

ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ

Επώνυμο: ΠΟΛΥΣΙΟΥ **Όνομα:** ΜΟΣΧΟΣ
Έτος γεννήσεως: 1948 **Τόπος γεννήσεως:** Πύθιο - Έβρου
Ίδρυμα: Γεωπονικό Πανεπιστήμιο Αθηνών
Τμήμα: Επιστήμης Τροφίμων και Διατροφής του Ανθρώπου (ΕΤ&ΔΑ)
Διεύθυνση: Ιερά οδός 75, 118 55 Αθήνα
Τηλέφωνο: 210 5294241, Fax : 210 5294265
E-mail: mopol@aua.gr

A. Πρώτο πτυχίο

Τίτλος: Licence
Χώρα: Βέλγιο
Πανεπιστήμιο: Βρυξελλών (ULB)
Σχολή-Τμήμα: Χημικό
Έτος έναρξης και έτος απόκτησης: 1967-1971 (Grande Distinction)

B. Διδακτορικό δίπλωμα

Χώρα: Βέλγιο
Πανεπιστήμιο: Βρυξελλών (ULB)
Σχολή-Τμήμα: Χημικό
Έτος έναρξης και έτος απόκτησης: 1972-1976 (La plus Grande Distinction)
Γνωστικό αντικείμενο: Οργανική Χημεία - Φασματοσκοπία NMR
Επιβλέπων καθηγητής : Jacques Reisse
Τίτλος διατριβής: Etude des derives cyclohexaniques par RMN de carbone-13

Γ. Ξένες γλώσσες

Γαλλικά, Αγγλικά

Δ. Ερευνητικά ενδιαφέροντα.

Ανάπτυξη τεχνικών για την παραλαβή κυρίων συστατικών και δευτερογενών μεταβολιτών φυσικών φυτικών προϊόντων ή άλλων αρωματικών και φαρμακευτικών φυτών που είναι αυτοφυή ή καλλιεργούνται στην Ελλάδα. Για παράδειγμα αναφέρονται: *Hibiscus cannabinus* L. ή κοινά κενάφ (πηκτίνες, ημικυτταρίνες, λιγνίνες, κυτταρίνες), *Crocus sativus* L. ή κοινά κρόκος Κοζάνης (καροτενοειδή, πικροκροκίνη, σαφρανάλη, φλαβονοειδή), μαστίχα Χίου, ρίγανη, θυμάρι, δίκταμο, δένδρολίβανο, λεβάντα, φασκόμηλο κ.λ.π (αιθέρια έλαια, φαινολικά συστατικά).

Ανάπτυξη νέων μεθόδων ποσοτικού προσδιορισμού των συστατικών των φυσικών προϊόντων και ποιοτικού ελέγχου ποτών-τροφίμων με αναλυτικές φασματοσκοπικές τεχνικές FT-IR, FT-Raman, NMR, GC-MS, HPLC-MS.

Φασματοσκοπική μελέτη φυσικών προϊόντων και των παραγώγων τους με τις τεχνικές UV-Vis, FT-IR, FT-Raman, GC-MS, NMR.

Εφαρμογές στη γεωργία και αξιοποίηση των παραπάνω φυσικών προϊόντων με σκοπό την εξοικονόμηση φυσικών πόρων και την ανάπτυξη οικολογικών προϊόντων.

Αντιοξειδωτική δράση, αντιμικροβιακή και φασματοσκοπική μελέτη αλληλεπίδρασης των δευτερογενών μεταβολιτών με πρωτεΐνες, DNA και RNA.

E. Ελληνικές και διεθνείς επιστημονικές ενώσεις των οποίων είμαι μέλος.

- α) Ένωση Ελλήνων Χημικών, Επιτροπή TE-36 Χημική Ορολογία, από το 1977.
- β) Ελληνική Εταιρεία Επιστημόνων και Τεχνολόγων Τροφίμων, από το 1988.
- γ) Ελληνική Εταιρεία Βιοτεχνολογίας, από το 1988.
- δ) Spectroscopy Society of Canada, από το 1981.
- ε) Societe pour le Developpement des Recherches sur le Magnesium (SDRM), από το 1988.
- στ) International Society of Food, Agriculture and Environment από το 2005.

ΣΤ. Διοικητικές θέσεις

- α) Διευθυντής του Εργαστηρίου Γενικής Χημείας του Γεωπονικού Πανεπιστημίου από το 1993.
- β) Αναπληρωτής Πρόεδρος του Γενικού Τμήματος του Γεωπονικού

- Πανεπιστημίου στις περιόδους 1993-95 και 1995-97.
 γ) Μέλος της Εφορίας της βιβλιοθήκης του Γ.Π.Α. από το 1993.
 δ) Εκπρόσωπος στη Σύγκλητο του Γ.Π.Α. στις περιόδους 1989-90, 1990-91, 1993-94, 1996-97 ως τακτικό μέλος.
 ε) Μέλος του ΔΣ της Μονάδας Οργάνωσης της Διαχείρισης του κοινοτικού πλαισίου στήριξης Α.Ε. (ΜΟΔ) την περίοδο 1996-1998.
 στ) Πρόεδρος του Γενικού Τμήματος ΓΠΑ (1999 – 2003).
 ζ) Διευθυντής Τομέα Χημικών και Φυσικών Επιστημών (2004-2005).
 η) Επιστημονικός Υπεύθυνος Π. Μ. Σ. του Γενικού Τμήματος (2004-2006).
 θ) Αντιπρύτανης Ακαδημαϊκών Υποθέσεων και Προσωπικού Γ.Π.Α. 2006-2010.
 ι) Μέλος του Δ.Σ. του Συνδέσμου Παραγωγών Αρωματικών και Φαρμακευτικών Φυτών της Ευρωπαϊκής Ένωσης (Europan).

Z. Τιμητικές διακρίσεις και επαγγελματική αναγνώριση

- 1) Υποτροφία του Υπουργείου Παιδείας του Βελγίου (1968-1971, 1971-1976).
- 2) Βραβείο "STAS 1976" από τη Βασιλική Ακαδημία Επιστημών του Βελγίου.
- 3) Κριτής στα διεθνή περιοδικά:
 - Journal of Agricultural and Food Chemistry
 - Journal of Chromatography A
 - Analytica Chimica Acta
 - Applied Spectroscopy
 - Food Additives Contaminants
 - Food Chemistry
 - Journal of Molecular Structure
 - Journal of Plant Physiology
 - Ultrasonics Sonochemistry
 - Vibrational Spectroscopy
 - Journal of Photochemistry and Photobiology B: Biology
 - Chromatographia
 - Flavour and Fragrance Journal
 - British Journal of Pharmacology
 - Biomacromolecules
 - BMC Complementary and Alternative Medicine
 - SRX Pharmacology
 - Industrial Crops and Products
 - Journal of Molecular Liquids
 - Colloids and Surfaces B
- 4) Μέλος οργανωτικών επιτροπών ή προεδρείων επιστημονικών συνεδρίων.
 - α) First International Symposium on Metal Ions in Biology and Medicine
 - β) 5^ο Πανελλήνιο Συνέδριο Επιστήμης και Τεχνολογίας Τροφίμων.
 - γ) Cost Chemistry Action D6: Workshop on Chemistry and Biochemistry under extreme conditions.

H. Διδακτική εμπειρία

	Τίτλος	Θέση	Χρόνος (από έως)	Ίδρυμα	Τμήμα
1	Επιμελητής	Σύμβαση	1977-1982	Α.Γ.Σ.Α.	
2	Λέκτορας	Μόνιμος	1982-1986	Α.Γ.Σ.Α.	Γεωργική Ανάπτυξη
3	Επικ. Καθηγητής	Μόνιμος	1986-1992	Γ.Π.Α.	Γενικό
4	Αν. Καθηγητής	Μόνιμος	1992-1998	Γ.Π.Α.	Γενικό
5	Καθηγητής	Μόνιμος	1998-2013	Γ.Π.Α.	Γενικό
6	Καθηγητής	Μόνιμος	2013-	Γ.Π.Α.	ΕΤ&ΔΑ

Θ. Διεθνείς Εκπαιδευτικές και Ερευνητικές Συνεργασίες

- α) Επισκέπτης Καθηγητής στο Τμήμα Χημείας του Πανεπιστημίου του Montreal κατά το ακαδημαϊκό έτος 1980-1981 και τις θερινές περιόδους 1982-1987.
- β) Επισκέπτης Καθηγητής στη Φαρμακευτική Σχολή του Πανεπιστημίου της Reims στη Γαλλία από το 1988.
- γ) Συμμετοχή στα Προγράμματα Erasmus/Σωκράτης με τις χώρες Ολλανδία, Γαλλία, Ιταλία, Τουρκία.
- δ) Ερευνητική Συνεργασία με καταξιωμένους επιστήμονες από Καναδά, Γαλλία, Ρωσία, Σλοβακία, Τουρκία, Ισπανία, Ρουμανία.

I. Συγγράμματα

- α) Σημειώσεις στη φασματοσκοπία NMR του Άνθρακα-13
Μ.ΠΟΛΥΣΙΟΥ. Εκδ. Ένωση Ελλήνων Χημικών, Κάνιγγος 27, Αθήνα (1979)
- β) Μαθήματα Οργανικής Στερεοχημείας και Ενόργανης Ανάλυσης (GC, UV-Vis, IR, NMR). Μ. ΠΟΛΥΣΙΟΥ. Εκδόσεις Γ.Π.Α. Αθήνα 1989, σελ. 1-264.

Κεφάλαια σε Ειδικές Εκδόσεις Βιβλίων

1. White Book: Saffron in Europe ISBN 978-960-8092-56-3
2. Conformational Flexibility of Nucleotides and Metal Ion Interactions. The Effect of Mg⁺⁺ Ions. M. Polissiou and T. Theophanides. "Biomolecular Stereodynamics" Vol. II Ed. R. H. SARMA Adenine Press 1981, pp. 487-496.
3. High Resolution ¹H NMR studies of mononucleotide with metals. T. Theophanides and M. Polissiou. Spectroscopy of Biological Molecules Serie C:Mathematical and Physical Sciences 1984, vol. 139, pp.291-301 Reidel Publishing Company.
4. Magnesium-Nucleic acid Interaction and Cancer Prevention. Theophanides and M. Polissiou. In Metal-Based Antitumour drugs. M.Gielen (Ed.). London: Freud Publishing house Ltd, England 1991, vol.2, pp 1-27.

ΙΑ. Πρόσφατα Ερευνητικά προγράμματα.

α. Επιστημονικός υπεύθυνος

A/A	Τίτλος	Πρόγραμμα	Φορέας
1	Αξιοποίηση στην οικολογική γεωργία βιολογικά δραστηκών συστατικών αιθερίων ελαίων αρωματικών φυτών.	ΠΕΝΕΔ 1996	ΓΓΕΤ
2	Αξιοποίηση των πετάλων του φυτού κρόκος (<i>Crocus sativus</i> L.) . Παραλαβή, διαχωρισμός, απομόνωση και χαρακτηρισμός χρωστικών (ανθοκυανινών-φλαβονοειδών) για χρήση τους στις βιομηχανίες τροφίμων	ΣΥΝ (ΕΠΕΤ II) 1996	ΓΓΕΤ
3	The improvement of olive oil quality by biotechnology means.	AIR 3 (AIR 3-CT94-1395) 1995	Ευρ.Ένωση
4	Isolation, separation et purification des carotenoids du safran et etude in vivo a l'échelle cellulaire de leurs activités biologiques	Διακρατικές επιστημονικές ανταλλαγές 1990	Γαλλία
5	Απομόνωση- αξιολόγηση- αξιοποίηση και φασματοσκοπική μελέτη των καροτενοειδών του ελληνικού κρόκου	ΠΕΝΕΔ 1991	ΓΓΕΤ
6	Παράγωγα Καροτενοειδών του Ελληνικού Κρόκου. Πιστοποίηση της δομής και της χημικής τους ευαισθησίας με τη φασματοσκοπία και τη μοριακή μηχανική. Εκτίμηση της βιολογικής τους δράσης ως ελεύθερες ενώσεις ή συνδεδεμένες	ΠΕΝΕΔ 1994	ΓΓΕΤ

