

**CURRICULUM VITAE**  
**KOURKOUTAS IOANNIS (YIANNIS)**



**Personal Information:**

First Name and Surname: IOANNIS (YIANNIS) KOURKOUTAS

Date of birth: 04/11/1974, Place of birth: Athens, Greece.

Married status: Married, Father of 2 children.

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**Education:**

1997-2002 PhD in Food Biotechnology, University of Patras, Department of Chemistry, Greece.

04/1999 Degree in Enology, University of Patras, Department of Chemistry, Greece.

1992-1997 Degree in Chemistry, University of Patras, Department of Chemistry, Greece.

**Work Experience:**

2012-today Assistant Professor of Applied Biotechnology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, GR-68100, Greece.

2007-2012 Lecturer of Applied Biotechnology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, GR-68100, Greece.

2005-2007 Post-Doc Researcher. AMTH11: "Improvement of quality of dairy products by application and modelling of new technologies" with attendance of EVROFARMA Dairy Industry. Budget: 750.000€.

2006-2008 Post-Doc Researcher. DEL\_13: "Production of dried starter cultures for food production using whey as raw material", with attendance of AVIGAL Dairy Industry. Budget: 756.850€.

2006-2007 Post-Doc Researcher. PBMAT-3: "Bioethanol production from breweries cellulose wastes (spent grains)" with attendance of MACEDONIA-THRACE Brewery. Budget: 179.200€.

2004-2006 Post-Doc Researcher. "Pythagoras I: Supporting Research Teams in the Universities: The liquid waste of dairy industry as raw material for the production of freeze-dried

probiotic kefir culture and use of the freeze-dried culture in as starter in cheese ripening”. Budget: 80.000€.

#### **Record of Funded Research Projects:**

Dr. Kourkoutas has participated in many research projects (coordinating most of them) totaling more than 3.800.000€. His funds derive from EU (7th FP), National Grants (Generally Secretary of Research and Technology, Greece) and the Food/Agriculture Industry.

#### Selected Projects:

- Project:** SYNERGASIA II: Proposal 11SYN\_2\_566: “Novel functional foods containing bioactive essential oils from Greek endemic species with health promoting properties” in collaboration with EVGA S.A and VIORYL S.A., Industries. **Source of funding:** Greek General Secretariat of Research and Technology (GSRT) and private industrial funds. **Budget:** 1.1840.000€. **Starting/ending dates:** August 2013-October 2015. **Role:** Coordinator.
- Project:** SYNERGASIA II: Proposal 11SYN\_2\_571: “Functional dairy and meat products with high added value fermented or enriched with new probiotic microorganisms isolated from Greek traditional products” in collaboration with NIKAS S.A., ECOFARMA S.A. RODOPI S.A. Industries. **Source of funding:** Greek General Secretariat of Research and Technology (GSRT) and private industrial funds. **Budget:** 1.580.000€. **Starting/ending dates:** October 2013-October 2015. **Role:** participant member (researcher).
- Project:** Greece-China Cooperation: Proposal 12CHN\_409: “Bioactive essential oils and other beneficial substances isolated from Greek and Chinese endemic species with health promoting properties” in collaboration with VIORYL S.A. and PAXMAN S.A. Industries. **Source of funding:** Greek General Secretariat of Research and Technology (GSRT) and private industrial funds. **Budget:** 560.000€. **Starting/ending dates:** December 2012-November 2015. **Role:** Scientific coordinator.
- Project:** Support of Post-Doctorate Researchers: Proposal LS9(3546): “Production of novel probiotic food products: Investigation of anticancer properties”. **Source of funding:** Greek General Secretariat of Research and Technology (GSRT). **Budget:** 150.000€. **Starting/ending dates:** February 2012-January 2015. **Role:** Scientific coordinator.
- Project:** Support of New Enterprises for Research & Technological Development Activities: Proposal 17NEWB2012: “Use of biologically active essential oils in the production of alcoholic beverages and pastry products with potential health benefits” in collaboration with TENTOURA CASTRO S.A. Beverage Industry. **Source of funding:** Greek General Secretariat of Research and Technology (GSRT) and private industrial funds. **Budget:** 190.000€. **Starting/ending dates:** November 2012-January 2015. **Role:** Subcontractor coordinator.
- Project:** Support of New Enterprises for Research & Technological Development Activities: Proposal 15NEWE2009: “Production of probiotic ice-cream using immobilized *L. casei* on dry nuts and pastry products” in collaboration with ENTELWEISS S.A. Dairy Industry. **Source of funding:** Greek GSRT and private industrial funds. **Budget:** 200.000€. **Starting/ending dates:** September 2011-December 2014. **Role:** Subcontractor coordinator.

