation, Athens, Greece, October 7-8 & 21-22, 2013.
2. «**In silico methodologies in Drug Design**»  
*1<sup>st</sup> International Spring Meeting, HeCrA's Young Researchers*, National Hellenic Research Foundation, Athens, Greece, May 27-28, 2017.
3. «**New scaffolds with antifungal properties. The case of Aspergillus fumigatus**»  
*10<sup>th</sup> International Symposium on Computational Methods in Toxicology and Pharmacology Integrating Internet Resources (CMTPI-2019)*, Ioannina, Greece, June 23-27, 2019.
4. «**Discovery of novel epigenetic inhibitors: A computational approach**»  
*10<sup>th</sup> International Conference of the Hellenic Crystallographic Association (HeCrA)*, Dimokritos, Athens, Greece, October 15-17, 2021.

## 5.4 REVIEWER IN INTERNATIONAL SCIENTIFIC JOURNALS

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*Journal of Chemistry, Molecules*

## 6. ACADEMIC EXPERIENCE

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### A. Teaching in Undergraduate Study Programs

A.1. **Lecturer 5 - 407/1980** - Department of Food Science and Technology, School of Food Sciences, University of West Attica.

#### ACADEMIC YEAR 2022-2023

**24.03.2022-08.07.2022**      **Course Title: Organic Chemistry**  
Theory, Tutorial, Laboratory  
**Semester: 2 (Spring)**

#### ACADEMIC YEAR 2021-2022

**24.03.2022-08.07.2022**      **Course Title: Organic Chemistry**  
Theory, Tutorial, Laboratory  
**Semester: 2 (Spring)**

#### ACADEMIC YEAR 2020-2021

**31.03.2021-12.07.2021**      **Course Title: Instrumental Food Analysis**  
Laboratory  
**Semester: 6 (Spring)**

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A.2. Academic Fellow - Department of Food Science and Technology, School of Food Sciences, University of West Attica.

## ACADEMIC YEARS 2022-2023 / 2021-2022 / 2020-2021 / 2019-2020

**10.10.2022-17.02.2023 & 11.10.2021-25.02.2022 & 05.10.2020-28.02.2021**      **Course Title:** General Chemistry Laboratory  
**Semester:** 1 (Winter)

**01.03.2023-04.05.2023 & 01.03.2022-08.07.2022 & 01.03.2021-12.07.2021 & 24.02.2020-03.07.2020**      **Course Title:** Organic Chemistry Laboratory  
**Semester:** 2 (Spring)

## B. Teaching in Postgraduate Study Programs

### ➤ 2017-today

Lectures on Computational Chemistry in the frame of the Interinstitutional M.Sc. "BIOENTREPRENEURSHIP", University of Thessaly, Department of Biochemistry and Biotechnology & National Hellenic Research Foundation, Institute of Chemical Biology, Greece

**Lecture Title:** "Novel approaches of virtual screening for the design and development of pharmaceutical compounds"

### ➤ 2019-today

Lectures on Computational Chemistry in the frame of the Interinstitutional Program of postgraduate studies in oncology, University of Crete, Department of Biochemistry and Biotechnology & National Hellenic Research Foundation, Institute of Chemical Biology

**Lecture Title:** "Novel approaches of virtual screening for the design and development of pharmaceutical compounds"

### ➤ 2021-today

Lectures on Computational and Analytical Chemistry based on Food Science in the frame of the M.Sc. "Food Science: Innovation and Safety", University of West Attica, Department of Food Science and Technology

Course	Lecture Title
Food Analysis	"Review of methods for determining general chemical composition, their scope and limitations"
Food Analysis	" Spectroscopic Techniques [Infrared (IR) & Nuclear Magnetic Resonance (NMR)] & Applications in Food Analysis "
Principles & methods of food processing & preservation	"Food Irradiation"
Food Product Innovation and Development	" Novel techniques for the discovery of bioactive compounds and applications in food science"

## C. Supervision of BSc and MSc thesis

C1. Supervisor of BSc thesis, Department of Food Science, School of Food Science, University of West Attica

1. **Lazaros Kaltsis (2021)**

**Title:** «Correlation of physicochemical properties and antioxidant activity of phenolic compounds, applying in silico and in vitro methods»

2. **Alexandra Arfani & Marina Kamaterou (2022)**

**Title:** *The use of edible packaging in food technology»*

3. **Flora Karpontini (2022)**

**Title:** «Food ingredients and bioactive compounds with potential contribution to the treatment of SARS-CovV-2 infection (COVID-19)»

4. **Vasileios Tsirgiotis (2022)**

**Title:** «Enrichment of olive oils with aromatic plants: applications and future perspectives»

5. **Ifigeneia Nicolaou & Maria Markou (2022)**

**Title:** «Discovery of natural compounds with antimicrobial properties against food diseases by applying computational tools»