	με πρωτεΐνες.		
7	Novel spectroscopic approaches to studies of biomolecular structure and interactions at the molecular and cellular levels	INTAS 93-1829 (1994)	Ευρ. Ένωση
8	Molecular Mechanisms of Interactions of DNA-Topoisomerases and Integrase Inhibitors with DNA, Enzymes and in Ternary Complexes	INTAS 94-0905 (1994)	Ευρ. Ένωση
9	Ημικυτταρίνες των στελεχών του Hibiscus cannabinus L. (KENAF) πριν την ανθοφορία και μετά τη σποροπαραγωγή	ΠΑΒΕ 1995	ΓΓΕΤ
10	Μελέτη αξιοποίησης στελεχών KENAF και βάμβακος στην παραγωγή μοριοσανίδων με παράλληλη αξιοποίηση των ινών και της βιομάζας για άλλες χρήσεις.	ΠΕΠΕΡ 1995	ΓΓΕΤ
11	The biochemistry and archestruure of fruit and vegetable tissue as quality predictors for optimising storage and processing regimes: Basic research leading to applicable models and rules	AIR 1 (AIR 1-CT92-0278) 1993	Ευρ. Ένωση
12	«Χημική, Φασματοσκοπική και Μικροσκοπική Μελέτη της Γύρης του Μελιού», Δράση V: Έρευνα – Μελέτη ποιότητας Μελιού. Φορέας επιχορήγησης	Έρευνα-Μελέτη	Υπουργείο Γεωργίας
13	«Χρήση της βιοτεχνολογίας στην επίλεκτη βελτίωση των ιδιοτήτων της μαστίχας και του μαστιχέλαιου»	Τομεακό πρόγραμμα Γεωργικής Βιοτεχνολογίας	Υπουργείο Ανάπτυξης
14	«Cost D-10/0016/99-Sonochemical Applications to Food Additives,Flavors,Fragrances and Pharmaceuticals Extraction from renewable natural resources:SAFECost Action D-10.	Ευρωπαϊκό πρόγραμμα - 2000	Ευρωπαϊκή Ένωση
15	«Εκχύλιση και διαχωρισμός πολυμερών από τα κυτταρικά τοιχώματα νέων γεωργικών φυτών»	Κοινό-Διακρατικό Ερευνητικό Πρόγραμμα (2001-2003) Ελλάδα-Σλοβακία	Υπουργείο Ανάπτυξης
16	«Επενδυτικές δυνατότητες στον τομέα αρωματικών και φαρμακευτικών φυτών στην Ελλάδα»	Έρευνα-Μελέτη 2002	Υπουργείο Εθνικής Οικονομίας
17	«Saffron Adulteration by Colour Additives:Developing an Antifraud Methology»	Craft-2002	Ευρωπαϊκή Ένωση
18	«Physicochemical investigation of bacterial metabolites and biocomplexes involved in plant-microbe interactions»	Nato Scientific Affairs Div. Belgium 2001	Nato Science Programme
19	«Απομόνωση, χαρακτηρισμός και μελέτη δευτερογενών μεταβολιτών από καλλιεργούμενα και αυτοφυή αρωματικά φυτά»	ΠΥΘΑΓΟΡΑΣ II 2005-2006	ΥΠΕΠΘ
20	«Μελέτη των τοπικών πρακτικών παραγωγής, επεξεργασίας και εμπορευματοποίησης του saffron»	INTERREG IIIC, 2005-2006	Περιφέρεια Δυτικής Μακεδονίας
21	«Μεθολογίες για την εφαρμογή διεθνών προτύπων στην καθαρότητα και ποιότητα του κρόκου» ακρωνύμιο SAFFIC	6 ^ο Πρόγραμμα Πλαίσιο 2006-2009	Ευρωπαϊκή Ένωση
22	«Γραφείο Διασύνδεσης Γεωπονικού Πανεπιστημίου Αθηνών – Β' Φάση»	2006-2008	Ε.Π.Ε.Α.Ε.Κ.
23	«Πηγή γενετικού υλικού του σαφράν (Crocus sativus) και άλλων ειδών του γένους Crocus» ακρωνύμιο CROCUSBANK	AGRI GEN RES Community	Ευρωπαϊκή Ένωση

		Programme 2007-2011	
24	«Αναβάθμιση και Επέκταση των Υπηρεσιών της Βιβλιοθήκης του Γ.Π.Α., στα πλαίσια του Εκσυγχρονισμού των Εκπαιδευτικών Διαδικασιών»	2008-2009	Ε.Π.Ε.Α.Ε.Κ.
25	«Αριστοποίηση συνθηκών μεταποίησης πρωτογενούς υλικού αρωματικών και φαρμακευτικών φυτών για την παραλαβή αιθέριων ελαίων και άλλων προϊόντων»	2008-2009	Ιδιώτης
26	Omics Technologies for Crop Improvement, Traceability, Determination of Authenticity, Adulteration and Origin in Saffron	Cost Action, 2011 -2014	Ευρωπαϊκή Ένωση

ΙΒ. Διδακτορικές διατριβές

α. Επιβλέπων καθηγητής

1. Π.Ταραντίλης (Γ.Π.Α., 1994). «Απομόνωση, καθαρισμός, ταυτοποίηση, φασματοσκοπική και βιολογική μελέτη των συστατικών των σιγμάτων του κρόκου (*Crocus sativus* L.)».
2. Χ. Παππάς (Γ.Π.Α., 2000) «Φασματοσκοπική μελέτη συστατικών του φυτού κενάφ (*Hibiscus cannabinus* L.)».
3. Π. Νούρος (Γ.Π.Α., 2001) «Ανάπτυξη νέων αυτοματοποιημένων μεθόδων προσδιορισμού χαρακτηριστικών ποιότητας του ελαιολάδου με την τεχνική της εισαγωγής δείγματος σε ροή».
4. Δ. Δαφερέρα (Γ.Π.Α., 2003) «Παραλαβή, ανάλυση με χρωματογραφικές-φασματοσκοπικές μεθόδους και βιολογική δράση αιθερίων ελαίων αρωματικών φυτών».
5. Χ. Κανάκης (Γ.Π.Α., 2007) «Παραλαβή δευτερογενών μεταβολιτών από το άνθος του φυτού *Crocus sativus* L. και μελέτη της αντιοξειδωτικής τους δράσης και των συμπλόκων αυτών με DNA, tRNA και Human Serum Albumin (HSA)».
6. Ν. Σιατής (Γ.Π.Α., 2013) «Ανάπτυξη νέων μεθόδων παραλαβής και ανάλυσης επιλεγμένων δευτερογενών μεταβολιτών από αρωματικά και ενεργειακά φυτά».
7. Α. Μπατσούλης (Γ.Π.Α., στάδιο συγγραφής) «Απομόνωση και χαρακτηρισμός ολιγοσακχαριτών από το κενάφ με πιθανή βιολογική δράση».
8. Ε. Αναστασάκη (Γ.Π.Α. στάδιο συγγραφής)
9. Ε. Πετράκης (Γ.Π.Α. σε εξέλιξη)

β. Ευρωπαϊκά διδακτορικά (Rapporteur et juge).

N.Allam-Fleury (1996), Reims, Γαλλία. "Caracterisation des mecanismes d'action des poisons du fuseau mitotique sur les cellules de carcinome de vessie sensibles et resistantes. Approche par immunomarquage et par spectroscopie infra-rouge a transformee de Fourier".

γ. Μεταπτυχιακές Μελέτες Φοιτητών από άλλες Ευρωπαϊκές χώρες (στο πλαίσιο του προγράμματος Erasmus).

1. F.H. de Wild (1995) από Ολλανδία. "Organic samples measured with FT-IR spectroscopy. Fourier transform infrared measurements of peach material and saccharides".
2. M. Hoekman (1996) από Ολλανδία. "Development of a Multi-Component FT-IR Analysis Method for Fruit Juices and Validation by HPLC".

ΙΓ. Δημοσιευμένες εργασίες

Σε Διεθνή Επιστημονικά Περιοδικά μετά από κρίση

1. High Resolution Proton NMR Studies of 5'-GMP and Mg⁺⁺ Interactions and Anticarcinogenic Effect of Magnesium. T. Theophanides and M. Polissiou. **Inorg. Chim. Acta 56 L1-L3 (1981).**
2. Platinum (II) and Palladium (II) Complexes with amino acid Derivatives. Synthesis, Interpretation of IR and NMR spectra and conformational Implications. S. Mylonas, A. Valavanidis, V. Voukouvalidis and M. Polissiou. **Inorg. Chim. Acta 55 p. 125-128, (1981).**

3. High Resolution Nuclear Magnetic Resonance Studies of Platinum (II) Guanosine-5'-Monophosphate Interactions in Aqueous Solutions. M. Polissiou, P.V. Tan, M. ST. Jacques and T. Theophanides. **Can. J. Chem.** **59**, 3297-3302 (1981).
4. Synthesis of S-2-Aminoethyl-L-Cysteine and S-2- Aminoethyl-D, L-Penicillamine Complexes with Pt (II) and Pd (II). Interpretation of IR and ¹H NMR Spectra and Conformational Implications. S. Mylonas, A. Valavanidis, V. Voukouvalidis and M. Polissiou. **Inorg. Chim. Acta** **66**, 25-28, (1982).
5. Products of Furans 3. Crystal and Molecular Structure, ¹H NMR and Conformational studies of 2-methyl-2-aryl substituted 6-Hydroxy-2H-pyran-3(6H)-one derivatives. Georgiadis, E. Couladouros, M. Polissiou, S. Filippakis, D. Mentzafos, A. Terzis. **J. Org. Chem.** **47**, 3054-3058 (1982).
6. Antitumor activity of Platinum (II) and Palladium (II) complexes of S-2-Aminoethyl-L-Cysteine, S-2-Aminoethyl-D, L-Penicillamine. S. Mylonas, A. Valavanidis, V. Voukouvalidis and M. Polissiou. **Chim. Chr., New Series** **12**, 165-168 (1983).
7. Binding Study of cis and trans Dichlorodiammine Platinum (II) to G5'p by proton Carbon-13 Nuclear Magnetic Resonance spectroscopy. M. Polissiou, P.V. Tan, M. St. Jacques and T. Theophanides. **Inorg. Chim. Acta** **203-210**, (1985).
8. FT-IR and ¹H NMR Spectroscopic Studies of C2'-endo, and C3'-endo Sugar Ring Conformations in 5'-GMP and 3'-GMP Nucleotides and their Platinum Complexes. Okamoto, V. Behnam, M. T. Phan Viet, M. Polissiou, J-Y Gauthier, S. Hanessian and T. Theophanides. **Inorg. Chim. Acta** **123**, 13-15, (1986).
9. Magnesium-Nucleic Acid Conformational Changes and Cancer. T. Theophanides, M. Polissiou. **Magnesium** **5:221-233** (1986).
10. NMR and FT-IR Conformational Studies of 8-Substituted Guanine. Nucleosides and their Metal Adducts and Cancer. M. Polissiou and T. Theophanides. **Inorg. Chim. Acta**, **137**, 195-201 (1987).
11. Synthesis, Molecular Structure determination and Antitumor Activity of Platinum (II) and Palladium (II) Complexes of 2-substituted Benzimidazole. S. Mylonas, A. Valavanidis, K. Dimitropoulos, M. Polissiou, A. Tsiftoglou and I. Vizirianakis. **J. Inorg. Biochem.** **34**, 265-275, (1988).
12. Structure of a Dithiolane. D. Mentzafos, M. Polissiou and M. Georgiadis. **Acta Crystallogr. C** **44**, 2030-2031, (1988).
13. Stereochemistry of the Bucherer-Berg Reaction and a Modified Strecker Reaction on Tetrahydro-2H-pyran-3-ones. S. Haroutounian, M. Georgiadis and M. Polissiou. **J. Heterocyclic Chem.** **26**, 1283-1287, (1989).
14. Possible role of water structure in magnesium biological systems. T. Theophanides, J-F. Angiboust, M. Polissiou, J. Anastassopoulou and M. Manfait. **Magnesium Res.** **3**, pp. 5-13, (1990).
15. A Convenient Synthesis of Oxaspiro[5.5]undecane derivatives. M.P. Georgiadis, A. Tsekouras, S.I. Kotretsou, S.A. Haroutounian and M.G. Polissiou. **Synthesis**, 929-932, (1991).
16. The structure of dimethylcrocin. P. Tarantilis, M. Polissiou, D. Mentzafos, A. Terzis, M. Manfait. **J. Chem. Crystallogr.**, **24**, 739-742, (1994).
17. Separation of picrocrocins, cis-trans-crocins and safranal of saffron using high-performance liquid chromatography with photodiode-array detection. P. Tarantilis, M. Polissiou, M. Manfait. **J. Chromatogr. A**, **664**, 55-61, (1994).
18. Inhibition of Growth and Induction of Differentiation of Promyelocytic Leukemia (HL-60) by Carotenoids from *Crocus sativus* L. P. Tarantilis, M. Polissiou, M. Manfait. **Anticancer Res.**, **14**: 1913-1918 (1994).
19. X-Ray and NMR studies on the rotational isomerism about C5-C6 bond of 6-substituted methyl-2,3,4-tri-O-acetyl-6-x-a-D glucopyranoside derivatives. Mentzafos, M. Polissiou, I. Grapsas, M. Georgiadis, A. Hountas and A. Terzis. **J. Chem. Crystallogr.**, **25**, 157-164, (1995).
20. Determination of saffron (*Crocus sativus* L.) components in crude plant extract using high-performance liquid chromatography-UV-visible photodiode-array detection-mass spectrometry. P. Tarantilis, G. Tsoupras, M. Polissiou. **J. Chromatogr. A**, **699**, 107-118, (1995).
21. Isolation and Identification of the Aroma Components from Saffron (*Crocus sativus* L.). P. Tarantilis, M. Polissiou. **J. Agr. Food Chem.**, **45**, 459-462, (1997).