#### **Patents:**

1. Dimitrellou, D.; Kandylis, P.; Kourkoutas, Y. Baby creams containing freeze-dried or thermally-dried immobilized probiotic bacteria on fruits, casein or whey protein. Patent. Hellenic Industrial Property Organization, 2013, no. 1008754.
2. ACHAICO ENTELWEISS S.A.; Panas, P.; Kourkoutas, Y. Industrial use of wet or dried immobilized lactic acid bacteria on dry nuts and pastry products in probiotic ice-cream production. Patent. Hellenic Industrial Property Organization, 2013, no. 1008050.
3. Kanellaki, M.; Kourkoutas, Y.; Bosnea, L.; Sidira, M. Industrial use of wet, thermally-dried or lyophilized immobilized lactic acid bacteria in production of meat products. Patent. Hellenic Industrial Property Organization, 2012, no. 1007555.
4. Kanellaki, M.; Koutinas, A.A.; Kourkoutas, Y.; Bosnea, L. Industrial use of wet or lyophilized immobilized lactic acid bacteria in production of dairy products. Patent. Hellenic Industrial Property Organization, 2006, no. 1005393.

### Publications:

Dr. Kourkoutas has published 71 papers in peer-reviewed journals (citations:>1450; *h*-factor: 20).

1. Tsimogiannis, D.; Choulitoudi, E.; Bimpilas, A.; Mitropoulou, G.; Kourkoutas, Y.; Oreopoulou, V. Exploitation of the biological potential of *Satureja thymbra* essential oil and distillation by-products. *J Appl Res Med Aromat Plants*, 2016, in press.
2. Sidira, M.; Santarmaki, V.; Kiourtzidis, M.; Argyri, A. A.; Papadopoulou, O. S.; Chorianopoulos, N.; Tassou, C.; Kaloutsas, S.; Galanis, A.; Kourkoutas, Y. Evaluation of immobilized *Lactobacillus plantarum* 2035 on whey protein as adjunct probiotic culture in yoghurt production. *LWT-Food Sci Technol*, 2017 75 137-146.
3. Fitsiou, E.; Mitropoulou, G.; Spyridopoulou, K.; Tiptiri-Kourpeti, A.; Vamvakias, M.; Bardouki, H.; Panayotidis, M.; Galanis, A.; Kourkoutas, Y.; Chlichlia, K.; Pappa, A. Phytochemical profile and evaluation of the biological activities of essential oils derived from the Greek aromatic plant species *Ocimum bacillicum*, *Mentha spicata*, *Pimpinella anisum* and *Fortunella margarita*. *Molecules*, 2016, 21 1069; doi:10.3390/molecules21081069.
4. Bezirtzoglou, E.; Voidarou, C.; Stavropoulou, E.; Kourkoutas, Y.; Alexopoulos, A.; Plessas, S.; Varzakas, T. Emerging antibiotic resistance in honey as a hazard for human health. *J Bacteriol Mycol Open Access*, 2016 2(1) 00012. <http://dx.doi.org/10.15406/jbmoa.2016.02.00012>.
5. Nikolaou, A.; Varzakas, T.; Kourkoutas, Y. Effect of organic fertilization treatment, frying oil and cultivar variety on the volatile profile of potato tubers. *Cur Res Nutr Food Sci*, 2016 4 1-8, <http://dx.doi.org/10.12944/CRNFSJ.4.1.01>.
6. Saxami, G.; Papadopoulou, O.S.; Chorianopoulos, N.; Kourkoutas, Y.; Tassou, C. C.; Galanis, A. Molecular detection of two potential probiotic lactobacilli strains and evaluation of their performance as starter adjuncts in yoghurt production. *Int J Mol Sci*, 2016 17 668. doi:10.3390/ijms17050668.
7. Dimitrellou, D.; Kandylis, P.; Petrović, T.; Dimitrijević-Branković, S.; Lević, S.; Nedović, V.; Kourkoutas, Y. Survival of spray dried microencapsulated *Lactobacillus casei* ATCC 393 in simulated gastrointestinal conditions and fermented milk. *LWT-Food Sci Technol*, 2016 71 169-174.
8. Dimitrellou, D.; Kandylis, P.; Kourkoutas, Y. Effect of cooling rate, freeze-drying, and storage on survival of free and immobilized *Lactobacillus casei* ATCC 393. *LWT-Food Sci Technol*, 2016 69 468-473.