6. **Dimitra Boutsini (2023)**

**Title:** «Dry-aging meat: Tool for the quality and organoleptic characteristics optimization»

7. **Eleftheria Gkortsia (2023)**

**Title:** «Computational techniques for the discovery of novel compounds inhibitors of enzymatic browning»

8. **Aikaterini-Filippi Spyrou (2023)**

**Title:** «Antimicrobial Activity Prediction of Lavender Essential Oil»

9. **Antonia Bakratsa (2023)**

**Title:** «Challenges and Opportunities for Food Waste Valorization»

10. **Konstantina Keropoulou (2023)**

**Title:** «Malting and brewing in the beer processing. New trends in the industry»

11. **Maria Bouraimi (2023)**

**Title:** «Vegetarian Diet: Health benefits and risks»

C2. Member of Examining of BSc thesis Committee, Department of Food Science, School of Food Science, University of West Attica

1. **Eleni Emini (2021)**

**Title:** «Coffee : brewing, aroma chemistry and effect of consumption on human health»

2. **Ifigeneia Konratieva (2021)**

**Title:** «Review of the effect of bioactive constituents of superfoods on gut microbiota»

3. **Aikaterini Nikolaidou (2021)**

**Title:** *Review on the probiotic and prebiotic activity of fermented food products »*

4. **Giannis Meinti (2021)**

**Title:** «Analytical methods for the detection of adulteration of products in the Greek food and beverage market»

5. **Aikaterino Vienna (2022)**

**Title:** «Aloe, chemical composition – antioxidants and antimicrobials properties and its usage in food science»



**6. Evangelos Pekos (2023)**

**Title:** «*Applications of image analysis techniques in the quality control of coffee varieties*»

**7. Dinitrios Kontolatis (2023)**

**Title:** «*Personalized Nutrition: Future Directions and Tomorrow's Challenges for the Scientific Community*»

**8. Ioanna Stefanaki (2023)**

**Title:** «*Strawberry nutritional composition study*»

**9. Aggelos Christakis (2023)**

**Title:** «*Pulsed Electric Field Treatment of Liquid Foods*»

**10. Marianna Oikonomakou (2023)**

**Title:** «*Pastirma sustainability study using analytical methods*»

**11. Georgios Deligiorgis (2023)**

**Title:** «*Postbiotics and their applications in food and health*»

**12. Dimitris Giannis and Dimitrios Zotos (2023)**

**Title:** «*Extraction of Phenolic Compounds from Lemon Balm (*Melissa officinalis*) By-Products Using Experimental Design and Liquid Chromatography-Mass Spectrometry (LC-MS/MS)*»

**13. Constantinos Pallikaras (2023)**

**Title:** «*Identification of bioactive substances from aromatic plants and the in silico study of their bioactivity*»

**14. Athanasios Elenis and Aikaterini Stamatopoulou (2023)**

**Title:** «*Pharmaceutical olive oil: Applications and future perspectives*»

**15. Efthimia Katsioulas (2023)**

**Title:** «*Comparative study of fruit kernels using infrared spectroscopy*»

*C3. Supervisor and co-supervisor of MSc thesis*

*C3.1 M.Sc. "Food Innovation, Quality and Safety", Department of Food Science and Technology, School of Food Sciences, University of West Attica*

**1. Aggeliki Kounoupa (in progress)**

**Title:** «*Discovery of novel umami taste activators using computational techniques*».

**2. Maria Kontomitrou (in progress)**

**Title:** «*Microalgae as a source of high-added value bioactive compounds*».

**3. Panagiotis Balos (in progress)**

**Title:** «*Alternative foods as sources of bioactive compounds*».

**4. Paraskevi Anastasiou (2023)**

**Title:** «*Review on medicinal plants of the Greek biodiversity and their applications in food products*».

*C3.2 Interinstitutional Program of postgraduate studies in oncology, University of Crete, Department of Biochemistry and Biotechnology & National Hellenic Research Foundation, Institute of Chemical Biology*

**5. Christos Markatos (2021)**

**Title:** «*Natural products as epigenetic modulators targeting anticancer therapeutics*». Co-supervision with Dr. M. Zervou, Senior Researcher, ICB, NHRF

## **7. SCIENTIFIC PUBLICATIONS – BOOK CHAPTERS**

### **7.1 PUBLICATIONS IN PEER REVIEWED SCIENTIFIC JOURNALS**

**P1.** C. Fotakis, D. Christodouleas, P. Zoumpoulakis, **E. Kritsi**, N.-P. Benetis, T. Mavromoustakos, H. Reis, A. Gili, M. G. Papadopoulos, M. Zervou, «Comparative biophysical studies of sartan class drug

molecules losartan and candesartan (CV-11974) with membrane bilayers», *J. Phys. Chem. B*, 115, 6180-6192, **2011**. doi: <https://doi.org/10.1021/jp110371k> (IF 2021-2022: 2.991)

**P2.** C. Fotakis, G. Megariotis, D. Christodouleas, **E. Kritsi**, P. Zoumpoulakis, D. Ntountaniotis, M. Zervou, C. Potamitis, A. Hodzic, G. Pabst, M. Rappolt, G. Mali, J. Baldus, C. Glaubitz, M. G. Papadopoulos, A. Afantitis, G. Melagraki, T. Mavromoustakos, «Comparative study of the AT1 receptor prodrug antagonist candesartan cilexetil with other sartans on the interactions with membrane bilayers», *Biochim. Biophys. Acta-Biomembr.*, 1818, 3107-3120, **2012**. doi: <https://doi.org/10.1016/j.bbamem.2012.08.009> (IF 2021: 3.72)