22. Molecular and cellular Interaction of the Differentiating Antitumor Agent Dimethylcrocetin with Nuclear Retinoic Acid Reseptor as studied by Near-Infrared and Visible SERS Spectroscopy. A.Beljebbar, H.Morjani, J.F.Anngiboust, G.D.Sockalignum, M.Polissiou, M.Manfait. **J.Raman Spectrosc.**,**28**, 159-163, (1997).
23. Automated flow injection spectrophotometric non-aqueous titrimetric determination of the free fatty acid content of olive oil. P.G.Nouros, C.A.Georgiou and M.G.Polissiou. **Anal. Chim. Acta** ,**351**, 291-297 (1997).
24. UV-Vis, FT-Raman and ¹H NMR Spectroscopies of Cis-Trans carotenoids from Saffron (*Crocus sativus* L.). M.K.Assimiadis, P.A.Tarantilis and M.G.Polissiou **Appl. Spectrosc.**, **52**, No 4, 5-8 (1998).
25. FT-IR, FT-Raman Spectroscopic study of carotenoids from Saffron (*Crocus Sativus* L.) and some derivatives. P.A.Tarantillis, A.Beljebbar, M.Manfait and M.Polissiou. **Spectrochim. Acta, A: Biomolecular Spectroscopy**, **54**, 651-657 (1998).
26. FT-IR Spectroscopic Determination of the Degree of Esterification of Cell Wall Pectins from stored Peaches and Correlation to textural changes. A.Chatjigakis, C.Pappas, N.Proxenia, O.Kalantzi, P.Rodis and M.Polissiou. **Carbohydr. Polym.**, **37**, 395-408 (1998).
27. Determination of Kenaf (*Hibiscus cannabinus* L.) Lignin in Crude Plant Material Using Diffuse Reflectance Infrared Fourier Transform Spectroscopy. C.Pappas, P.A. Tarantilis, and M. Polissiou **Appl. Spectrosc.**, **52**, 1399-1402 (1998).
28. Direct parallel flow injection multichannel spectrophotometric determination of olive oil peroxide value. P.G.Nouros, C.A.Georgiou and M.G.Polissiou **Analytica Chimica Acta**, **389** (1-3), 239-245 (1999)
29. Prediction of the pH in Wood by Diffuse Reflectance Infrared Fourier Transform Spectroscopy. C.Pappas, P. Rodis, P.A. Tarantilis, and M. Polissiou **Appl. Spectrosc.**, **53**, 805-809 (1999).
30. Interaction of β -Cyclodextrin with Unsaturated and Saturated Straight Chain Fatty Acid Anions Studied by Phenolphthalein displacement. **Journal of Inclusion Phenomena and Macrocyclic Chemistry**, **34**, 85-96, (1999).
31. Quantitative Determination of Fenthion in Pesticide Formulations by FT-Raman Spectroscopy. S.G. Skoulika, C.A. Georgiou and M.G. Polissiou **Appl. Spectrosc.**, **53** (11), 1470-1474 (1999).
32. FT-Raman Spectroscopy – Analytical Tool for Routine Analysis of Diazinon in Pesticide Formulations. S.G. Skoulika, C.A. Georgiou and M.G. Polissiou **Talanta**, **51**, 599-604 (2000).
33. Rapid Quantitative Analysis of Organophosphorus Pesticide Formulations by FT-Raman Spectroscopy. S.G. Skoulika, C.A. Georgiou and M.G. Polissiou **Internet Journal of Vibrational Spectrosc.**, **4** (3), 2 (2000).
34. Determination of olive oil 2-thiobarbituric acid reactive substances by parallel flow injection. P.G.Nouros, C.A.Georgiou and M.G.Polissiou **Analytica Chimica Acta**, **417** (1), 119-124, (2000).
35. GC-MS Analysis of Essential Oils from Some Greek Aromatic Plants and their Fungitoxicity on *Penicillium digitatum*, D. J. Daferera, Basil N. Ziogas, M. G. Polissiou, **J. Agric. Food Chem.** **48** (6), 2576-2581 (2000).
36. Fourier transform Raman spectroscopic characterisation of cells of the plant-associated soil bacterium *Azospirillum brasilense* Sp7. Kamnev, A. A. Tarantilis, P. A. Antonyuk, L. P. Beshpalova, L. A.; Polissiou, M. G. Colina, M. Gardiner, P. H. Ignatov, V. V. **J. Mol. Struct.** **563-564**, 199-207 (2001).
37. Spectroscopic investigation of indole-3-acetic acid interaction with iron(III) Kamnev, A. A. Shchelochkov, A. G. Perfiliev, Y. D. Tarantilis, P. A. Polissiou, M. G. **J. Mol. Struct.** **563-564**, 565-572 (2001).
38. Complexation of Indole-3-acetic Acid with Iron(III): Influence of Coordination on the pi-Electronic System of the Ligand Kamnev, A. A. Shchelochkov, A. G. Tarantilis, P. A. Polissiou, M. G. Perfiliev, Y. D. **Monats. Chem.** **132**, 675-682 (2001).
39. Enzymatic acylation of hydroxypropyl cellulose in organic media and determination of ester formation by diffuse reflectance infrared Fourier transform (DRIFT) spectroscopy Sereti V, Stamatias H, Pappas C, Polissiou M, Kolisis FN **Biotechnology and Bioengineering** **72** (4): 495-500, 2001.
40. Comparison of classical and ultrasound-assisted isolation procedures of cellulose from kenaf (*Hibiscus cannabinus* L.) and eucalyptus (*Eucalyptus rodustrus* Sm.) Pappas, C.

- Tarantilis, P. A. Daliani, I. Mavromoustakos, T.; Polissiou, M. **Ultrason. Sonochem.** **9**, 19-23 (2002).
41. Fourier transform infrared spectroscopic characterization of heavy metal-induced metabolic changes in the plant-associated soil bacterium *Azospirillum brasilense* Sp7. A. A. Kamnev, L. P. Antonyuk, A. V. Tugarova, P. A. Tarantilis, M. G. Polissiou and P. H. E. Gardiner. **J. Mol. Struct.**, **610**, 127-131 (2002).
 42. Quantitative analysis of α -pinene and β -myrcene in mastic gum oil using FT-Raman spectroscopy, D. Daferera, C. Pappas, P. A. Tarantilis and M. Polissiou. **Food Chem.** **77**, 511-515 (2002).
 43. Characterization of essential oils from lamiaceae species by fourier transform raman spectroscopy. D.J. Daferera, P.A. Tarantilis, and M.G. Polissiou **J. Agric. Food Chem.** **50**, 5503-5507 (2002).
 44. Spectroimmunochemistry using colloidal gold bioconjugates A.A. Kamnev, L.A. Dykman, P.A. Tarantilis, M.G. Polissiou **Bioscience Reports.** **22**, No. 5/6, 541-547 (2002).
 45. Compositions and the *in vitro* antimicrobial activities of the essential oils of *Achillea setacea* and *Achillea teretifolia* (Compositae), M. Ünlü, D. Daferera, E. Dönmez, M. Polissiou, and A. Sökmen. **Journal of Ethnopharmacology**, **83** (1-2), 117-121 (2002).
 46. A New Method for Pollen Identification by FT-IR Spectroscopy. C.S. Pappas, P.A. Tarantilis, P. C. Harizanis, M.G. Polissiou **Appl. Spectrosc.** **57**(1), 23-27 (2003).
 47. Isolation and spectroscopic study of pectic substances from kenaf (*Hibiscus cannabinus* L.) C.S. Pappas, P.A. Tarantilis and M.G. Polissiou **Natural Products Research**, **17** (3), 171-176 (2003).
 48. The Effectiveness of plant Essential Oils on *Botrytis cinerea*, *Fusarium* sp., and *Clavibacter michiganensis* subsp. *michiganensis*, D. J. Daferera, Basil N. Ziogas, M. G. Polissiou, **Crop protection** **22** (1), 39-44 (2003).
 49. Ultrasound-Assisted Extraction of Volatile Compounds from Citrus Flowers And Citrus Honey. E. Alissandrakis, D. Daferera, P. A. Tarantilis, M. Polissiou, P. C. Harizanis, **Food Chem.** **82**, 575-582 (2003).
 50. Antimicrobial and Antioxidant Activity of the Essential Oil and Methanol Extracts of *Thymus pectinatus* Fish. et Mey. var. *pectinatus* (Lamiaceae). G. Vardar-Ünlü, F. Candan, A. Sökmen, D. Daferera, M. Polissiou, M. Sökmen, E. Dönmez and B. Tepe, **J.Agric. Food Chem.**, **51** (1), 63-67 (2003).
 51. Antimicrobial Activity of Essential Oil and Methanol Extracts of *Achillea sintenisii* Hub. Mor. (Asteraceae), A. Sökmen, G. Vardar-Ünlü, M. Polissiou, D. Daferera, M. Sökmen, B. Tepe, and E. Dönmez. **Phytotherapy Research**, **17**, 1005-1010 (2003).
 52. In Vitro Antibacterial, Antifungal, and Antioxidant Activities of the Essential Oil and Methanol Extracts of Herbal Parts and Callus Cultures of *Satureja hortensis* L., M. Güllüce, M. Sokmen, D. Daferera, G. Açar, H. Özkan, N. Kartal, M. Polissiou, A. Sokmen, and F. Şahin, **J. Agric. Food Chem.** **51** (14), 3958-3965, (2003).
 53. Antioxidant and Antimicrobial Activity of the Essential Oil and Methanol Extracts of *Achillea millefolium* subsp. *millefolium* Afan. (Asteraceae), F. Candan, M. Unlu, D. Daferera, M. Polissiou, A. Sökmen, and H. Aşkın Akpulat. **Journal of Ethnopharmacology.** **87** (2-3), 215-220 (2003).
 54. Determination of uronic acids in isolated hemicelluloses from kenaf using diffuse reflectance infrared fourier transform Spectroscopy (DRIFTS) and the curve-fitting deconvolution method. A. N. Batsoulis, M. K. Nacos, C. S. Pappas, P. A. Tarantilis, T. Mavromoustakos, and M. G. Polissiou. **Appl. Spectrosc.** **58**(2), 199-222 (2004).
 55. Antimicrobial and Antioxidative Activity of the Essential Oils and Methanol Extracts of *Salvia cryptantha* (Montbret et Aucher ex Benth.) and *Salvia multicaulis* (Vahl), B. Tepe, E. Donmez, M. Unlu, F. Candan, D. Daferera, G. Vardar-Unlu, M. Polissiou and A. Sökmen. **Food Chemistry**, **84**(4), 519-525, (2004).
 56. In Vitro Antimicrobial and Antioxidant Activities of the Essential Oils and Various Extracts of *Thymus eigii* M. Zohary et P.H. Davis Tepe, B., Daferera, D., Sokmen, M., Polissiou, M., Sokmen, A. **J. Agric. Food Chem.**, **52**(5), 1132-1137, 2004.
 57. Biological activities of the essential oils and methanol extract of *Origanum vulgare* ssp. *vulgare* in the Eastern Anatolia region of Turkey, F. Şahin, M. Güllüce, D. Daferera, A. Sökmen, M. Sökmen, M. Polissiou, G. Agar and H. Özer. **Food Control**, **2004**, **15**(7), 549-557.

