



Σύντομο Προφίλ Ακαδημαϊκού Προσωπικού / Σύντομο Βιογραφικό Σημείωμα

Πανεπιστήμιο:	Τεχνολογικό Πανεπιστήμιο Κύπρου
Επίθετο:	Βαρώτης
Όνομα:	Κωνσταντίνος
Βαθμίδα/Θέση:	Καθηγητής
Σχολή:	ΓΕΔΠ
Τμήμα:	Χημικών Μηχανικών
Επιστημονικό Πεδίο: *	Βιοκατάλυση και Βιοτεχνολογία

* Εξειδίκευση



Ακαδημαϊκά Προσόντα / Τίτλοι Σπουδών

(οι καταχωρήσεις να γίνουν αρχίζοντας από τον πιο υψηλό τίτλο)

Ακαδημαϊκός Τίτλος	Έτος	Ίδρυμα	Τμήμα	Τίτλος Διατριβής (Καταχωρείται προαιρετικά)
Καθηγητής	1990	Πανεπιστήμιο Κρήτης	Χημείας	
Διδακτορικό	2009	Michigan State University	Χημείας και Φυσικής	
Μαστερ	1998	Northeastern University	Φυσικής	
Πτυχίο	2002	U. of Cincinnati, OH, USA	Χημείας και Φυσικής	



Ιστορικό Εργοδότησης σε Ακαδημαϊκά Ιδρύματα/Ερευνητικά Κέντρα – να καταχωρηθούν οι τρεις (3) πιο πρόσφατες

Περίοδος Εργοδότησης		Εργοδότης	Τόπος	Θέση
Από	Μέχρι			
2009	Τώρα	Τεχνολογικό Πανεπιστήμιο Κύπρου	Λεμεσός, Κύπρος	Καθηγητής
2002	2009	Πανεπιστήμιο Κρήτης	Ηράκλειο Κρήτης	Καθηγητής
1998	2002	Πανεπιστήμιο Κρήτης	Ηράκλειο Κρήτης	Αν. Καθηγητής

Κύρια άρθρα σε επιστημονικά περιοδικά <u>με κριτές</u> , μονογραφίες, βιβλία, εκδόσεις συνεδρίων. Να καταχωρηθούν τα πέντε (5) πιο πρόσφατα και άλλα πέντε (5) επιλεγμένα – (μέγιστος αρ. δέκα (10))						
A/A	Έτος	Τίτλος	Άλλοι συγγραφείς	Επιστημονικό Περιοδικό και Εκδότης / Συνέδριο	Τόμος	Σελ.
1	2022	Application of double-pulse laser-induced breakdown spectroscopy (DP-LIBS), Fourier transform infrared micro-spectroscopy and Raman microscopy for the characterization of coppersulfides	Charalampos Tselios, Konstantinos A. Yiannakkos, Charalampos Andreou, Marios Papageorgiou and Antonis Nicolaides	RSC Adv.	12	631
2	2022	Evidence for reversible light-dependent transitions in the photosynthetic pigments of diatoms	C. Tselios	RSC Adv.	12,49	31555-31563
3	2019	Bio-hydrometallurgy dynamics of copper sulfide-minerals probed by micro-FTIR mapping and Raman microspectroscopy	A. Adamou, A. Nicolaides	Minerals Engineering	132	39-47
4	2018	Photosensitivity responses of <i>Sagittula stellata</i> probed by FTIR, fluorescence and Raman microspectroscopy	M. Papageorgiou, C. Tselios	RSC Advances	9, 47	27391-2739