**P3.** **E. Kritsi**, C. Potamitis, S. Durdagi, P. Zoumpoulakis, S. Golic Grdadolnik, T. Mavromoustakos, «Molecular insights into the AT1 antagonism based on biophysical and *in silico* studies of telmisartan», *Med. Chem. Res.*, 22, 4842-4857, **2013**. doi: <https://doi.org/10.1007/s00044-012-0464-5> (IF 2021: 2.21)

**P4.** T. Fotopoulou, A. Ciric, **E. Kritsi**, R. C. Calhelha, I. C. F. R. Ferreira, M. Sokovic, P. Zoumpoulakis, M. Koufaki, «Antimicrobial/Antibiofilm Activity and Cytotoxic Studies of  $\beta$ -Thujaplicin Derivatives», *Arch. Pharm. Chem. Life Sci.*, 349, 698-709, **2016**. doi: <https://doi.org/10.1002/ardp.201600095> (IF 2021-2022: 4.74)

**P5.** D. Xanthopoulos, **E. Kritsi**, C. T. Supuran, M. G. Papadopoulos, G. Leonis, P. Zoumpoulakis, «Discovery of HIV Type 1 Aspartic Protease Hit Compounds through Combined Computational Approaches», *ChemMedChem*, 11, 1646-1652, **2016**. doi: <https://doi.org/10.1002/cmdc.201600220> (IF 2021-2022: 3.466)

**P6.** **E. Kritsi**, M. T. Matsoukas, C. Potamitis, V. Karageorgos, A. Detsi, V. Magafa, G. Liapakis, T. Mavromoustakos, P. Zoumpoulakis, «Exploring new scaffolds for angiotensin II receptor antagonism», *Bioorg. Med. Chem.*, 24, 4444-4451, **2016**. doi: <https://doi.org/10.1016/j.bmc.2016.07.047> (IF 2020-2021: 3.641)

**P7.** M. Smiljkovic, M. T. Matsoukas, **E. Kritsi**, U. Zelenko, S. Golic Grdadolnik, R. Calhelha, I. Ferreira, S. Sankovic-Babic, J. Glamoclija, T. Fotopoulou, M. Koufaki, P. Zoumpoulakis, M. Sokovic, «Nitrate esters of heteroaromatic compounds as novel *Candida Albicans* CYP51 enzyme inhibitors», *ChemMedChem.*, 13, 251-258, **2017**. doi: <https://doi.org/10.1002/cmdc.201700602> (IF 2021-2022: 3.466)

**P8.** G. Deraos, **E. Kritsi**, M. T. Matsoukas, K. Christopoulou, H. Kalbacher, P. Zoumpoulakis, V. Apostolopoulos, J. Matsoukas, «Design of Linear and Cyclic Mutant Analogues of Dirucotide Peptide (MBP82–98) against Multiple Sclerosis: Conformational and Binding Studies to MHC Class II», *Brain Sci.*, 8, 213-229, **2018**. doi: <https://doi.org/10.3390/brainsci8120213> (IF 2021-2022: 3.114)

**P9.** **E. Kritsi**, M. T. Matsoukas, C. Potamitis, A. Detsi, M. Ivanov, M. Sokovic, P. Zoumpoulakis, «Novel Hit Compounds as Putative Antifungals: The Case of *Aspergillus fumigatus*», *Molecules*, 24, 3853-3871, **2019**. doi: <https://doi.org/10.3390/molecules24213853> (IF 2021: 4.927)

**P10.** I. Kostopoulou, A. Diassakou, E. Kavetsou, **E. Kritsi**, P. Zoumpoulakis, E. Pontiki, D. Hadjipavlou-Litina, A. Detsi, «Novel quinolinone–pyrazoline hybrids: synthesis and evaluation of antioxidant and lipoxygenase inhibitory activity», *Mol. Divers.*, 25, 723-740, **2021**. doi: <https://doi.org/10.1007/s11030-020-10045-x> (IF 2021: 3.364)

**P11.** A. Tzani, C. Vaitsis, **E. Kritsi**, M. Smiljkovic, M. Sokovic, P. Zoumpoulakis, A. Detsi, «Green synthesis of bis-(b-dicarbonyl)-methane derivatives and biological evaluation as putative anticandidal agents», *J. Mol. Struct.*, 1216, 128276, **2020**. doi: <https://doi.org/10.1016/j.molstruc.2020.128276> (IF 2021-2022: 3.196)

**P12.** J. Zachmann, **E. Kritsi**, A. Tapeinou, P. Zoumpoulakis, T. Tselios, M. T. Matsoukas, «A Combined Computational and Structural Approach into Understanding the Role of Peptide Binding and Activation of the Melanocortin Receptor 4», *J. Chem. Inf. Model*, 60, 1461-1468, **2020**. doi: <https://doi.org/10.1021/acs.jcim.9b01196> (IF 2021: 6.162)