58. The *in vitro* antimicrobial and antioxidant activities of the essential oils and methanol extracts of endemic *Thymus spathulifolius*. A. Sokmen, M. Gulluce, H. Askin Akpulat, D. Daferera, B. Tepe, M. Polissiou, M. Sokmen, F. Sahin. **Food Control**, **15** (2004) **627–634**.
59. The *in vitro* Antioxidant and Antimicrobial Activities of the Essential Oil and Methanol Extracts of *Achillea biebersteini* Afan. (Asteraceae). A. Sokmen, M. Sokmen, D. Daferera, M. Polissiou, F. Candan, M. Unlu and H. Aşkin Akpulat. **Phytother. Res.** **18**, **451–456** (2004).
60. Spectroscopic determination of the degree of esterification of pectic substances from kenaf. Christos S. Pappas, Petros A. Tarantilis and Moschos.G. Polissiou **Natural Products Research**, **18** (4) **335-340** 2004.
61. Determination of the degree of esterification of pectinates with decyl and benzyl ester groups by diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS) and curve-fitting deconvolution method. C.S. Pappas, A. Malovikova, Z. Hromadkova, P.A. Tarantilis, A. Ebringerova, M.G. Polissiou. **Carbohydrate Polymers** **56** (4) **465-469** 2004.
62. *In Vitro* Antioxidant, Antimicrobial, and Antiviral Activities of the Essential Oil and Various Extracts from Herbal Parts and Callus Cultures of *Origanum acutidens*. Sokmen, M.; Serkedjieva, J.; Daferera, D.; Gulluce, M.; Polissiou, M.; Tepe, B.; Akpulat, H. A.; Sahin, F.; Sokmen, A.; **J. Agric. Food Chem.** 2004, **52**(11), **3309-3312**.
63. Qualitative Determination of Volatile Compounds and Quantitative Evaluation of Safranal and 4-Hydroxy-2,6,6-trimethyl-1-cyclohexene-1-carboxaldehyde (HTCC) in Greek Saffron. Kanakis, C. D.; Daferera, D. J.; Tarantilis, P. A.; Polissiou, M. G.; **J. Agric. Food Chem.**; 2004; **52**(14); **4515-4521**.
64. The *in vitro* antioxidant and antimicrobial activities of the essential oil and various extracts of *Origanum syriacum* L var *bevanii*. B. Tepe, D. Daferera, M. Sokmen, M. Polissiou and A. Sokmen. **J Sci Food Agric** **84**:1389–1396 (2004).
65. The effect of sowing date and growth stage on the essential oil composition of three types of parsley. SA Petropoulos, D Daferera, CA Akoumianakis, HC Passam, MG Polissiou. **J Sci Food Agric** **84**:1606–1610 (2004).
66. Chemical analysis and antitumor activity of natural and semi-natural carotenoids of saffron. P.A. Tarantilis, M.G. Polissiou, **Acta Horticulturae**, **650**, (2004), **447-459**.
67. Kenaf (*Hibiscus cannabinus* L.) based substrates for the production of compact plants. A. Tsakonas, V. Stergiou, M. Polissiou, K. Akoumianakis and H. C. Passam **Industrial Crops and Products**, **21** (2), 2004, **223-227**.
68. Determination of the degree of esterification of pectinates with decyl and benzyl ester groups by diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS) and curve-fitting deconvolution method. Christos S. Pappas, Anna Malovikova, Zdenka Hromadkova, Petros A. Tarantilis, Anna Ebringerova and Moschos G. Polissiou. **Carbohydrate Polymers**, **56** (4), 2004, **465-469**.
69. Antimicrobial and antioxidant activities of the essential oil and various extracts of *Salvia tomentosa* Miller (Lamiaceae), B. Tepe, D. Daferera, A. Sokmen, M. Sokmen and M. Polissiou. **Food Chemistry** **90**(3), 2005, **333-340**.
70. Antioxidative activity of the essential oils of *Thymus sipyleus* subsp. *sipyleus* var. *sipyleus* and *Thymus sipyleus* subsp. *sipyleus* var. *rosulans*. B. Tepe, M. Sokmen, H. Askin Akpulat, D. Daferera, M. Polissiou and A. Sokmen. **Journal of Food Engineering**, 2005, **66** (4), **447-454**.
71. Antimicrobial and antioxidative activity of the essential oil and various extracts of *Cyclotrichium origanifolium* (Labill.) Manden. & Scheng. Bektas Tepe, Munevver Sokmen, Atalay Sokmen, Dimitra Daferera and Moschos Polissiou. **Journal of Food Engineering**, 2005, **69**, **335-342**.
72. Rapid Method for Simultaneous Quantitative Determination of Four Major Essential Oil Components from Oregano (*Oreganum* sp.) and Thyme (*Thymus* sp.) Using FT-Raman Spectroscopy. Siatis, N. G.; Kimbaris, A. C.; Pappas, C. S.; Tarantilis, P. A.; Daferera, D. J.; Polissiou, M. G.; **J. Agric. Food Chem.** 2005, **53**, **202-206**.
73. FT-Raman Spectroscopic Simultaneous Determination of Fructose and Glucose in Honey. Batsoulis, A. N.; Siatis, N. G.; Kimbaris, A. C.; Alissandrakis, E. K.; Pappas, C. S.; Tarantilis, P. A.; Harizanis, P. C.; Polissiou, M. G.; **J. Agric. Food Chem.** 2005, **53**, **207-210**.
74. Composition of the essential oils of *Tanacetum argyrophyllum* (C. Koch) Tvetzel. var. *argyrophyllum* and *Tanacetum parthenium* (L.) Schultz Bip. (Asteraceae) from Turkey. H. Askin Akpulat, Bektas Tepe, Atalay Sokmen, Dimitra Daferera and Moschos Polissiou.

- Biochemical Systematics and Ecology (2005), 33 (5), 511-516.**
75. Composition of the Essential Oil of *Achillea schischkinii* Sosn. (Asteraceae) from Turkey, E. Donmez, B. Tepe, D. Daferera, M. Polissiou. **Journal of Essential Oil Research, 17, 2005, 575-576.**
 76. DNA Interaction with Naturally Occurring Antioxidant Flavonoids Quercetin, Kaempferol, and Delphinidin. C. D. Kanakis, P. A. Tarantilis, M. G. Polissiou, S. Diamantoglou, H. A. Tajmir-Riahi. **Journal of Biomolecular Structure & Dynamics, 22, 6, (2005). 719-724.**
 77. Comparison of distillation and ultrasound-assisted extraction methods for the isolation of sensitive aroma compounds from garlic (*Allium sativum*). Athanasios C. Kimbaris, Nikolaos G. Siatis, Dimitra J. Daferera, Petros A. Tarantilis, Christos S. Pappas and Moschos G. Polissiou. **Ultrasonics Sonochemistry, 13, 2006, 54-60.**
 78. Quantitative analysis of garlic (*Allium sativum*) oil unsaturated acyclic components using FT-Raman spectroscopy Athanasios C. Kimbaris, Nikolaos G. Siatis, Christos S. Pappas, Petros A. Tarantilis, Dimitra J. Daferera, Moschos G. Polissiou, **Food Chemistry 94 (2006) 287-295.**
 79. Screening of the antioxidative and antimicrobial properties of the essential oils of *Pimpinella anisetum* and *Pimpinella flabellifolia* from Turkey. Bektas Tepe, H. Askin Akpulat, Munevver Sokmen, Dimitra Daferera, Onder Yumrutas, Enes Aydin, Moschos Polissiou, Atalay Sokmen, **Food Chemistry 97 (2006) 719-724.**
 80. Improvement of Biodiesel Production on the Application of Ultrasound: Monitoring of the Procedure by FT-IR Spectroscopy N.G. Siatis, A.C. Kimbaris, C.S. Pappas, P.A. Tarantilis, and M.G. Polissiou. **Journal of the American Oil Chemist's Society (2006), 83, 53-57.**
 81. Interaction of antioxidant flavonoids with tRNA: Intercalation or external binding and comparison with flavonoid-DNA adducts Kanakis CD, Tarantilis PA, Polissiou MG, Tajmir-Riahi HA **DNA and Cell Biology 25 (2006): 116-123.**
 82. Kenaf xylan – A source of biologically active acidic oligosaccharides. M.K. Nacos, P. Katapodis, C. Pappas, D. Daferera, P.A. Tarantilis, P. Christakopoulos and M. Polissiou, **Carbohydrate Polymers 66 (1) (2006), 126-134.**
 83. Instrumental analysis of bacterial cells using vibrational and emission Mössbauer spectroscopic techniques. Alexander A. Kamnev, Anna V. Tugarova, Lyudmila P. Antonyuk, Petros A. Tarantilis, Leonid A. Kulikov, Yurii D. Perfiliev, Moschos G. Polissiou and Philip H.E. Gardiner. **Analytica Chimica Acta, 573-574 (2006), 445-452.**
 84. Antioxidant flavonoids bind human serum albumin. C.D. Kanakis, P.A. Tarantilis, M.G. Polissiou, S. Diamantoglou and H.A. Tajmir-Riahi, **Journal of Molecular Structure 798 (1-3) (2006), 69-74.**
 85. Inhibitory activity on amyloid- β aggregation and antioxidant properties of *Crocus sativus* stigmas extracts and its crocin constituents Papandreou M.A., Kanakis C.D., Polissiou M.G., Efthimiopoulos S., Cordopatis P., Margarity M., Lamari F.N., **Journal of Agricultural and Food Chemistry 54 (3) (2006), 8762-8768.**
 86. Chemical composition of the essential oil of *Salvia aethiopsis* L. Güllüce M., Özer H., Barış Ö., Daferera D., Şahin F., Polissiou M., **Turkish journal of Biology 30 (4) (2006), 231-233.**
 87. The in vitro antioxidative properties of the essential oils and methanol extracts of *Satureja spicigera* (K. Koch.) Boiss. and *Satureja cuneifolia* ten Ozigur Eminagaoglu, Bektas Tepe, Onder Yumrutas, H. Askin Akpulat, Dimitra Daferera, Moschos Polissiou, Atalay Sokmen. **Food Chemistry 100 (2007) 339-343.**
 88. Investigation of the antioxidant properties of *Ferula orientalis* L. using a suitable extraction procedure. Nuket Kartal, Munevver Sokmen, Bektas Tepe, Dimitra Daferera, Moschos Polissiou, Atalay Sokmen. **Food Chemistry 100 (2007) 584-589.**
 89. Aroma investigation of unifloral Greek citrus honey using solid-phase microextraction coupled to gas chromatographic-mass spectrometric analysis. Eleftherios Alissandrakis, Petros A. Tarantilis, Paschalis C. Harizanis and Moschos Polissiou. **Food Chemistry 100, (2007) 396-404.**
 90. DNA interaction with saffron's secondary metabolites safranal, crocetin and dimethylcrocetin. Kanakis C.D., Tarantilis P.A., Tajmir-Riahi H.-A., Polissiou M.G.,. **DNA and Cell Biology 26 (1) (2007) 63-70.**
 91. Crocetin, dimethylcrocetin and safranal bind human serum albumin: stability and antioxidative properties. Kanakis C.D., Tarantilis P.A., Tajmir-Riahi H.A., Polissiou M.G. **Journal of Agricultural and Food Chemistry 55 (3) (2007) 970-977.**