5	2019	Discrete Ligand Binding and Electron Transfer Properties of <i>ba</i> ₃ -Cytochrome c Oxidase from <i>Thermus thermophilus</i> : Evolutionary Adaption to Low Oxygen and	C Koutsoupakis, T Soulimane	Accounts of chemical research 52 (5), 1380-139, (2019)	52,5	1380-1390
6	2016	Probing the whole ore chalcopyrite–bacteria interactions and jarosite biosynthesis by Raman and FTIR microspectroscopies	A Adamou, G Manos, N Messios, L Georgiou, C Xydas.	Bioresource Technology	214	852-855
7	2017	Detection of Maillard reaction products by a coupled HPLC-Fraction collector technique and FTIR characterization of Cu (II)- complexation with the isolated species	A. Ioannou, V. Daskalakis	Journal of Molecular Structure	1141	634-642
8	2012	Spectroscopic and Kinetic Investigation of the Fully Reduced and Mixed Valence States of <i>ba</i> ₃ -Cytochrome c Oxidase from <i>Thermus Thermophilus</i> : A FOURIER TRANSFORM INFRARED (FTIR) AND TIME-RESOLVED STEP-SCANFTIRSTUDY	C. Koutsoupakis, T. Soulimane	J. Biological Chemistry	287	37495-37507



ΔΙΠΑΕ
CYQAA

ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION



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9	2011	Probing protonation/deprotonation of tyrosine residues in cytochrome ba3 oxidase from <i>Thermus thermophilus</i> by time-resolved step-scan Fourier transform infrared spectroscopy	C. Koutsoupakis, O. Kolaj-Robin, T. Souliman	J. of Biological Chemistry	285	30600-30605
10	2017	Modifications of hemoglobin and myoglobin by Maillard reaction products (MRPs) A Ioannou, C Varotsis PloS one 12 (11), 1-13 (2017)	A. Ioannou	PloS	12	1-13

Εκθέσεις (όπου εφαρμόζεται). Να καταχωρηθούν οι πέντε (5) πιο πρόσφατες και άλλες πέντε (5) επιλεγμένες – (μέγιστος αρ. δέκα (10))

A/A	Ημερομηνία	Θέμα	Διεθνής / Τοπική	Τοποθεσία*	Ρόλος στην Έκθεση
1	10-15 July 2022	Structure of the CuB-NO in the binuclear center of heme-copper oxidoreductases	Διεθνής ICPP-12	Μαδρίτη	Invited talk
2	30/10/22 ως 4/11/22	Probing the dynamics of FCP protein from diatoms	Διεθνής ICRP2022 International conference on Retinal Proteins	Sapporo, Japan	Poster
3	May 29- June 2 2022	Probing the nitrite reductase activity of heme-copper respiratory oxidase	Διεθνής 241st ECS Meeting May 29-June	Vancouver	Invited talk
4	Nov27- Dec 4 2022	Probing the Dynamics of the Fucoxanthin-Chlorophyll <i>a/c</i> (FCPs) Proteins of the Marine Diatoms <i>Fragilariopsis sp.</i> and <i>P. tricorutum</i>	Διεθνής BioInorganic Chemistry	Kobe, Osaka	Invited talk
5	Febr. 19-23 2022	Resonance Raman of the CcO/NO ₂ reaction	Διεθνής Biophysical society meeting	San Francisco, USA	Poster
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ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION



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* Να καταχωρηθεί ο χώρος, η πόλη κ.τ.λ.

Ερευνητικά Projects. Να καταχωρηθούν τα πέντε (5) πιο πρόσφατα και άλλα πέντε (5) επιλεγμένα – (μέγιστος αρ. δέκα (10))

A/A	Ημερομηνία	Τίτλος	Επιχορήγηση Από:	Ρόλος στο Ερευνητικό Projects *
1	2019-2022	Production of the bioactive signaling messenger nitric oxide from nitrite: Probing the nitrite reductase activity of heme globins and mitochondrial hemecopper respiratory oxidase	Research Promotion Foundation	Collaborator
2	2012-2014	Application of Microscopic FTIR and Raman Imaging to Food Biotechnology	Research Promotion Foundation	Scientific/Project Coordinator
3	2010-2013	Activation and reduction of Nitric oxide (NO) to laughing gas (N ₂ O) by Nitric Oxide Reductase and heme-copper cbb3 oxidase	Research Promotion Foundation	Scientific/Project Coordinator
4	2018-2020	Real time monitoring the nature resources in the Mining Environments of Hellenic Copper Mines	Research Promotion Foundation	Collaborator
5	2018-2021	Triggering Photoprotection in Photosystem II Antenna by Molecular Simulations and Raman Spectroscopy	Research Promotion Foundation	Research Team Membe
6	2012-2014	Probing the surface of CuFeS ₂ using spectroscopy techniques Hellenic Copper Mines Ltd	Hellenic Copper Mines Ltd	Scientific/Project Coordinator
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**Ρόλος στο Ερευνητικό Project: πχ Επιστημονικός Συντονιστής, Μέλος Ερευνητικής Ομάδας, Ερευνητής, Βοηθός Ερευνητής, άλλα.*