9. Tiptiri-Kourpeti, A.; Spyridopoulou, K.; Santarmaki, V.; Aindelis, G.; Tompoulidou, E.; Lamprianidou, E. E; Saxami, G.; Ypsilantis, P.; Lampri, E. S; Simopoulos, C.; Kotsianidis, I.; Galanis, A.; Kourkoutas, Y.; Dimitrellou, D.; Chlichlia, K. *Lactobacillus casei* exerts anti-proliferative effects accompanied by apoptotic cell death and up-regulation of TRAIL in colon carcinoma cells. *PLoS ONE* 2016 11(2): e0147960. doi:10.1371/journal.pone.0147960.
10. Sidira, M.; Kandyliis, P.; Kanellaki, M.; Kourkoutas, Y. Effect of curing salts and probiotic cultures on the evolution of flavor compounds in dry-fermented sausages during ripening. *Food Chem*, 2016, 201 334-338.
11. Galanis, A.; Kourkoutas, Y.; Tassou, C.; Choriantopoulos, N. Detection and identification of probiotic *Lactobacillus plantarum* strains by multiplex PCR using RAPD-derived primers. *Int J Mol Sci*, 2015 16, 25141-25153.
12. Sidira, M.; Kourkoutas, Y.; Kanellaki, M.; Charalampopoulos, D. *In vitro* study on the cell adhesion ability of immobilized lactobacilli on natural supports. *Food Res Int*, 2015, 76, 532-539.
13. Mitropoulou, G.; Fitsiou, E.; Stavropoulou, E.; Papavasiliopoulou, E.; Vamvakias, M.; Pappa, A.; Oreopoulou, A.; Kourkoutas, Y. Composition, antimicrobial, antioxidant, and antiproliferative activity of *Origanum dictamnus* (*dittany*) essential oil. *Microb Ecol Health Dis*, 2015, 26, 26543-<http://dx.doi.org/10.3402/mehd.v26.26543>.
14. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M. Cheese production using kefir culture entrapped in milk proteins. *Appl Biochem Biotechnol*, 2015, 176, 213-230.
15. Sidira, M.; Kandyliis, P.; Kanellaki, M.; Kourkoutas, Y. Effect of immobilized *Lactobacillus casei* on volatile compounds of heat treated probiotic dry-fermented sausages. *Food Chem*, 2015, 178, 201-207.
16. Sidira, M.; Kandyliis, P.; Kanellaki, M.; Kourkoutas, Y. Effect of immobilized *Lactobacillus casei* on the evolution of flavor compounds in probiotic dry-fermented sausages during ripening. *Meat Sci*, 2015, 100, 41-51.
17. Dimitrellou, D.; Kandyliis, P.; Sidira, M.; Koutinas, A.A.; Kourkoutas, Y. Free and immobilized *Lactobacillus casei* ATCC 393 on whey protein as starter cultures for probiotic Feta-type cheese production. *J Dairy Sci*, 2014, 97, 4675-4685.
18. Sidira, M.; Galanis, A.; Nikolaou, A.; Kanellaki, M.; Kourkoutas, Y. Evaluation of *Lactobacillus casei* ATCC 393 protective effect against spoilage of probiotic dry-fermented sausages. *Food Control*, 2014, 42, 315-320.
19. Tsakiris, A.; Kallithraka, S.; Kourkoutas, Y. Grape brandy production, composition and sensory evaluation. *J Sci Food Agric*, 2014, 94, 404-414.
20. Sidira, M.; Karapetsas, A.; Galanis, A.; Kanellaki, M.; Kourkoutas, Y. Effective survival of immobilized *Lactobacillus casei* during ripening and heat treatment of probiotic dry-fermented sausages and investigation of the microbial dynamics. *Meat Sci*, 2014, 96, 948-955.
21. Mitropoulou, G.; Nedovic, V.; Goyal, A.; Kourkoutas, Y. Immobilization technologies in probiotic food production. *J Nutr Metabol*, 2013, <http://dx.doi.org/10.1155/2013/716861>.
22. Ypsilantis, P.; Lambropoulou, M.; Kourkoutas, I.; Pechivanis, A.; Simopoulos, C. Liver radiofrequency ablation compromises the biological gut barrier. *Hum Exp Toxicol*, 2013, DOI: 10.1177/0960327113489049.
23. Sidira, M.; Saxami, G.; Dimitrellou, D.; Santarmaki, V.; Galanis, A.; Kourkoutas, Y. Monitoring survival of *Lactobacillus casei* ATCC 393 in probiotic yogurts using an efficient molecular tool. *J Dairy Sci*, 2013, 96, 3369-3377.
24. Begea, M.; Sirbu, A.; Kourkoutas, Y.; Dima, R. Single-cell protein production of *Candida* strains in culture media based on vegetal oils. *Romanian Biotechnol Lett*, 2012, 17, 7776-7786.