92. Chemical composition and antioxidant activity of the essential oil of *Clinopodium vulgare* L. Tepe B., Sihoglu-Tepe A., Daferera D., Polissiou M., Sokmen A., **Food Chemistry** **103** (3) (2007) 766-770.
93. Antioxidant activity of the essential oil and various extracts of *Nepeta flavida* Hub.-Mor. from Turkey. Tepe B., Daferera D., Tepe A.-S., Polissiou M., Sokmen A. **Food Chemistry** **103** (4) (2007) 1358-1364.
94. Antimicrobial and antioxidant properties of the essential oils and methanol extract from *Mentha longifolia* L. ssp. *longifolia*. Gulluce M., Sahin F., Sokmen M., Ozer H., Daferera D., Sokmen A., Polissiou M. Adiguzel A., Ozkan H. **Food Chemistry** **103** (4) (2007) 1449-1456.
95. Effects of the active constituents of *Crocus sativus* L. crocin on recognition and spatial rats' memory. Pitsikas N., Zisopoulou S., Tarantilis P.A., Kanakis C.D., Polissiou M.G., Sakellaridis N. **Epitheorisi Klinikes Farmakologias kai Farmakokinetikes**, **25** (1) (2007) 92-93.
96. Interaction of tRNA with safranal, crocetin and dimethylcrocetin. Kanakis C.D., Tarantilis P.A., Tajmir-Riahi H.-A., Polissiou M.G. **Journal of Biomolecular Structure and Dynamics** **24** (6) (2007) 537-545.
97. An overview of DNA and RNA bindings to antioxidant flavonoids. Kanakis C.D., Tarantilis P.A., Polissiou M.G., Diamantoglou S., Tajmir-Riahi H.-A. **Cell Biochemistry and Biophysics** **49** (1) (2007) 29-36.
98. Effects of the active constituents of *Crocus sativus* L., crocins on recognition and spatial rats' memory. Pitsikas N., Zisopoulou S., Tarantilis P.A., Kanakis C.D., Polissiou M.G., Sakellaridis N. **Behavioural Brain Research** **183** (2) (2007) 141-146.
99. Nettle extract effects on the aphid *Myzus persicae* and its natural enemy, the predator *Macrolophus pygmaeus* (Hem., Miridae). Gaspari M., Lykouressis D., Perdakis D., Polissiou M. **Journal of Applied Entomology** **131** (2007) (9-10) 652-657.
100. Chemical composition of the essential oil from leaves of *Lippia citriodora* H.B.K. (Verbenaceae) at two developmental stages. Argyropoulou C., Daferera D., Tarantilis P.A., Fasseas C., Polissiou M. **Biochemical Systematics and Ecology** **35** (12) (2007) 31-837.
101. Evaluation of acetaldehyde and methanol in greek traditional alcoholic beverages from varietal fermented grape pomaces (*Vitis vinifera* L.). M. Geroyiannaki, M.E. Komaitis, D.E. Stavarakas, M. Polysiou, P.E. Athanasopoulos, M. Spanos. **Food Control** **18** (2007) 988-995.
102. Identification and differentiation of goat and sheep milk based on diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS) using cluster analysis. Pappas C.S., Tarantilis P.A., Moschopoulou E., Moatsou G., Kandarakis I., Polissiou M.G. **Food Chemistry** **106** (3) (2008) 1271-1277.
103. Antioxidant activity in meat treated with oregano and sage essential oils. Fasseas M.K., Mountzouris K.C., Tarantilis P.A., Polissiou M., Zervas G. **Food Chemistry** **106** (3) (2008) 1188-1194.
104. Studies on the antioxidant activity of the essential oil and methanol extract of *Marrubium globosum* subsp. *globosum* (Lamiaceae) by three different chemical assays. Cengiz Sarikurkcu, Bektas Tepe, Dimitra Daferera, Moschos Polissiou, Mansur Harmandar. **Bioresource Technology** **99** (2008) 4239-4246.
105. The effect of water deficit stress on the growth, yield and composition of essential oils of parsley. S.A. Petropoulos, Dimitra Daferera, M.G. Polissiou, H.C. Passam. **Scientia Horticulturae** **115** (2008) 393-397.
106. Bioactivities of the various extracts and essential oils of *Salvia limbata* C.A.Mey. and *Salvia sclarea* L. Öğütçü, H., Sökmen, A., Sökmen, M., Polissiou, M., Serkedjieva, J., Daferera, D., Şahin, F., Bariş, Ö., Güllüce, M. **Turkish Journal of Biology** **32** (3), 2008, 181-192.
107. RNA arbitrarily primed PCR and fourier transform infrared spectroscopy reveal plasticity in the acid tolerance response of *Streptococcus macedonicus*. Papadimitriou, K., Boutou, E., Zoumpoulou, G. , Tarantilis, P.A. , Polissiou, M. , Vorgias, C.E. , Tsakalidou, E. **Applied and Environmental Microbiology**, **74** (19) 2008, 6068-6076.
108. Effect of nitrogen-application rate on the biomass, concentration, and composition of essential oils in the leaves and roots of three types of parsley. S.A. Petropoulos, D. Daferera, M.G. Polissiou, H.C. Passam. **J.Plant Nutr. Soil Sci.** **2009**, **172**, 210-215.

109. The effect of salinity on the growth, yield and essential oils of turnip-rooted and leaf parsley cultivated within the Mediterranean region. S.A. Petropoulos, D. Daferera, M.G. Polissiou, H.C. Passam. **J Sci Food Agric** **2009**; **89**: 1534-1542.
110. An overview of structural features of DNA and RNA complexes with saffron compounds: Models and antioxidant activity. C. D. Kanakis, P. A. Tarantilis, C. Pappas, J. Bariyanga, H. A. Tajmir-Riahi and M.G. Polissiou. **Journal of Photochemistry and Photobiology B: Biology**, **95**, 2009, 204-212.
111. Ultrasound-assisted extraction gas chromatography-mass spectrometry analysis of volatile compounds in unifloral thyme honey from Greece. Eleftherios Alissandrakis, Petros A. Tarantilis, Christos Pappas, Paschalis C. Harizanis, Moschos Polissiou, **European Food Research and Technology**, **229** (3), 2009, 365-373.
112. Differentiation of saffron from four countries by multivariate analysis of Mid-infrared spectroscopy. E. Anastasaki, C. Kanakis, C. Pappas, L. Maggi, C.P. del Campo, M. Carmona, G.L. Alonso, M. Polissiou, **European Food Research and Technology**, **229**, 2009, 899-905.
113. Worldwidemarket screening of saffron volatile composition. Luana Maggi, Manuel Carmona, C Priscila del Campo, Charalabos D Kanakis, Eirini Anastasaki, Petros A Tarantilis, Moschos G Polissiou and Gonzalo L Alonso. **J Sci Food Agric** (2009) **89**:1950–1954.
114. Geographical differentiation of saffron by GC-MS/FID and chemometrics. E. Anastasaki, C. Kanakis, C. Pappas, L. Maggi, C. P. del Campo, M. Carmona, G. L. Alonso, M. G. Polissiou. **Eur Food Res Technol** (2009) **229**:899–905.
115. Structural analysis of DNA and RNA interactions with antioxidant flavonoids. C.D. Kanakis, Sh. Nafisi, Mehdi Rajabi, Azadeh Shadaloi, P.A. Tarantilis, M.G. Polissiou, J. Bariyanga and H.A. Tajmir-Riahi. **Spectroscopy** **23** (2009) 29–43.
116. Citrus essential oils and four enantiomeric pinenes against *Culex pipiens* (Diptera: Culicidae) Michaelakis, A., Papachristos, D., Kimbaris, A., Koliopoulos, G., Giatropoulos, A., Polissiou, M.G. **Parasitology Research** **2009**, **Pages** 1-5.
117. Coactivity of sulfide ingredients: A new perspective of the larvicidal activity of garlic essential oil against mosquitoes Kimbaris, A.C., Kioulos, E., Koliopoulos, G., Polissiou, M.G., Michaelakis, A. **Pest Management Science** **65**, (3), 2009, 249-254.
118. Quantitative determination of pulegone in pennyroyal oil by FT-IR spectroscopy. Petrakis, E.A., Kimbaris, A.C. Pappas, C.S., Tarantilis, P.A., Polissiou, M.G. **Journal of Agricultural and Food Chemistry**, **57** (21), 2009, 10044-10048.
119. Toxicity of citrus essential oils against *Ceratitis capitata* (Diptera: Tephritidae) larvae. D.P. Papachristos, A.C. Kimbaris, N.T. Papadopoulos & M.G. Polissiou. **Ann Appl Biol** **155** (2009) 381–389.
120. Coactivity of sulfide ingredients: A new perspective of the larvicidal activity of garlic essential oil against mosquitoes. Kimbaris, A.C., Kioulos, E., Koliopoulos, G., Polissiou, M.G., Michaelakis, A. **Pest Management Science** **65**, (3), 2009, 249-254.
121. SyMiC, a Methodology for the Pinpointing and Utilization of Natural Products: a Review and Future Prospects. Anastasia Markantonatou, Dimitra Daferera, Vasiliki Liakoura, Petros Tarantilis, Moschos Polissiou, Constantinos Fasseas. **Proceedings of the 2009 2nd International Conference on Biomedical Engineering and Informatics, BMEI 2009**, art. no. 5302435.
122. Effect of freezing, drying and the duration of storage on the composition of essential oils of plain-leafed parsley [*Petroselinum crispum* (Mill.) Nym. ssp. *neapolitanum* Danert] and turnip-rooted parsley [*Petroselinum crispum* (Mill.) Nym. ssp. *tuberosum* (Bernh.) Crov.] Spiros A. Petropoulos, Dimitra Daferera, Moschos G. Polissiou and Harold C. Passam. **Flavour Fragr. J.** **2010**, **25**, 28–34.
123. Antioxidant saffron constituents bind DNA and tRNA. Kanakis, C.D., Tarantilis, P.A., Polissiou, M.G., Tajmir-Riahi, H.A. **Acta Horticulturae** **850** (31), 2010, 217-222.
124. Etherio, a new variety of *Lavandula angustifolia* with improved essential oil production and composition from natural selected genotypes growing in Greece C.N. Hassiotis, P.A. Tarantilis, D. Daferera, M.G. Polissiou, **Industrial Crops and Products** **32** (2010) 77–82.
125. Picrocrocin Content and Quality Categories in Different (345) Worldwide Samples of Saffron (*Crocus sativus* L.). C. PRISCILA DEL CAMPO, MANUEL CARMONA, LUANA MAGGI, CHARALABOS D. KANAKIS, EIRINI G. ANASTASAKI, PETROS A.

- TARANTILIS, MOSCHOS G. POLISSIOU AND GONZALO L. ALONSO. **J. Agric. Food Chem.** **2010**, **58**, **1305–1312**.
126. Changes in saffron volatile profile according to its storage time. Luana Maggi, Manuel Carmona, Amaya Zalacain, Charalabos D. Kanakis, Eirini Anastasaki, Petros A. Tarantilis, Moschos G. Polissiou, Gonzalo L. Alonso. **Food Research International** **43** (2010) **1329–1334**.
 127. Quantification of Crocetin Esters in Saffron (*Crocus sativus* L.) Using Raman Spectroscopy and Chemometrics. EIRINI G. ANASTASAKI, CHARALABOS D. KANAKIS, CHRISTOS PAPPAS, LUANA MAGGI, AMAYA ZALACAIN, MANUEL CARMONA, GONZALO L. ALONSO, AND MOSCHOS G. POLISSIOU. **J. Agric. Food Chem.** **2010**, **58**, **6011–6017**.
 128. Effects of mild temperature conditions during dehydration procedures on saffron quality parameters. C Priscila del Campo, Manuel Carmona, Luana Maggi, Charalabos D Kanakis, Eirini G Anastasaki, Petros A Tarantilis, Moschos G Polissiou and Gonzalo L Alonso. **J Sci Food Agric** **2010**; **90**: **719–725**.
 129. Differentiation of saffron from four countries by mid-infrared spectroscopy and multivariate analysis. E. Anastasaki • C. Kanakis • C. Pappas • L. Maggi • C. P. del Campo • M. Carmona • G. L. Alonso • M. G. Polissiou. **Eur Food Res Technol** (2010) **230**:**571–577**.
 130. Generation of linalool derivatives in an artificial honey produced from bees fed with linalool-enriched sugar syrup. Eleftherios Alissandrakis • Evangelos Mantziaras • Petros A. Tarantilis • Pashalis C. Harizanis • Moschos Polissiou. **Eur Food Res Technol** (2010) **231**:**21–25**.
 131. Rapid qualitative and quantitative detection of beef fillets spoilage based on Fourier transform infrared spectroscopy data and artificial neural networks, Argyri A.A., Panagou E.Z., Tarantilis P.A., Polysiou M., Nycha G-J.E. **Sensors and Actuators, B: Chemical, Volume 145, Issue 1, 2010, Pages 146-154**.
 132. The World Saffron and Crocus collection: strategies for establishment, management, characterization and utilization. *Jose´-Antonio Ferna´ndez, Omar Santana, Jose´-Luis Guardiola, Rosa-Victoria, Molina Pat, Heslop-Harrison, George Borbely, Ferdinando Branca, Sergio Argento, Eleni Maloupa, Thierry Talou, Jean-Marie Thiercelin, Khalil Gasimov, Hasan Vurdu, Marta Rolda´n, Marcela Santaella, Enrique Sanchi´s, Amparo Garcı´a-Luis, Gyula Suranyi, Attila Molna´r, Gabor Sramko, Gergely Gulyas, Luckacs Balazs, Orsolya Horvat, Mari´a-Fernanda Rodrı´guez, Rau´l Sa´nchez-Vioque, Miguel-A´ngel Escolano, Jose´-Vicente Reina, Nikos Krigas, Teresa Pastor, Begon˜a Renau-Morata, Christine Raynaud, Oruc Ibadli, Moschos Polissiou, Maria Z. Tsimidou, Athanasios Tsaftaris, Mahmoud Sharaf-Eldin, Joaquin Medina, Theophanis Constantinidis, Theophanis Karamplianis, Marcelino De-Los-Mozos-Pascual*, **Genet Resour Crop Evol** **2010**.
 133. The effect of a garlic essential oil component and entomopathogenic nematodes on the suppression of *Meloidogyne javanica* on tomato. Anastasiadis, I., Kimbaris, A.C., Kormpi, M., Polissiou, M.G., Karanastasi, E. **Hellenic Plant Protection Journal** **4** (1), **2011**, **21-24**
 134. Investigation of organic extractives from unifloral chestnut (*Castanea sativa* L.) and eucalyptus (*Eucalyptus globulus* Labill.) honeys and flowers to identification of botanical marker compounds. Eleftherios Alissandrakis, Petros A. Tarantilis, Christos Pappas, Pashalis C. Harizanis, Moschos Polissiou **LWT Food Science and Technology Volume 44, Issue 4, 2011, Pages 1042-1051**.
 135. Detection of changes in the cellular composition of *Salmonella enterica* serovar Typhimurium in the presence of antimicrobial compound(s) of *Lactobacillus* strains using Fourier transform infrared spectroscopy. Georgia Zoumpopoulou, Konstantinos Papadimitriou, Moschos G. Polissiou, Petros A. Tarantilis, Effie Tsakalidou. **International Journal of Food Microbiology** **144** (2010) **202–207**.
 136. Variability in essential oil content and composition of *Origanum hirtum* L., *Origanum onites* L., *Coridothymus capitatus* L. and *Satureja thymbra* L. populations from the Greek island Ikaria. Economou G., Panagopoulos G., Tarantilis P., Kalivas D., Kotoulas V., Travlos I.S., Polysiou M., Karamanos A. **Industrial Crops and Products**, **33** (1), **2011**, **236-241**.