*J. Zachmann & E. Kritsi contributed equally to the present work*

**P13.** D. T. Pournara, A. Durner, **E. Kritsi**, A. Papakostas, P. Zoumpoulakis, A. Nicke, M. Koufaki, «Design, synthesis, and *in vitro* evaluation of novel P2X7 antagonists», *ChemMedChem*, 15, 2530-2543, **2020**. doi: <https://doi.org/10.1002/cmdc.202000303> (IF 2021-2022: 3.466)

**P14.** G. Zoidis, **E. Kritsi**, P. Lecinska, M. Ivanov, P. Zoumpoulakis, M. Sokovic, M. Catto, «The Triazole ring as a Privileged Scaffold for Putative Antifungals: Synthesis and Evaluation of a Series of New analogues», *ChemMedChem*, 16, 134-144, **2020**. doi: <https://doi.org/10.1002/cmdc.202000312> (IF 2021-2022: 3.466)

**P15.** G. E. Magoulas, L. Kalopetridou, A. Ćirić, **E. Kritsi**, P. Kouka, P. Zoumpoulakis, N. Chondrogianni, M. Soković, K. C. Prousis, T. Calogeropoulou, «Synthesis, biological evaluation and QSAR studies of new thieno[2,3-d] pyrimidin-4(3H)-one derivatives as antimicrobial and antifungal agents», *Bioorg. Chem.*, 106, 104509-104524, **2021**. doi: <https://doi.org/10.1016/j.bioorg.2020.104509> (IF 2021: 5.307)

**P16.** K. Koumaki, G. Kontogianni, V. Kosmidou, F. Pahitsa, **E. Kritsi**, M. Zervou, A. Chatziioannou, V. L. Souliotis, O. Papadodima, A. Pintzas, «BRAF paradox breakers PLX8394, PLX7904 are more effective against BRAFV600E CRC cells compared with the BRAF inhibitor PLX4720 and shown by detailed pathway analysis», *Biochim. Biophys. Acta, Mol. Basis Dis.*, 1867, 166061-166074, **2021**. doi: <https://doi.org/10.1016/j.bbadis.2020.166061> (IF 2021: 6.03)

**P17.** I. Kostopoulou, A. Tzani, N. I. Polyzos, M. A. Karadendrou, **E. Kritsi**, E. Pontiki, T. Liargkova, D. Hadjipavlou-Litina, P. Zoumpoulakis, A. Detsi, «Exploring the 2'-hydroxy-chalcone framework for the development of antioxidant and anti-inflammatory agents», *Molecules*, 22, 2777-2801, **2021**. doi: <https://doi.org/10.3390/molecules26092777> (IF 2021: 4.927)

**P18.** D. Matiadis, P. G. V. Liggri, **E. Kritsi**, N. Tzioumaki, P. Zoumpoulakis, D. P. Papachristos, G. Balatsos, M. Zagnou, A. Michaelakis, «Curcumin derivatives as potential mosquito larvicidal agents against two mosquito vectors, *Culex pipiens* and *Aedes albopictus*», *Int. J. Mol. Sci.*, 22, 8915, **2021**. doi: <https://doi.org/10.3390/ijms22168915> (IF 2021-2022: 6.208)

**P19.** D. Tagkouli, T. Tsiaka, **E. Kritsi**, M. Soković, V. J. Sinanoglou, D. Z. Lantzouraki, P. Zoumpoulakis, «Towards the Optimization of Microwave-Assisted Extraction and the Assessment of Chemical Profile, Antioxidant and Anti-microbial Activity of Wine Lees Extracts», *Molecules*, 22, 1-19, **2022**. doi: <https://doi.org/10.3390/molecules27072189> (IF 2021: 4.927)

**P20.** G. V. Paramel, M. Lindkvist, B. A. Idosa, L. S. Sebina, C. Kardeby, T. Fotopoulou, D. Pournara, **E. Kritsi**, E. Ifanti, M. Zervou, M. Koufaki, M. Grenegård, K. Fransén, «Novel purine analogues regulate IL-

1 $\beta$  release via inhibition of JAK activity in human aortic smooth muscle cells», *Eur. J. Pharmacol.*, 929, 172128, **2022**. doi: <https://doi.org/10.1016/j.ejphar.2022.175128> (IF 2021-2022: 4.432)

**P21. E. Kritsi**, P. G. V. Liggri, E. C.V. Stamati, K. E. Tsitsanou, S. E. Zographos, A. Michaelakis, D. Papachristos, P. Zoumpoulakis, «A Combined Computational Methodology for the Discovery of Hit Compounds with Putative Insect Repellency Properties», *ChemMedChem*, e202200271, **2022**. doi: <https://doi.org/10.1002/cmde.202200271> (IF 2021-2022: 3.466)