25. Prompona, D.K.; Kandyliis, P.; Tsakiris, A.; Kanellaki, M.; Kourkoutas, Y. Application of alternative technologies for elimination of artificial colourings in alcoholic beverages produced by *Citrus medica* and potential impact on human health. *Food Nutr Sci*, 2012, 3, 959-969.
26. Saxami, G.; Ypsilantis, P.; Sidira, M.; Simopoulos, C.; Kourkoutas, Y.; Galanis, A. Distinct adhesion of probiotic strain *Lactobacillus casei* ATCC 393 to rat intestinal mucosa. *Anaerobe*, 2012, 18, 417-420.
27. Koutinas, A.A.; Sypsas, V.; Kandyliis, P.; Michelis, A.; Bekatorou, A.; Kourkoutas, Y.; Kordulis, C.; Lycourghiotis, A.; Banat, I.M.; Nigam, P.; Marchant, R.; Giannouli, M.; Yianoulis, P. Nano-tubular cellulose for bioprocess technology development. *PLoS ONE*, 2012 7, e34350.
28. Tsakiris, A.; Sotirakoglou, K.; Kandyliis, P.; Kaldis, P.; Tzia, C.; Kourkoutas, Y. Price estimation and economic evaluation of the production cost of red wines produced by immobilized cells on dried raisin berries. *Int J Wine Res*, 2011, 3, 1-8.
29. Kandyliis, P.; Vekiari, A. S.; Kanellaki, M.; Grati Kamoun, N.; Msallem, M.; Kourkoutas, Y. Comparative study of extra virgin olive oil flavor profile of Koroneiki variety (*Olea europaea* var. *Microcarpa alba*) cultivated in Greece and Tunisia during one period of harvesting. *LWT-Food Sci Technol*, 2011, 44, 1333-1341.
30. Nikolaou, A.; Saxami, G.; Kourkoutas, Y.; Galanis, A. A new methodology for rapid detection of *Lactobacillus delbrueckii* subsp. *bulgaricus* based on multiplex PCR. *J Microbiol Meth*, 2011, 84, 362-364.
31. Hondrodinou, O.; Kourkoutas, Y.; Panagou, E. Z. Efficacy of natamycin to control fungal growth in natural black olive fermentation. *Food Microbiol*, 2011, 28, 621-627.
32. Sidira, M.; Galanis, A.; Ypsilantis, P.; Karapetsas, A.; Progaki, Z.; Simopoulos, C.; Kourkoutas, Y. Effect of probiotic-fermented milk administration on gastrointestinal survival of *Lactobacillus casei* ATCC 393 and modulation of intestinal microbial flora. *J Mol Microbiol Biotechnol*, 2010, 19, 224-230.
33. Tsakiris, A.; Kandyliis, P.; Bekatorou, A.; Kourkoutas, Y.; Koutinas, A.A. Dry red wine making using yeast immobilized on cork pieces. *Appl Biochem Biotechnol*, 2010, 162, 1316-1326.
34. Tsakiris, A.; Koutinas, A.A.; Psarianos, C.; Kourkoutas, Y.; Bekatorou, A. A new process for wine production by penetration of yeast in uncrushed frozen grapes. *Appl Biochem Biotechnol*, 2010, 162, 1109-1121.
35. Vekiari, S.A.; Oreopoulou, V.; Kourkoutas, Y.; Kamoun, N.; Msallem, M.; Psimouli, V.; Arapoglou, D. Characterization and seasonal variation of the quality of virgin olive oil of the Throumbolia and Koroneiki varieties from Southern Greece. *Grasas y Aceites*, 2010, 61, 221-231.
36. Karapetsas, A.; Vavoulidis, E.; Galanis, A.; Sandaltzopoulos, R.; Kourkoutas, Y. Rapid detection and identification of probiotic *Lactobacillus casei* ATCC 393 by multiplex PCR. *J Mol Microbiol Biotechnol*, 2010, 18, 156-161.
37. Dimitrellou, D.; Kandyliis, P.; Mallouchos, A.; Komaitis, M.; Koutinas, A.A.; Kourkoutas, Y. Effect of freeze-dried kefir culture on proteolysis of feta-type and whey-cheeses. *Food Chem*, 2010, 119, 795-800.
38. Chorianopoulos, N.G.; Giaouris, E.D.; Kourkoutas, Y.; Nychas, G.-J. Inhibition of the early stage of *Salmonella enterica* serovar Enteritidis biofilm development on stainless steel by cell-free supernatant of a *Hafnia alvei* culture. *Appl Environ Microbiol*, 2010, 76, 2018-2022.
39. Koutinas, A.A.; Bekatorou, A.; Katechaki, E.; Dimitrellou, D.; Kopsahelis, N.; Papapostolou, H.; Panas, P.; Sideris, K.; Kallis, M.; Bosnea, L.A.; Koliopoulos, D.; Sotiropoulos, P.; Panteli, A.; Kourkoutas, Y.; Kanellaki, M.; Soupioni, M. Scale-up of thermally dried kefir production as starter