137. Quantitative determination of anthocyanins in three sweet cherry varieties using diffuse reflectance infrared Fourier transform spectroscopy C.S. Pappas, C.Takidelli, E.Tsantili, P.A.Tarantilis, M.G.Polissiou. **Journal of Food Composition and Analysis**, **24 (2011)**, 17-21.
138. Rapid determination of safranal in the quality control of saffron spice (*Crocus sativus* L.). Luana Maggi, Ana Maria Sánchez, Manuel Carmona, Charalabos D Kanakis, Eirini Anastasaki, Petros A Tarantilis, Moschos G Polissiou and Gonzalo L Alonso. **Food Chemistry**, **127**, 2011, 369-373.
139. Larvicidal evaluation of three *Mentha* species essential oils and their isolated major components against the West Nile virus mosquito. Michaelakis, A., Papachristos, D., Kimbaris, A., Polissiou, M. **Hellenic Plant Protection Journal** **4 (2)**, 2011, 35-43.
140. Milk β -lactoglobulin complexes with tea polyphenols. Kanakis, C.D., Hasni, I., Bourassa, P., Tarantilis, P.A., Polissiou, M.G., Tajmir-Riahi, H.-A. **Food Chemistry** **127 (3)**, 2011, 1046-1055.
141. Antibacterial activities of essential oils from eight Greek aromatic plants against clinical isolates of *Staphylococcus aureus*. Alexopoulos, A., Kimbaris, A.C., Plessas, S., Mantzourani, I., Theodoridou, I., Stavropoulou, E., Polissiou, M.G., Bezirtzoglou, E. **Anaerobe**, **17 (8)**, 2011, 399-402.
142. Classification of Greek *Mentha pulegium* L. (Pennyroyal) Samples according to Geographical Location by Fourier Transform infrared Spectroscopy. Charalabos D Kanakis Eleftherios A. Petrakis, Athanasios C. Kimbaris, Christos Pappas, Petros A. Tarantilis and Moschos G. Polissiou. **Phytochemical Analysis**, 2012, **23(1)**, 34-43.
143. Comparing poly-3-hydroxybutyrate accumulation in *Azospirillum brasilense* strains Sp7 and Sp245: The effects of copper(II). Kamnev, A.A., Tugarova, A.V., Tarantilis, P.A., Gardiner, P.H.E., Polissiou, M.G. **Applied Soil Ecology**, 2012, **61**, 213- 216.
144. Effects of americium-241 and humic substances on *Photobacterium phosphoreum*: Bioluminescence and diffuse reflectance FTIR spectroscopic studies. Alexander A. Kamneva, Anna V. Tugarova, Maria A. Selivanova, Petros A. Tarantilis, Moschos G. Polissiou, Nadezhda S. Kudryasheva, **Spectrochimica Acta Part A (2012)** **100**, 171 - 175.
145. Evaluation of bioefficacy of three Citrus essential oils against the dengue vector *Aedes albopictus* (Diptera: Culicidae) in correlation to their components enantiomeric distribution Giatropoulos, A., Papachristos, D.P., Kimbaris, A., Koliopoulos, G., Polissiou, M.G., Emmanouel, N., Michaelakis, A. **Parasitology Research** **2012**, **111**, (6), 2253- 2263.
146. Herbal infusions; their phenolic profile, antioxidant and anti-inflammatory effects in HT29 and PC3 cells. D. Kogiannou, N. Kalogeropoulos, P. Kefalas, M. G. Polissiou, A. C. Kaliora, **Food and Chemical Toxicology xxx (2013) xxx-xxx**.
147. Polyphenol composition and antioxidant and metal chelating activities of the solid residues from the essential oil industry. R. Sánchez-Vioquea, M. Polissiou, K. Astraka, M. de los Mozos-Pascual, P. Tarantilis, D. Herraiz-Peñalvera, O. Santana-Méridas, **Industrial Crops and Products** **49 (2013) 150– 159**.
148. Bioefficacy of acyclic monoterpenes and their saturated derivatives against the West Nile vector *Culex pipiens*. A. Michaelakis, V. P. Vidali, D. P. Papachristos, E. N. Pitsinos, G. Koliopoulos, E. A. Couladouros, M. G. Polissiou, A. C. Kimbaris. **Chemosphere xxx (2013) xxx-xxx**.
149. Incidence of Bacteriocins Produced by Food-Related Lactic Acid Bacteria Active towards Oral Pathogens. G. Zoumpopoulou, E. Pepelassi, W. Papaioannou, M. Georgalaki, P. A. Maragkoudakis, P. A. Tarantilis, M. Polissiou, E. Tsakalidou, K. Papadimitriou. **Int. J. Mol. Sci.** **2013**, **14(3)**, 4640-4654.
150. Probing the binding sites of resveratrol, genistein, and curcumin with milk β -lactoglobulin, Kanakis, C.D., [Tarantilis, P.A.](#), [Polissiou, M.G.](#), [Tajmir-Riahi, H.A.](#) **Journal of Biomolecular Structure and Dynamics**, **31 (12)**, 2013.
151. Geographical differentiation of dried lentil seed (*Lens culinaris*) samples using Diffuse Reflectance Fourier Transform Infrared Spectroscopy (DRIFTS) and discriminant analysis, G. Kouvoutsakis, C. Mitsi, P.A. Tarantilis, M.G. Polissiou, C.S. Pappas, **Food Chemistry** **145 (2014) 1011–1014**.

152. Bioefficacy of acyclic monoterpenes and their saturated derivatives against the West Nile vector *Culex pipiens*, Antonios Michaelakis, Veroniki P. Vidali, Dimitrios P. Papachristos, Emmanuel N. Pitsinos, George Koliopoulos, Elias A. Couladouros, Moschos G. Polissiou, Athanasios C. Kimbaris, **Chemosphere 96 (2014) 74–80.**

Total number of papers published since 1981: 152

Total citation-Excluding self citations of all authors: 4330

h-index: 36

ΣΕ ΕΙΔΙΚΕΣ ΕΚΔΟΣΕΙΣ

1. Conformational Flexibility of Nucleotides and Metal Ion Interactions. The Effect of Mg⁺⁺ Ions. M. Polissiou and T. Theophanides. **"Biomolecular Stereodynamics" Vol. II Ed. R. H. SARMA Adenine Press 1981, pp. 487-496.**
2. High Resolution ¹H NMR studies of mononucleotide with metals. T. Theophanides and M. Polissiou. **Spectroscopy of Biological Molecules Serie C: Mathematical and Physical Sciences 1984, vol. 139, pp.291-301** Reidel Publishing Company.
3. Magnesium and Calcium content of drinking water, fruit juices, salt and saffron of Greece. P. Tarantilis, S. Haroutounian and M. Polissiou. **Metal Ions in Biology and Medicine.** Ph. Collery et al. (Eds.). John Libbey Eurotext, Paris **1990**, pp. 177-179.
4. Synthesis, molecular structure determination and antitumor activity of Platinum (II) and Palladium (II) complexes with, carrier molecules, derivatives of 3-(2-aminoethylthio)-propionic acid peptides. S. Mylonas, S. Caranikas, M. Polissiou, A. Hatzigiannakou, A. Tsiftoglou and I. Christou. **Metal Ions in Biology and Medicine.** Ph. Collery et al. (Eds.). John Libbey Eurotext, **Paris 1990**, pp. 357-359.
5. Cis-Platinum-Guanosine 3',5'-Cyclic Monophosphate complexes. Conformational studies related to cancer. M. Polissiou and T. Theophanides. **Metal Ions in Biology and Medicine.** Ph. Collery et al. (Eds.). John Libbey Eurotext, **Paris 1990**, pp. 360-362.
6. Protonation of Hexamethylenetetramine by GaCl₃.xH₂O and growth inhibition effect on K562 cells. M. Polissiou, H. Morjani, Ph. Collery, J.-F. D. Lamiable and M. Manfait. **Metal Ions in Biology and Medicine.** Ph. Collery et al. (Eds.). John Libbey Eurotext, **Paris 1990**, pp. 403-405.
7. High- Sensitive Detection of Intracellular Carotenoids in Single Living Cancer Cells as Probed by Surface-Enhanced Raman Microspectroscopy. M.Manfait, H.Morjani, R.Efremov, J.-F.Angiboust, M.Polissiou, I.Nabiev. **Spectroscopy of Biological Molecules.** R.E. Hester et al. (Eds.).The Royal Society Chemistry Cambridge **1991**, pp. 303-304.
8. Magnesium-Nucleic acid Interaction and Cancer Prevention. Theophanides and M. Polissiou. In **Metal-Based Antitumour drugs.** M.Gielen (Ed.). London: Freud Publishing house Ltd, England **1991**, vol.2, pp 1-27.
9. Magnesium-nucleic acid interactions in water. J.Anastassopoulou, M.Polissiou, M.Manfait, Th.Theophanides. **Metal ions in Biology and Medicine.** J.Anastassopoulou et al. (Eds.). John Libbey Eurotext, Paris, **1992**, vol.2, 26-31.
10. Effect of gallium on anthracycline uptake in sensitive and resistant K562 cancer cells. J.Millot, H.Morjani, Ph.Collery, M.Polissiou, M.Manfait. **Metal ions in Biology and Medicine.** J.Anastassopoulou et al. (Eds.). John Libbey Eurotext, Paris, **1992**, vol.2, pp. 178-179.
11. Magnesium and drinking water for health. S.Missailidis, J.Anastassopoulou, M.Polissiou, P.Tarantilis, Th.Theophanides. **Metal ions in Biology and Medicine.** J.Anastassopoulou et al. (Eds.). John Libbey Eurotext, Paris, **1992**, vol.2, pp. 351-353.
12. Differential interaction modes of dimethylcroctin in K562 and HL60 tumor cells as probed by near infrared FT-Raman microspectroscopy. A.Beljebbar, G.D.Sockalignum, H.Morjani, J.F.Angiboust, M.Polissiou, M.Manfait. **Spectroscopy of Biological Molecules,** J.C.Merlin et al.(Eds.). Kluwer Academic Publishers, Printed in The Netherlands **1995**, pp. **475-476.**