**P22. E. Kritsi**, T. Tsiaka, A. G. Ioannou, V. Mantanika, I. F. Strati, I. Panderi, P. Zoumpoulakis, V. J. Sinanoglou, «*In vitro* and *In Silico* Studies to Assess Edible Flowers' Antioxidant Activity», *Appl. Sci.*, 12, 7331, **2022**. doi: <https://doi.org/10.3390/app12147331> (IF 2022-2023: 2.838)

**P23.** A. G. Ioannou, **E. Kritsi**, V. J. Sinanoglou, D. Cavouras, T. Tsiaka, D. Houhoula, P. Zoumpoulakis, I. F. Strati, «Highlighting the potential of Attenuated Total Reflectance – Fourier Transform Infrared (ATR-FTIR) spectroscopy to characterize honey samples with Principal Component Analysis (PCA)», *Anal. Lett.*, 56, 789-806, **2022**. doi: <https://doi.org/10.1080/00032719.2022.2103143> (IF 2021-2022: 2.267)

**P24.** T. Tsiaka, **E. Kritsi**, D. Z. Lantzouraki, P. Christodoulou, D. Tsigrimani, I. F. Strati, V. J. Sinanoglou, P. Zoumpoulakis, «Assessing the Phytochemical Profile and Potential of Traditional Herbal Infusions against Aldose Reductase through *In Silico* Studies and LC-MS/MS Analysis», *Appl. Sci.*, 18, 8361, **2022**. doi: <https://doi.org/10.3390/app12168361> (IF 2022-2023: 2.838)

**P25.** A. Tzani, **E. Kritsi**, L. Tsamantioti, I. Kostopoulou, M. A. Karadendrou, P. Zoumpoulakis, A. Detsi, «Synthesis, Conformational Analysis and ctDNA Binding Studies of Flavonoid Analogues Possessing the 3,5-di-tert-butyl-4-hydroxyphenyl Moiety», *Antioxidants*, 11, 2273, **2022**. doi: <https://doi.org/10.3390/antiox11112273> (IF 2022-2023: 7.675)

**P26.** T. Tsiaka, D. Z. Lantzouraki, G. Polychronaki, G. S. Sotiroudis, **E. Kritsi**, V. J. Sinanoglou, D. P. Kalogianni, P. Zoumpoulakis, «Optimization of Ultrasound- and Microwave-Assisted Extraction for the Determination of Phenolic Compounds in Peach Byproducts Using Experimental Design and Liquid Chromatography – Tandem Mass Spectrometry», *Molecules*, 28, 518, **2023**. doi: <https://doi.org/10.3390/molecules28020518> (IF 2021-2022: 4.927)

**P27. E. Kritsi\***, T. Tsiaka, G. Sotiroudis, E. Mouka, K. Aouant, G. Ladika, P. Zoumpoulakis, D. Cavouras, V. J. Sinanoglou, «Potential Health Benefits of Banana Phenolic Content during Ripening by Implementing Analytical and *In Silico* Techniques», *Life*, 13, 332, **2023**. doi: <https://doi.org/10.3390/life13020332> (IF 2022-2023: 3.253)

\* corresponding author

**P28.** V. J. Sinanoglou, T. Tsiaka, K. Aouant, E. Mouka, G. Ladika, **E. Kritsi**, S. J. Konteles, A.-G. Ioannou, P. Zoumpoulakis, I. F. Strati, D. Cavouras, «Quality Assessment of Banana Ripening Stages by Combining Analytical Methods and Image Analysis», *Appl. Sci.*, 13, 3533, **2023**. doi: <https://doi.org/10.3390/app13063533> (IF 2022-2023: 2.838)

**P29.** T. Tsiaka, **E. Kritsi\***, S. M. Bratakos, G. Sotiroudis, P. Petridi, I. Savva, P. Christodoulou, I. F. Strati, P. Zoumpoulakis, D. Cavouras, V. J. Sinanoglou, «Quality Assessment of Ground Coffee Samples from Greek Market Using Various Instrumental Analytical Methods, *In Silico* Studies and Chemometrics», *Antioxidants*, 12, 1184, **2023**. doi: <https://doi.org/10.3390/antiox12061184> (IF 2022-2023: 7.675)

\* corresponding author

**P30.** Y. Batsi, G. Antonopoulou, T. Fotopoulou, K. Koumaki, **E. Kritsi**, C. Potamitis, M. Goulielmaki, S. Skarmalioraki, C. Papalouka, E. Poulou-Sidiropoulou, V. Kosmidou, S. Douna, M. S. Vidali, E. F. Gkotsi, A. Chatziioannou, V. L. Souliotis, V. Pletsas, O. Papadodima, V. Zoumpourlis, P. Georgiadis, M. Zervou, A. Pintzas, I. D. Kostas, «Design and Synthesis of Novel 2-Acetamido, 6-Carboxamide Substituted Benzothiazoles as Potential BRAFV600E Inhibitors - In vitro Evaluation of their Antiproliferative Activity», *ChemMedChem*, **2023**. doi: <https://doi.org/10.1002/cmdc.202300322> (IF 2022-2023: 3.400)