- culture for hard-type cheese making: An economic evaluation. *Appl Biochem Biotechnol*, 2010, 160, 1734-1743.
40. Bosnea, L.; Kourkoutas, Y.; Albantaki, N.; Tzia, C.; Koutinas, A.A.; Kanellaki, M. Functionality of freeze-dried *L. casei* cells immobilized on wheat grains. *LWT- Food Sci Technol*, 2009, 42, 1696-1702.
41. Dimitrellou, D.; Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M. Thermally-dried immobilized kefir on casein as starter culture in dried whey cheese production. *Food Microbiol*, 2009, 26, 809-820.
42. Kopsahelis, N.; Nisiotou, A.; Kourkoutas, Y.; Panas, P.; Nychas, G.J.-E.; Kanellaki, M. Molecular characterization and molasses fermentation performance of a wild yeast strain operating in an extremely wide temperature range. *Bioresour Technol*, 2009, 100, 4854-4862.
43. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M. Evaluation of thermally-dried *Kluyveromyces marxianus* as baker's yeast. *Food Chem*, 2009, 115, 691-696.
44. Katechaki, E.; Panas, P.; Kourkoutas, Y.; Koliopoulos, D.; Koutinas, A.A. Thermally-dried free and immobilized kefir cells as starter culture in hard-type cheese production. *Bioresour Technol*, 2009, 100, 3618-3624.
45. Sipsas, V.; Kolokythas, G.; Kourkoutas, Y.; Plessas, S.; Nedovic, V.A.; Kanellaki, M. Comparative study of batch and continuous Multi-Stage Fixed-Bed Tower (MFBT) bioreactor during wine-making using freeze-dried immobilized cells. *J Food Eng*, 2009, 90, 495-503.
46. Dimitrellou, D.; Tsaousi, K.; Kourkoutas, Y.; Panas, P.; Kanellaki, M.; Koutinas, A.A. Fermentation efficiency of thermally-dried immobilized kefir on casein as starter culture. *Process Biochem*, 2008, 43, 1323-1329.
47. Papavasiliou, G.; Kourkoutas, Y.; Rapti, A.; Sipsas, V.; Koutinas, A.A.; Soupioni, M. Production of freeze-dried kefir culture using whey. *Int Dairy J*, 2008, 13, 247-254.
48. Plessas, S.; Koliopoulos, D.; Kourkoutas, Y.; Psarianos, C.; Alexopoulos, A.; Marchant, R.; Banat, I.M.; Koutinas, A.A. Upgrading of discarded oranges through fermentation using kefir in food industry. *Food Chem*, 2008, 106, 40-49.
49. Kopsahelis, N.; Panas, P.; Kourkoutas, Y.; Koutinas, A. A. Evaluation of thermally-dried immobilized cells of *Lactobacillus delbrueckii* subsp. *bulgaricus* on apple pieces as a potent starter culture. *J Agric Food Chem*, 2007, 55, 9829-9836.
50. Dimitrellou, D.; Kourkoutas, Y.; Banat, I.M.; Marchant, R.; Koutinas, A.A. Whey cheese production using freeze-dried kefir co-culture as a starter. *J Appl Microbiol*, 2007, 103, 1170-1183.
51. Kourkoutas, Y.; Sipsas, V.; Papavasiliou, G.; Koutinas, A.A. An economic evaluation of freeze-dried kefir starter culture production using whey. *J Dairy Sci*, 2007, 90, 2175-2180.
52. Kourkoutas, Y.; Kanellaki, M.; Koutinas, A.A. Apple pieces as immobilization support of various microorganisms. *LWT-Food Sci Technol*, 2006, 39, 980-986.
53. Kourkoutas, Y.; Kandyliis, P.; Panas, P.; Dooley, J.S.G; Nigam, P.; Koutinas, A.A. Evaluation of freeze-dried kefir co-culture as starter in Greek Feta-type cheese production. *Appl Environ Microbiol*, 2006, 72, 6124-6135.
54. Kourkoutas, Y.; Bosnea, L.; Taboukos, S.; Baras, C.; Lambrou, D. ; Kanellaki, M. Probiotic cheese production using *Lactobacillus casei* cells immobilized on fruit pieces. *J Dairy Sci*, 2006, 89, 1431-1451.
55. Kourkoutas, Y.; Kanellaki, M.; Koutinas, A.A.; Tzia, C. Effect of storage of immobilized cells at ambient temperature on volatiles during wine-making. *J Food Eng*, 2006 74, 217-223.
56. Tsakiris, A.; Kourkoutas, Y.; Koutinas, A.A.; Psarianos, C.; Kanellaki, M. Wine produced by immobilized cells on dried raisin berries in sensory evaluation comparison with commercial products. *J Sci Food Agric*, 2006, 86, 539-543.