Ακαδημαϊκές Συμβουλευτικές Υπηρεσίες ή/και Συμμετοχή σε Συμβούλια / Επιτροπές - Να καταχωρηθούν οι πέντε (5) πιο πρόσφατες (Καταχωρούνται προαιρετικά)

A/A	Περίοδος	Οργανισμός	Τίτλος Θέσης ή Υπηρεσίας	Κύριες Δραστηριότητες
1	2011-2013	ΤΕΡΑΚ	Συμβούλιο Πανεπιστημίου	
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Βραβείσεις / Διεθνείς Διακρίσεις (όπου εφαρμόζεται). Να καταχωρηθούν οι πέντε (5) πιο πρόσφατες και άλλες πέντε (5) επιλεγμένες – (μέγιστος αρ. δέκα (10) (Καταχωρούνται προαιρετικά)

Ref. Number	Date	Title	Awarded by:
1	1997	Step-scan FTIR spectroscopy	Alexander von Humboldt
2	2002	P. denitrificans	European Molecular Biology
3	1998	Dynamics of CcO	Fulbright Fellow
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Άλλες Διακρίσεις. Να καταχωρηθούν οι πέντε (5) πιο πρόσφατες και άλλες πέντε (5) επιλεγμένες (μέγιστος αρ. δέκα (10) (Καταχωρούνται προαιρετικά)

A/A	Ημερομηνία	Τίτλος	Κύριες Δραστηριότητες
1	2004	Thermus thermophilus	Japanish Science Promotion (Research)
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Academic Personnel Short Profile / Short CV

University:	Cyprus University of Technology
Surname:	Varotsis
Name:	Constantinos
Rank/Position:	Professor
Faculty:	Geotechnical Sciences and Environmental Management
Department:	Chemical Engineering
Scientific Domain: *	Biocatalysis and Biotechnology

** Field of Specialization*

Academic qualifications (list by highest qualification)

Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)
	1990	Michigan State University	Chemical Physics	
	1985	Northeastern University	Physics	
	1983	U. of Cincinnati	Chemistry and Physics	



Employment history in Academic Institutions/Research Centers – List by the three (3) most recent

Period of employment		Employer	Location	Position
From	To			
1990	1992	Michigan State University	E. Lansing, MI,U.S.A	PostDoc
1993	2009	U. of Crete	Heraklion Crete, Greece	Professor
2009	Now	CUT	Lemesos, Cyprus	Professor

Key <u>refereed</u> journal papers, monographs, books, conference publications etc. List the five (5) more recent and other five (5) selected –(max total 10)						
Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages
1	2022	Application of double-pulse laser-induced breakdown spectroscopy (DP-LIBS), Fourier transform infrared micro-spectroscopy and Raman microscopy for the characterization of coppersulfides	Charalampos Tselios, Konstantinos A. Yiannakkos, Charalampos Andreou, Marios Papageorgiou and Antonis Nicolaides	RSC Adv.	12	631
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5	2019	Discrete Ligand Binding and Electron Transfer Properties of <i>ba</i> ₃ -Cytochrome c Oxidase from <i>Thermus thermophilus</i> : Evolutionary Adaption to Low Oxygen and	C Koutsoupakis, T Soulimane	Accounts of chemical research 52 (5), 1380-139, (2019)	52,5	1380-1390
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7	2017	Detection of Maillard reaction products by a coupled HPLC-Fraction collector technique and FTIR characterization of Cu (II)-complexation with the isolated species	A. Ioannou, V. Daskalakis	Journal of Molecular Structure	1141	634-642
8	2012	Spectroscopic and Kinetic Investigation of the Fully Reduced and Mixed Valence States of <i>ba</i> ₃ -Cytochrome c Oxidase from <i>Thermus Thermophilus</i> : A FOURIER TRANSFORM INFRARED (FTIR) AND TIME-RESOLVED STEP-SCANFTIRSTUDY	C. Koutsoupakis, T. Soulimane	J. Biological Chemistry	287	37495-37507