## 7.2 REVIEW ARTICLES IN PEER REVIEWED SCIENTIFIC JOURNALS

**R1.** T. F. Kellici, D. Ntountaniotis, **E. Kritsi**, M. Zervou, P. Zoumpoulakis, C. Potamitis, S. Durdagi, R. E. Salmas, G. Ergun, E. Gokdemir, M. Halabalaki, I. P. Gerothanassis, G. Liapakis, A. Tzakos, T. Mavromoustakos, «Leveraging NMR and X-ray Data of the Free Ligands to Build Better Drugs Targeting Angiotensin II Type 1 G-Protein Coupled Receptor», *Curr. Med. Chem.*, **23**, 36-59, **2016**. doi: <https://doi.org/10.2174/0929867323666151117122116> (IF 2021-2022: 4.74)

**R2.** K. Tsiantas, S. Konteles, **E. Kritsi**, V. J. Sinanoglou, T. Tsiaka, P. Zoumpoulakis, «Non-polar dietary and endogenous lipids on gut microbiota alterations. The role of lipidomics», *Int. J. Mol. Sci.*, **23**, 4070, **2022**. doi: <https://doi.org/10.3390/ijms23084070> (IF 2021-2022: 6.208)

**R3.** T. Tsiaka, **E. Kritsi**<sup>\*</sup>, K. Tsiantas, P. Christodoulou, V. J. Sinanoglou, P. Zoumpoulakis<sup>\*</sup>, «Design and Development of Novel Nutraceuticals: Current Trends and Methodologies», *Nutraceuticals*, **2**, 71-90, **2022**. doi: <https://doi.org/10.3390/nutraceuticals2020006>

<sup>\*</sup> corresponding author

## 7.3 CHAPTERS - TRANSLATION

**BC1.** A. Tzani, M. A. Karadendrou, T. Tsiaka, **E. Kritsi**, P. Zoumpoulakis, A. Detsi, «Exploring the Role of Natural Deep Eutectic Solvents (NADES) Towards the Valorization of Food Processing Industry Waste», Book Title: Deep Eutectic Solvents: Properties, Applications and Toxicity, Chapter ID: 75796, Chapter 2, Nova Science Publishers, Inc., ISBN: 978-1-68507-719-8, doi: <https://doi.org/10.52305/IWUI3187>

T. Βασική Οργανική Χημεία (Συμμετοχή στη Μεταφραστική Ομάδα) - Κωδικός Βιβλίου στον Εύδοξο: 122074092, Έκδοση: 1/2023, Συγγραφείς: Bruice P.Y., ISBN: 9789963258208, Ριαθέτης (Εκδότης): BROKEN HILL PUBLISHERS LTD

## 7.4 PROCEEDINGS IN PEER REVIEWED SCIENTIFIC CONFERENCES

**PROC1.** «Conformational similarities and differences of Angiotensin II (All): All acetate vs All TFA salt in solution».

C. Potamitis, **E. Kritsi**, A. Resvani, M. E. Androutsou, P. Plotas, P. Katsougraki, G. Agelis, M. Zervou, P. Zoumpoulakis, J. Matsoukas

*32<sup>th</sup> European Peptide Symposium*, Athens, Greece, September 2-7, **2012**.

*European Peptide Science*, pp. 526-527, ISBN 978-960-466-121-3.

**PROC2.** «Conformational determination of potent antagonist analogues of oxytocin by Nuclear Magnetic Resonance Spectroscopy and Molecular Dynamics Simulations».

V. Magafa, **E. Kritsi**, C. Potamitis, P. Zoumpoulakis, N. L. Assimomytis, L. Borovičková, J. Slaninová, P. Cordopatis

*33<sup>th</sup> European Peptide Symposium*, Bulgaria, Sofia, August 31-September 5, **2014**.

*European Peptide Science*, pp. 198-199, ISBN 978-619-90427-2-4.

**PROC3. «Curcumin derivatives as potential mosquito larvicidal agents against two mosquito vectors, *Culex pipiens* and *Aedes albopictus*».**

P. G. V. Liggri, D. Matiadis, E. Kritsi, N. Tzioumaki, P. Zoumpoulakis, D. P. Papachristos, G. Balatsos, M. Sagnou, A. Michaelakis

*10<sup>th</sup> International Conference of the Hellenic Crystallographic Association (HeCrA), Athens, Greece, 15-17 October, 2021.*

*Proceedings of 10<sup>th</sup> International Conference of HeCrA, pp. 79-80.*

**PROC4. «A combined computational methodology for the discovery of hit compounds with putative insect repellency properties».**

P. G. V. Liggri, E. Kritsi, K. E. Tsitsanou, S. E. Zographos, A. Michaelakis, D. P. Papachristos, P. Zoumpoulakis

*10<sup>th</sup> International Conference of the Hellenic Crystallographic Association (HeCrA), Athens, Greece, 15-17 October, 2021.*

*Proceedings of 10<sup>th</sup> International Conference of HeCrA, pp. 93-94.*

**PROC5. «Structural study of the potentially antimicrobial MqsAp peptide from the MqsR–MqsA toxin–antitoxin system using NMR Spectroscopy and Molecular Modeling».**