57. Plessas, S.; Kourkoutas, Y.; Psarianos, C.; Kanellaki, M.; Koutinas, A.A. Continuous baker's yeast production using orange peel as promoting support in the bioreactor. *J Sci Food Agric*, 2006, 86, 407-414.
58. Kourkoutas, Y.; Kanellaki, M.; Koutinas, A.A.; Tzia, C. Effect of fermentation conditions and immobilization supports on the wine-making. *J Food Eng*, 2005, 69, 115-123.
59. Kourkoutas, Y.; Xolias, V.; Kallis, M.; Bezirtzoglou, E.; Kanellaki, M. *Lactobacillus casei* immobilization on fruit pieces for probiotic additive, fermented milk and lactic acid production. *Process Biochem*, 2005, 40, 411-416.
60. Mallios, P.; Kourkoutas, Y.; Iconomopoulou, M.; Koutinas, A.A.; Psarianos, C.; Marchant, R.; Banat, I.M. Low temperature wine-making using yeast immobilized on pear pieces. *J Sci Food Agric*, 2004, 84, 1615-1623.
61. Kourkoutas, Y.; Becatorou, A.; Banat, I.M.; Marchant, R.; Koutinas, A.A. Immobilization technologies and support materials suitable in alcoholic beverages production: a review. *Food Microbiol*, 2004, 21, 377-397.
62. Kourkoutas, Y.; McErlean, C.; Kanellaki, M.; Hack, C.J.; Marchant, R.; Banat, I.M.; Koutinas, A.A. High temperature wine-making using the thermophilic yeast strain *Kluyveromyces marxianus* IMB3. *Appl Biochem Biotech*, 2004, 112, 25-36.
63. Rahman, K.S.M.; Thahira-Rahman, J.; Kourkoutas, Y.; Petsas, I.; Banat, I.M. Enhanced bioremediation of *n*-alkane petroleum sludge using bacterial consortium amended with rhamnolipid and micro-nutrients. *Bioresour Technol*, 2003, 90, 159-168.
64. Kourkoutas, Y.; Douma, M.; Koutinas, A.A.; Kanellaki, M.; Banat, I.M.; Marchant, R. Continuous wine-making fermentation using quince immobilized yeast at room and low temperatures. *Process Biochem*, 2003, 39, 143-148.
65. Elezi, O.; Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M.; Bezirtzoglou, E.; Barnett, Y.A.; Nigam, P. Food additive lactic acid production by immobilized cells of *Lactobacillus brevis* on delignified cellulosic material. *J Agric Food Chem*, 2003, 51, 5285-5289.
66. Kourkoutas, Y.; Komaitis, M.; Koutinas, A.A.; Kaliafas, A.; Kanellaki, M.; Marchant, R.; Banat, I.M. Wine production using yeast immobilized on quince biocatalyst at temperatures between 30 and 0°C. *Food Chem*, 2003, 82, 353-360.