9	2011	Probing protonation/deprotonation of tyrosine residues in cytochrome ba3 oxidase from <i>Thermus thermophilus</i> by time-resolved step-scan Fourier transform infrared spectroscopy	C. Koutsoupakis, O. Kolaj-Robin, T. Souliman	J. of Biological Chemistry	285	30600-30605
10	2017	Modifications of hemoglobin and myoglobin by Maillard reaction products (MRPs) A Ioannou, C Varotsis PloS one 12 (11), 1-13 (2017)	Ioannou	PoS	12	1-13

Exhibitions (where applicable). List the five (5) more recent and other five (5) selected. (max total 10)					
Ref. Number	Date	Topic	International / Local	Location*	Role in Exhibition
1	10-15 July 2022	Structure of the CuB-NO in the binuclear center of heme-copper oxidoreductases	International ICPP-12	Madrid	Invited talk
2	30/10/22 ως 4/11/22	Probing the dynamics of FCP protein from diatoms	ICRP2022 International conference on Retinal Proteins	Sapporo, Japan	Poster
3	May 29- June 2 2022	Probing the nitrite reductase activity of heme-copper respiratory oxidase	International 241st ECS Meeting May 29-June	Vancouver	Invited talk
4	Nov27- Dec 4 2022	Probing the Dynamics of the Fucoxanthin-Chlorophyll <i>a/c</i> (FCPs) Proteins of the Marine Diatoms <i>Fragilariopsis sp.</i> and <i>P. tricorutum</i>	International Bio Inorganic Chemistry	Kobe, Osaka	talk
5	Febr. 19- 23 2022	Resonance Raman of the CcO/NO ₂ reaction	International Biophysical society meeting	San Francisco, USA	Poster
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**Specify venue, geographic location etc*

Research Projects. List the five (5) more recent and other five (5) selected (max total 10)				
Ref. Number	Date	Title	Funded by	Project Role*
1	2019-2022	Production of the bioactive signaling messenger nitric oxide from nitrite: Probing the nitrite reductase activity of heme globins and mitochondrial hemecopper respiratory oxidase	Research Promotion Foundation	Collaborator
2	2012-2014	Application of Microscopic FTIR and Raman Imaging to Food Biotechnology	Research Promotion Foundation	Scientific/Project Coordinator
3	2010-2013	Activation and reduction of Nitric oxide (NO) to laughing gas (N ₂ O) by Nitric Oxide Reductase and heme-copper cbb3 oxidase	Research Promotion Foundation	Scientific/Project Coordinator
4	2018-2020	Real time monitoring the nature resources in the Mining Environments of Hellenic Copper Mines	Research Promotion Foundation	Collaborator
5	2018-2021	Triggering Photoprotection in Photosystem II Antenna by Molecular Simulations and Raman Spectroscopy	Research Promotion Foundation	Research Team Membe
6	2012-2014	Probing the surface of CuFeS ₂ using spectroscopy techniques Hellenic Copper Mines Ltd	Hellenic Copper Mines Ltd	Scientific/Project Coordinator
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**Project Role: i.e. Scientific/Project Coordinator, Research Team Member, Researcher, Assistant Researcher, other*



**Academic Consulting Services and/or Participation in Councils / Boards/ Editorial Committees.
List the five (5) more recent (Optional Entry)**

Ref. Number	Period	Organization	Title of Position or Service	Key Activities
1	2011-2013	CUT	University council	
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**Awards / International Recognition (where applicable). List the five (5) more recent and other five (5) selected.
(max total 10) (Optional Entry)**

Ref. Number	Date	Title	Awarded by:
1	1997	Step-scan FTIR spectroscopy	Alexander von Humboldt
2	2002	P. denitrificans	European Molecular Biology
3	1998	Dynamics of CcO	Fulbright Fellow
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**Other Achievements. List the five (5) more recent and other five (5) selected.
(max total 10) (Optional Entry)**

Ref. Number	Date	Title	Key Activities:
1	2004	Thermus thermophilus	Japanish Science Promotion (Research)
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