13. Monitoring the chemical changes of fruits and condiments by FT-IR and FT-Raman spectroscopies. M. Polissiou. **Spectroscopy of Biological Molecules**, J.C. Merlin et al. (Eds.). Kluwer Academic Publishers, Printed in the Netherlands **1995**, pp. **599-602**.
14. FT-IR spectroscopy: A non-destructive method for the evaluation of the degree of esterification of pectins of peach cell wall materials. A.K. Chatjigakis, N. Proxenia, O. Kalantzi, P. Rodis, M. Polissiou. **Spectroscopy of Biological Molecules**, J.C. Merlin et al. (Eds.). Kluwer Academic Publishers, Printed in The Netherlands **1995**, pp. **605-606**.
15. Near-Infrared Raman and Visible SERS Investigation of the molecular and cellular interaction of differentiating agent dimethylcrocetin with human nuclear retionic acid receptor. Morjani, A. Beljebbar, G.D. Sockalingum, J.F. Angiboust, M. Polissiou and M. Manfait. **Spectroscopy of Biological Molecules: Modern Trends**. P. Carmona et al. (Eds.). Kluwer Academic Publishers. Printed in the Netherlands **1997**, pp. 399-400.
16. Determination of sugars in fruit juices with FT-IR spectroscopy. A.K. Chatjigakis, V. Valsamaki, M. Hoekman, M. Polissiou. **Spectroscopy of Biological Molecules. Modern Trends**. P. Carmona et al. (Eds.). Kluwer Academic Publishers, Printed in The Netherlands **1997**, pp. **491-492**.
17. Characterization of cis-trans isomers of saffron carotenoids by UV-Vis, FT-Raman and ¹H NMR spectroscopies. M.K. Assimiadis, P.A. Tarantilis and M.G. Polissiou. **Spectroscopy of Biological Molecules: Modern Trends**. P. Carmona et al. (Eds.). Kluwer Academic Publishers. Printed in the Netherlands **1997**, pp. **495-496**.
18. Automated flow injection spectrophotometric determination of olive oil free fatty acid content and comparison with FT-IR method. P. Nourou, C.A. Georgiou, M. Polissiou. **Spectroscopy of Biological Molecules. Modern Trends**. P. Carmona et al. (eds.). Kluwer Academic Publishers, Printed in The Netherlands **1997**, pp. **497-498**.
19. Spectroscopic study of iron(III) complexes with some indole derivatives. A.G. Shchelochkov, A.A. Kamnev, P. A. Tarantilis and M. G. Polissiou. **Proceedings of the Seventh International Symposium, on Metal ions in Biology and Medicine** held in Saint Petersburg State University, Saint Petersburg, Russia, on May 5-9, **2002**. vol. 7. Eds. L. Khassanova, Ph. Collery, I. Maynard, Z. Khassanova, J-C. Etienne. John Libbey Eurotext, Paris 2002, pp. **37-40**.
20. Surface-enhanced Fourier transform infrared spectroscopy of protein A conjugated with colloidal gold. A.A. Kamnev, L. A. Dykman, P. A. Tarantilis and M. G. Polissiou. **Proceedings of the Seventh International Symposium, on Metal ions in Biology and Medicine** held in Saint Petersburg State University, Saint Petersburg, Russia, on May 5-9, **2002**. vol. 7. Eds. L. Khassanova, Ph. Collery, I. Maynard, Z. Khassanova, J-C. Etienne. John Libbey Eurotext, Paris 2002, pp. **231-236**.
21. Spectroscopic aspects in studying the impact of heavy metals on rhizobacteria and their role in bacterial metabolism. A.A. Kamnev, L. P. Antonyuk P. A. Tarantilis, M. G. Polissiou, L. A. Kulikov and Y.D. Perfiliev. **Proceedings of the Seventh International Symposium, on Metal ions in Biology and Medicine** held in Saint Petersburg State University, Saint Petersburg, Russia, on May 5-9, **2002**. vol. 7. Eds. L. Khassanova, Ph. Collery, I. Maynard, Z. Khassanova, J-C. Etienne. John Libbey Eurotext, Paris 2002, pp. **104-107**.
22. Effects of heavy metals on the plant-associated bacterium *Azospirillum brasilense*: endophytic and non-endophytic strains. A.V. Tugarova, A.A. Kamnev, L. P. Antonyuk P. A. Tarantilis and M. G. Polissiou. **Proceedings of the Seventh International Symposium, on Metal ions in Biology and Medicine** held in Saint Petersburg State University, Saint Petersburg, Russia, on May 5-9, **2002**. vol. 7. Eds. L. Khassanova, Ph. Collery, I. Maynard, Z. Khassanova, J-C. Etienne. John Libbey Eurotext, Paris 2002, pp. **237-241**.

Σε Συνέδρια (2002-xxxx)

1. Fourier transform raman spectroscopic study of indole-3-acetic acid and its Fe(III) complex in acetone solutions. Kamnev, A. A. Shchelochkov, A. G. Tarantilis, P. A. Polissiou, M. G. **Eighteenth International Conference on Raman Spectroscopy. Raman spectroscopy 2002 VOL 18, page(s) 873-874.**
2. Effects of colloidal gold particle size on surface-enhanced infrared absorption (SEIRA) of protein A conjugate and its interaction with immunoglobulin. Alexander A. Kamnev, Lev A. Dykman, Petros A. Tarantilis and Moschos G. Polissiou. **XXVI European Congress on Molecular Spectroscopy. 1- 6 September 2002. Villeneuve d'Ascq – France.**

3. Isolation and spectroscopic study of xylans from kenaf and of acidic fragments from their enzymatic digestion. M.K. Nacos, C. Pappas, P. Katapodis, P. Christakopoulos, D. Daferera, P.A. Tarantilis, M. Polissiou. **10th Bratislava Symposium on Saccharides. September 1-6, 2002, Smolenice, Slovakia, Program and Abstracts p. 43.**
4. Determination of the Degree of Esterification of Pectic Substances from Kenaf. C.S. Pappas, P.A. Tarantilis and M.G. Polissiou. **3rd Aegean Analytical Chemistry Days Polihnitos, Lesvos, Greece. September 29 - October 3, 2002 Proceedings p. 115-118.**
5. Ultrasound based method for the extraction of essential oils from aromatic plants. D. Daferera, P.A. Tarantilis, M. Polissiou. **Ultrasonics International 2003, 30 June-3 July 2003, Granada, Spain.**
6. Ultrasound assisted extraction of the essential oil from Saffron. C. Kanakis, P.A. Tarantilis, M. Polissiou. **Ultrasonics International 2003, 30 June-3 July 2003, Granada, Spain**
7. Chemical Analysis and Antitumor Activity of Natural and Semi-Natural Carotenoids of Saffron P. A. Tarantilis and M. G. Polissiou. **Proceedings of the 1st International Symposium on Saffron Biology and Biotechnology. Albacete, Spain 22-25 October 2003. Acta Horticulturae 650 (2004), 447-459.**
8. Effects of heavy metals on plant-associated rhizobacteria. A. V. Tugarova, A.A. Kamnev, L.P. Antonyuk, P.H.E. Gardiner, P.A. Tarantilis, and M.G. Polissiou. Federation of European Societies on Trace Elements and Minerals, **Second International Symposium on Trace Elements and Minerals in Medicine and Biology, May, 13-15, 2004, Neuherberg-Munich**
9. Biopolymers conjugated with gold nanoparticles: FTIR spectroscopic study and detection of biospecific interactions. A.A. Kamnev, L.A. Dykman, L.P. Antonyuk, Y.N. Sadovnikova, P.A. Tarantilis, and M.G. Polissiou. **5th International Symposium, Molecular Mobility and Order in Polymer Systems. June 20-24, 2005, Saint Petersburg**
10. Studies on *Thymus teucrioides* subsp. *candilicus*: Chemical composition of the essential oil content of the glandular trichomes, using a novel isolation method. A. Markantonatou, D. Daferera, V. Liakoura, P.A. Tarantilis, G. Karabourniotis, M. Polissiou, C. Fasseas. **XVII International Botanical Congress 17-23 July 2005, Vienna, Austria.**
11. Surface-Enhanced FTIR Absorption Spectroscopy (FT-SEIRAS) of Proteins: the Effects of Conjugation with Colloidal Gold and Biospecific Interactions. A.A. Kamnev, L.A. Dykman, P.A. Tarantilis, L.P. Antonyuk and M.G. Polissiou. Books of Abstracts **11th European Conference on the Spectroscopy of Biological Molecules. September 3-5, 2005, Aschaffenburg, Germany.**
12. INSTRUMENTAL ANALYSIS OF BACTERIAL CELLS AND CELLULAR CONSTITUENTS USING VIBRATIONAL AND EMISSION MÖSSBAUER SPECTROSCOPY TECHNIQUES. A.A. Kamnev, P.A. Tarantilis, Y.D. Perfiliev, L.P. Antonyuk, M.G. Polissiou. Instrumental Methods of Analysis Modern Trends and Applications, **IMA'05, 2-6 October, 2005 Iraklion, Crete, Greece.**
13. Monitoring of allicin transformation to garlic essential oil constituents by means of FT-IR spectroscopy. N.G. Siatis, A.C. Kimbaris, D. J. Daferera, C.S. Pappas, P.A. Tarantilis, and M.G. Polissiou. **Instrumental Methods of Analysis Modern Trends and Applications, IMA'05, 2-6 October, 2005 Iraklion, Crete, Greece.**
14. Evaluation of FT-Raman and FT-IR determination methods of honey floral origin A.N. Batsoulis, N.G. Siatis, E.K. Alissandrakis, C.S. Pappas, A.C. Kimbaris, P.A. Tarantilis, P.C. Harizanis and M.G. Polissiou. **Instrumental Methods of Analysis Modern Trends and Applications, IMA'05, 2-6 October, 2005 Iraklion, Crete, Greece.**
15. Food characterization – Characterization of goat and ovine milk using FT-IR spectroscopy. C.S. Pappas, E. Moschopoulou, G. Moatsou, P.A. Tarantilis, I. Kandarakis, M.G. Polissiou. **International Congress on Bioprocesses in Food Industries, ICBF-2006 18-19 June 2006 Patras**
16. Comparison of the antioxidant activity of Saffron's essential oil obtained by Hydrodistillation and Saffron's essential oil obtained by Ultrasound Assisted Extraction. C. D. Kanakis, D. J. Daferera, P.A. Tarantilis, M. Polissiou. **International Congress on Bioprocesses in Food Industries, ICBF-2006 18-19 June 2006 Patras**
17. Discrimination of Acid Tolerant Phenotypes of *Streptococcus Macedonicus* by Fourier Transform Infrared Spectroscopy and Principal Component Analysis. K. Papadimitriou, G. Zoumpopoulou, P.A. Tarantilis, M. Polissiou, E. Tsakalidou. **FoodMicro 2006, Food Safety and Food Biotechnology: Diversity and Global Impact. August 29 – September 2, 2006, Bologna – Italy.**