C. Ntallis, C. T. Chasapis, M. Kousisi, M. Plakantonaki, E. Kritsi, T. Tselios, P. Zoumpoulakis, A. Vlamis-Gardikas

*10<sup>th</sup> International Conference of the Hellenic Crystallographic Association (HeCrA), Athens, Greece, 15-17 October, 2021.*

*Proceedings of 10<sup>th</sup> International Conference of HeCrA, pp. 100-101.*

### **7.5 POSTER PRESENTATIONS IN CONFERENCES**

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**PP1. «Comparative conformational analysis study of candesartan CV with eprosartan and losartan».**

E. Kritsi, S. Chatziaggelou, P. Zoumpoulakis, C. Potamitis, N. Papakonstantopoulos, T. Mavromoustakos

*11<sup>th</sup> Conference Medicinal Chemistry, Patras, April 25-28, 2010.*

**PP2. «Comparative conformational analysis and docking studies between Telmisartan and Valsartan. Insights on the molecular basis of action of their pharmacophores associated with AT<sub>1</sub> antagonism».**

P. Zoumpoulakis, S. Durdagi, C. Potamitis, E. Kritsi, S. Golic Grdadolnik, T. Mavromoustakos

*14<sup>th</sup> Hellenic Symposium on Medicinal Chemistry, Thessaloniki, Greece, April 23-25, 2010.*

**PP3. «Comparative studies between telmisartan and other AT<sub>1</sub> antagonists at membranes and receptor active site».**

P. Zoumpoulakis, S. Durdagi, C. Potamitis, E. Kritsi, S. Grdadolnik, T. Mavromoustakos

*12<sup>th</sup> Conference Medicinal Chemistry, Patras, April 12-15, 2011.*

**PP4. «Exploring the potential of flavonoids as tyrosinase inhibitors: molecular docking studies of natural and synthetic chalcones and aurones».**

O. Chatzivasilou, M. Roussaki, E. Kritsi, A. Detsi, P. Zoumpoulakis

*International Conference on Chemistry for Health, Athens, September 9-14, 2012.*

**PP5. «Design novel antibacterial compounds by using Virtual Screening».**

P. Zoumpoulakis, E. Kritsi, C. Potamitis

*9<sup>th</sup> Hellenic Symposium on Chemical Engineer, Athens, Greece, May 23-2, 2013.*

**PP6. «Design, synthesis and structure characterization of novel chalcones and aurones as tyrosinase inhibitors».**



O. Chatzivasiliou, M. Roussaki, **E. Kritsi**, B. Petrushevski, P. Zoumpoulakis, A. Detsi  
*9<sup>th</sup> Hellenic Symposium on Chemical Engineer*, Athens, Greece, May 23-2, **2013**.

**PP7. «Conformational Studies of [Mpa<sup>1</sup>]OT analogues».**

**E. Kritsi**, C. Potamitis, P. Zoumpoulakis, N. Assimomytis, J. Slaninová, P. Cordopatis, V. Magafa  
*15<sup>th</sup> Conference Medicinal Chemistry*, Patras, April 9-11, **2014**.

**PP8. «Study of novel bio-inspired tyrosinase modulators».**

D. Xanthopoulos, C. Kyrkou, M. Kokkoti, **E. Kritsi**, K. Proussis, S. Zografos, T. Kalogeropoulou, P. Zoumpoulakis  
*15<sup>th</sup> Conference of Medicinal Chemistry*, Patras, April 9-11, **2014**.

**PP9. «Exploring new scaffolds for angiotensin II receptor antagonism».**

**E. Kritsi**, M. T. Matsoukas, C. Potamitis, V. Karageorgos, A. Detsi, V. Magafa, G. Liapakis, T. Mavromoustakos, P. Zoumpoulakis  
*17<sup>th</sup> Hellenic Symposium on Medicinal Chemistry*, Thessaloniki, Greece, June 1-3, **2017**.

**PP10. «A combinatorial methodology for the discovery of new agents with insect repellent properties».**

**E. Kritsi**, S. E. Zographos, P. Zoumpoulakis  
*2<sup>nd</sup> International Conference on Pharmaceutical Chemistry*, Barcelona, Spain, October 2-4, **2017**.

**PP11. «New hit compounds targeting Odorant Binding Proteins (OBPs) as putative repellents».**

**E. Kritsi**, S. E. Zographos, P. Zoumpoulakis  
*3<sup>rd</sup> International Electronic Conference on Medicinal Chemistry*, November 1-3, **2017**.

**PP12. «Discovering Novel Ligands for Mosquito Odorant Binding Proteins (OBPs) using a combined computational methodology».**

P. G. V. Liggri, **E. Kritsi**, A. Michaelakis, D. P. Papachristos, K. E. Tsitsanou, P. Zoumpoulakis, S. E. Zographos  
*Instruct Biennial Structural Biology Conference Structural Biology: Deeper into the Cell*, Madrid, Spain, May 22-24, **2019**.

**PP13. «Structure-based design and Synthesis of putative BRAF<sup>V600E</sup> inhibitors as anticancer agents».**

G. E. Magoulas, **E. Kritsi**, M. Koufaki, D. Papahatjis, M. Zervou, T. Calogeropoulou  
*11<sup>th</sup> Joint Meeting on Medicinal Chemistry*, Prague, Czech Republic, June 27-30, **2019**.

**PP14. «Synthetic microneurotrophins as novel agonists of neurotrophin receptors».**

G. E. Magoulas, O. Kirkilessi, **E. Kritsi**, M. Zervou, I. Padiaditakis, P. Efstathopoulos, A. Kourgiantaki, K. C. Prousis, I. Charalampopoulos, A. Gravanis, T. Calogeropoulou  
*55<sup>th</sup> International Conference on Medicinal Chemistry*, Nantes, France, July 3-5, **2019**.

**PP15. «Design, Synthesis and Biological Evaluation of novel P2X7 inhibitors».**

D. Pournara, **E. Kritsi**, A. Papakostas, A. Krautloher, P. Zoumpoulakis, A. Nicke, M. Koufaki  
*VIII EFMC International Symposium on Advances in Synthetic and Medicinal Chemistry*, Athens, Greece, September 1-5, **2019**.

**PP16. «Design, Synthesis and Evaluation of microneurotrophins, novel synthetic agonists of neurotrophins receptors».**

O. Kirkilessi, G. Magoulas, **E. Kritsi**, M. Zervou, I. Padiaditakis, P. Efstathopoulos, A. Kourgiantaki, K. Prousis, I. Charalampopoulos, Achille Gravanis, T. Calogeropoulou  
*VIII EFMC International Symposium on Advances in Synthetic and Medicinal Chemistry*, Athens, Greece, September 1-5, **2019**.

**PP17. «Development of New Selective Glucocorticoid Receptor Agonists: hit-to-lead optimization».**

D. Siakouli, **E. Kritsi**, A. C.Tenchiu, N. Travlos, G. Panagiotou, A. Boulaka, K. Nasaj, C. Potamitis, O. Kirkilessi, A. Tzani, T. Calogeropoulou, C. Arbez-Gindre, M. N. Alexis, I. D. Kostas, M. Zervou, D. J. Mitsiou

*70<sup>th</sup> National Conference, Hellenic Society of Biochemistry and Molecular Biology, Athens, Greece, 29-1 December, 2019.*

**PP18. «BRAF inhibitors -paradox breakers efficiency and pathway analysis in colon cancer cell lines».**

K. Koumaki, G. Kontogianni, V. Kosmidou, E. Pappou, **E. Kritsi**, M. Zervou, A. Chatziioannou, V. L. Souliotis, O. Papadodima, A. Pintzas

*70<sup>th</sup> National Conference, Hellenic Society of Biochemistry and Molecular Biology, Athens, Greece, 29-1 December, 2019.*

**PP19. «Novel benzothiazole derivatives inhibit proliferation on BRAFV600E colorectal cancer cell lines».**

K. Koumaki, Y. Batsi, V. Kosmidou, **E. Kritsi**, M. Zervou, G. Antonopoulou, I. D. Kostas, V. L. Souliotis, A. Pintzas

*70<sup>th</sup> National Conference, Hellenic Society of Biochemistry and Molecular Biology, Athens, Greece, 29-1 December, 2019.*

**PP20. «Design and Synthesis of Potential Repellents of the Anopheles Gambiae Odorant Binding Protein Agam-OBP1 through the application of Dynamic Combinatorial Chemistry».**

E. Chazapi, **E. Kritsi**, C. Potamitis, P. G. V. Liggri, C. E. Drakou, K. E. Tsitsanou, D. P. Papachristos, A. Michaelakis, S. E. Zographos, K. C. Prousis, M. Zervou, T. Calogeropoulou

*18<sup>th</sup> Hellenic Symposium on Medicinal Chemistry, Athens, Greece, 25-27 February, 2021.*

**PP21. «A computational approach for the discovery of novel DNMT1 epigenetic inhibitors».**

**E. Kritsi**, P. Christodoulou, D. Lantzouraki, T. Tsiaka, P. Georgiadis, M. Zervou

*18<sup>th</sup> Hellenic Symposium on Medicinal Chemistry, Athens, Greece, 25-27 February, 2021.*

**PP22. «Design, synthesis and molecular docking studies of acetylcholinesterase inhibitors based on the coumarin scaffold».**

A. Katopodi, A. Kalospyros, G. Eressiou, P. Panousaki, **E. Kritsi**, M. Zervou, A. Detsi

*European Symposium on Organic Chemistry, Virtual Mini Symposium, 5-6 July, 2021.*

**PP23. «Novel Natural Compounds as Putative Antimicrobials: A Computational Approach».**

E. Kritsi, I. Nikolaou, M. Markou, S. J. Konteles, P. Zoumpoulakis, V. J. Sinanoglou

*13<sup>th</sup> International Conference on Instrumental Methods of Analysis – Modern Trends and Applications, Chania, Greece, 17-20 September, 2023.*

## **8. MEMBERSHIPS**

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Member: Association of Greek Chemists

Member: Hellenic Crystallographic Association