18. FTIR Spectroscopic Detection and Study of Biospecific Interactions Using Functionalised Gold Nanoparticles. A.A. Kamnev, L.A. Dykman, L.P. Antonyuk, P.A. Tarantilis and M.G. Polissiou. **XXVIII European Congress on Molecular Spectroscopy, September 3-8, 2006, Instabul, Turkey.**
19. Isolation-Determination of Secondary Metabolites from Aromatic Plants and Study of their Antioxidant Activity. A.C. Kimbaris, E.G. Anastasaki, O.A. Papantoni, P.A. Tarantilis, M.G. Polissiou. **5th International Conference on Instrumental Analysis Modern Trends and Applications. 30 September-4 October 2007, Rio-Patras Greece.**
20. Antioxidant activity of crocins, crocetin and dimethylcrocetin tested by the DPPH antioxidant capacity assay. C. D. Kanakis, P.A. Tarantilis, M. G. Polissiou. **5th International Conference on Instrumental Analysis Modern Trends and Applications. 30 September-4 October 2007, Rio-Patras Greece.**
21. Determination of safranal percentage content in saffron (*Crocus sativus* L.) extracts using FT-IR spectroscopy. C.S.Pappas, C.D. Kanakis, E.G. Anastasaki, P.A. Tarantilis and M.G. Polissiou. **5th International Conference on Instrumental Analysis Modern Trends and Applications. 30 September-4 October 2007, Rio-Patras Greece.**
22. Determination of caprine percentage content in milk mixtures using FT-IR spectroscopy. C.S.Pappas, E. Moschopoulou, G. Moatsou, P.A. Tarantilis, I. Kandarakis, M.G. Polissiou. **5th International Conference on Instrumental Analysis Modern Trends and Applications. 30 September-4 October 2007, Rio-Patras Greece.**
23. Instrumental analysis of bacterial cells growing under different stress conditions using Diffuse Reflectance Infrared Fourier Transform (DRIFT) spectroscopy. A.A. Kamnev, P.A. Tarantilis, J.N. Sandovnikova, L.P. Antonyuk, M.G. Polissiou. **5th International Conference on Instrumental Analysis Modern Trends and Applications. 30 September-4 October 2007, Rio-Patras Greece.**
24. SyMiC: A novel methodology for the location and exploitation of "economically important metabolites" of wild plants bearing glandular trichomes. Markantonatou, A., Daferera, D., Liakoura, V, Tarantilis, P., Constantinidis, T., Karabourniotis, G., Polissiou, M., Fasseas, C. Abstracts of Botany 2008. **Botany without Borders. July 26–30, 2008. University of British Columbia, Vancouver BC.**
25. Geographical origin of Saffron spice by Mid-Infrared spectroscopy (MIR), E.G. Anastasaki, C.D. Kanakis, C.S. Pappas, P.A. Tarantilis, **M.G. Polissiou, 7th Joint Meeting of AFERP, ASP, GA, PSE & SIF, August 3-8, 2008, Athens, Greece.**
26. "Insecticidal activity against *Myzus persicae* and chemical composition of three Lamiaceae essential oils obtained by microwave-assisted hydrodistillation: Comparison with traditional hydrodistillation". Petrakis, E., Kimbaris, A., Perdikis, D., Lykouressis, D., Tarantilis P., and **Polissiou, M. 7th Joint Meeting "Natural Products", 3-8 August 2008, Athens Greece.**
27. Activity of non-oxygenated versus oxygenated monoterpenes against mosquitoes. An attempt to correlate toxicity with chemical structure. Michaelakis A, Koliopoulos G, Milonas P, Kontodimas D, **Polissiou M**, Kimbaris A, Papachristos D. **7th Joint Meeting "Natural Products", 3-8 August 2008, Athens Greece.**
28. "Repellent properties of hydrosols derived from three Lamiaceae species against the insect pest *Myzus persicae*". Petrakis, E., Perdikis, D., Kimbaris, A., Lykouressis, D., Tarantilis P., and **Polissiou, M. 7th Joint Meeting "Natural Products", 3-8 August 2008, Athens Greece.**
29. Ταχεία ανίχνευση της αλλοίωσης βόειου κρέατος με την τεχνική Φασματοσκοπίας υπέρυθρου με μετασχηματισμό Fourier (FT-IR). Α. Αργύρη, Π. Α. Ταραντίλης, Χ. Παππάς, Ε. Πανάγου, **Μ. Πολυσιού & Γ-Ι. Ε. Νυχάς. 1^ο Πανελλήνιο Συνέδριο για το κρέας και τα προϊόντα του, Αθήνα 2008.**
30. Discrimination of saffron from different producing countries by mid-infrared spectroscopy. E.G. Anastasaki, C.D. Kanakis, C.S. Pappas, P.A. Tarantilis, L. Maggi, C.P. del Campo, M. Carmona, G.L. Alonso, **M.G. Polissiou. 3rd international Symposium on Saffron, Κρόκος, Κοζάνη, GREECE, 20-23 May 2009.**
31. Presentation of SAFFIC Project: results on methodologies for implementing international standards for saffron purity and quality. Manuel Carmona, Luana Maggi, C. Priscila del Campo, Gonzalo L. Alonso, Charalabos D. Kanakis, Eirini Anastasaki, Petros A. Tarantilis, **Moschos G. Polissiou. 20-24 May, 2009 Krokos Kozani, Greece. 3rd International symposium on saffron.**

32. Antioxidant saffron constituents bind DNA and tRNA. C.D. Kanakis, P.A. Tarantilis, H.A. Tajmir-Riahi and **M.G. Polissiou**. **20-24 May, 2009 Krokos Kozani, Greece. 3rd International symposium on saffron.**
33. Antiamnestic and anxiolytic properties of the active constituents of *Crocus sativus* L., crocins. N. Pitsikas, A. Boultsadakis, S. Zisopoulou, G. Georgiadou, P.A. Tarantilis and **M.G. Polissiou**. **20-24 May, 2009 Krokos Kozani, Greece. 3rd International symposium on saffron.**
34. Do anthocyanins play a role in peltate gland metabolites of *Thymus teucrioides* subsp. *candilicus* leaves? Conclusions and ramifications. Anastasia Markantonatou, Vally Liakoura, Dimitra Daferera, Petros Tarantilis, **Moschos Polissiou**, Costas Fasseas, **5th Balkan Botanical Congress, 7-11 September 2009, Belgrade, Serbia.**
35. Determination of crocins content in saffron (*Crocus sativus* L.) using Raman spectroscopy. E.G. Anastasaki, C.D. Kanakis, C.S. Pappas, P.A. Tarantilis, L. Maggi, C.P. del Campo, M. Carmona, G.L. Alonso, **M.G. Polissiou**. **IMA 2009, Athens, Greece, 4-8 October, 2009, 95p.**
36. Quantitative determination of pulegone by FT-IR spectroscopy. Eleftherios A. Petrakis, Athanasios C. Kimbaris, Christos S. Pappas, Petros A. Tarantilis, **Moschos G. Polissiou**, **IMA 2009, Athens, Greece, 4-8 October, 2009, 96p.**
37. Determination of the geographical origin of *Menta pulegium* using mid-infrared spectroscopy. C.D. Kanakis, E.A. Petrakis, A.C. Kimbaris, C. Pappas, P.A. Tarantilis, **M.G. Polissiou**. **IMA 2009, Athens, Greece, 4-8 October, 2009, 193p.**
38. "Determination of Total Phenolic Content in Herbal Infusions by FT-IR and Chemometrics". Anastasaki E., Kanellou G., Tarantilis P., **Polissiou M.** **7th Aegean Analytical Chemistry Days, 29/9 – 3/10/2010, Λέσβος.**
39. Verification of the geographical origin of oregano (*Origanum vulgare* subsp. *hirtum*): Application of FT-IR spectroscopy and chemometrics. C. D. Kanakis, E. A. Petrakis, A. C. Kimbaris, P. A. Tarantilis, C. Pappas and **M. G. Polissiou**. **IMA 2011, The 7th International Conference on Instrumental Methods of Analysis Modern Trends and Applications, 18-22 Sept. 2011, Chania Crete, Greece.**
40. Φυτογενετικοί πόροι του γένους *Crocus* (Iridaceae) στο πλαίσιο του Ευρωπαϊκού Δικτύου CROCUSBANK: συλλογές, τεκμηρίωση και *ex situ* διατήρηση. Μαλούπα Ε., Κρίγκας Ν., Κωνσταντινίδης Θ., Καραμπλιάνης Θ., **Πολυσιού Μ.**, Τσιμίδου Μ., Fernández J. A., De los-Mozos-Pascual M., Santana Méridas O., Molina-Romero R.V., Sanchís E., Branca F., Borbely G., Heslop-Harrison S. J., Vurdu H., Gasimov K **12^o Πανελλήνιο Επιστημονικό Συνέδριο** (Ελληνική Βοτανική Εταιρεία), **29 Σεπτ. – 2 Οκτ., 2011 Ρέθυμνο – Κρήτη.**
41. Έλεγχος της αντιοξειδωτικής ικανότητας αφεψημάτων μετά την προσθήκη γάλακτος, λεμονιού και μελιού. Γ. Κανέλλου, Ε. Αναστασάκη, Π.Α. Ταραντίλης, **Μ. Πολυσιού**. **Ημέρες Χημείας Τροφίμων, 4-5 Νοεμβρίου 2011, Αθήνα, Γενικό Χημείο του Κράτους.**
42. Μελέτη του αιθερίου ελαίου και υδροαλκοολικών εκχυλισμάτων φυτών του γένους *Cistus* της ελληνικής χλωρίδας. Α. Μπαστούνη, Δ. Δαφερέρα, Κ. Αστρακά, Π.Α. Ταραντίλης, **Μ.Γ. Πολυσιού**. **Ημέρες Χημείας Τροφίμων, 4-5 Νοεμβρίου 2011, Αθήνα, Γενικό Χημείο του Κράτους.**
43. Γεωγραφική διαφοροποίηση σκόρδου περιοχής Βύσσας με χρήση αέριας χρωματογραφίας και διαχωριστικής στατιστικής ανάλυσης. Α.Χ. Κυμπάρης, Ε. Αλυσσανδράκης, Α. Σκούφα, Χ. Ρίμπογλου, Π.Α. Ταραντίλης, **Μ.Γ. Πολυσιού**. **Ημέρες Χημείας Τροφίμων, 4-5 Νοεμβρίου 2011, Αθήνα, Γενικό Χημείο του Κράτους.**
44. Πτητικά συστατικά αφεψημάτων μελισσόχορτου (*Melissa officinalis*) και δενδρολίβανου (*Rosmarinus officinalis*). Ε. Αναστασάκη, Γ. Κανέλλου, Δ. Δαφερέρα, Π. Ταραντίλης, **Μ. Πολυσιού**. **Ημέρες Χημείας Τροφίμων, 4-5 Νοεμβρίου 2011, Αθήνα, Γενικό Χημείο του Κράτους.**
45. Διερεύνηση της αποδόμησης των πρωτεϊνών του βασιλικού πολτού κατά την αποθήκευση με τη χρήση φασματοσκοπίας FT-IR. Ε. Αλυσσανδράκης, Χ.Σ. Παππάς, Π.Α. Ταραντίλης, Π.Χ. Χαριζάνης, **Μ.Γ. Πολυσιού**. **Ημέρες Χημείας Τροφίμων, 4-5 Νοεμβρίου 2011, Αθήνα, Γενικό Χημείο του Κράτους.**
46. CHEMICAL CHARACTERIZATION OF DIFFERENT SPECIES OF THE GENUS *CROCUS* BY GC-MS AND FT-IR SPECTROSCOPY. **Polissiou M.**, Anastasaki E., Kanakis Ch., Petrakis E., Astraka K., Daferera D., Tarantilis P.A., Mantzouridou F., Tsimidou M., Santana Omar, De los Mozos-Pascual M., Fernandez Perez J-A. **1st INTERNATIONAL CONFERENCE, MEDICINAL CROPS (Plants & Mushrooms),**

Challenges and Prospects for Sustainable Development in Small Farming Athens, Greece, November 9-12, 2011.

47. CLASSIFICATION OF MEDICINAL AND AROMATIC PLANTS ACCORDING TO GEOGRAPHICAL LOCATION USING FT-IR SPECTROSCOPY. **Polissiou M.G.**, Kanakis C.D., Petrakis E.A., Kimbaris A.C., Pappas C., Tarantilis P.A. **1st INTERNATIONAL CONFERENCE, MEDICINAL CROPS (Plants & Mushrooms)**, *Challenges and Prospects for Sustainable Development in Small Farming Athens, Greece, November 9-12, 2011.*
48. Εφαρμογή της φασματοσκοπίας Raman στη διαφοροποίηση ειδών του γένους *Crocus*, με βάση την περιεκτικότητα των στυλών των ανθέων τους σε κροκίνες. Κανάκης Χ., Πετράκης Ε., Αναστασάκη Ε., Ασπρακά Κ., Δαφερέρα Δ., Ταραντίλης Π.Α., Μαντζουρίδου Φ., Τσιμίδου Μ., Santana Omar, De los Mozos-Pascual M. , Fernandez Perez J-A, **Πολυσιού Μ. 21ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΧΗΜΕΙΑΣ 2011. ΘΕΣΣΑΛΟΝΙΚΗ 9-12 ΔΕΚΕΜΒΡΙΟΥ 2011.**
49. ΠΑΡΑΤΗΡΗΣΕΙΣ ΣΤΟ ΠΡΟΦΙΛ ΚΑΙ ΤΑ ΕΠΙΠΕΔΑ ΤΩΝ ΚΡΟΚΙΝΩΝ ΣΤΙΓΜΑΤΩΝ ΤΟΥ *C. sativus* L. ΑΠΟ ΤΗΝ WORLD SAFFRON COLLECTION (CUENCA, SPAIN) Ορδούδη Α.Σ., Νενάδης Ν., Ναζίρη Ε., Κυριακούδη Α., Μαντζουρίδου Φ., Τσιμίδου Μ.Ζ., Ταραντίλης Π., **Πολυσιού Μ.**, Santana-Méridas O., De Los Mozos-Pascual M., Fernandez-Perez JA. **21ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΧΗΜΕΙΑΣ 2011. ΘΕΣΣΑΛΟΝΙΚΗ 9-12 ΔΕΚΕΜΒΡΙΟΥ 2011.**