67. Kourkoutas, Y.; Kanellaki, M.; Koutinas, A.A.; Banat, I.M.; Marchant, R. Storage of immobilized yeast cells for use in wine-making at ambient temperature. *J Agric Food Chem*, 2003, 51, 654-658.
68. Kourkoutas, Y.; Psarianos, C.; Koutinas, A.A.; Kanellaki, M.; Banat, I.M.; Marchant, R. Continuous whey fermentation using kefir yeast immobilized on delignified cellulosic material. *J Agric Food Chem*, 2002, 50, 2543-2547.
69. Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M.; Banat, I.M.; Marchant, R. Continuous wine fermentation using a psychrophilic yeast immobilized on apple cuts at different temperatures. *Food Microbiol*, 2002, 19, 127-134.
70. Kourkoutas, Y.; Dimitropoulou, S.; Kanellaki, M.; Marchant, R.; Nigam, P.; Banat, I.M.; Koutinas, A.A. High-temperature alcoholic fermentation of whey using *Kluyveromyces marxianus* IMB3 yeast immobilized on delignified cellulosic material. *Bioresour Technol*, 2002, 82, 177-181.
71. Kourkoutas, Y.; Komaitis, M.; Koutinas, A.A.; Kanellaki, M. Wine production using yeast immobilized on apple pieces at low and room temperatures. *J Agric Food Chem*, 2001, 49, 1417-1425.

Dr. Kourkoutas has published 14 articles in books.

Selected articles in books:

1. Dimitrellou, D.; Sidira, M.; Charalampopoulos, D.; Ypsilantis, P.; Galanis, A.; Simopoulos, C.; Kourkoutas, Y. Effect of cell immobilization on properties of presumptive probiotics. In: Nedović, V.; Raspor, P.; Lević, J.; Šaponjac, V.T.; Barbosa-Cánovas, G. V. Emerging and traditional technologies for safe, healthy, and quality food. Springer Cham Heidelberg New York Dordrecht London, 2016, (pp. 257-268).
2. Sidira, M.; Kanellaki, M.; Kourkoutas, Y. Profile of aroma-related volatile compounds isolated from probiotic dry-fermented sausages produced with free or immobilized *L. casei* using SPME GC/MS analysis. In: Ho, C.T.; Mussinan, C.; Shahidi, S.; Tratras Contis, E. Nutrition, Functional and Sensory Properties of Foods, RSC Publishing, Cambridge, UK, 2013 (pp. 135-147).
3. Sidira, M.; Galanis, A.; Ypsilantis, P.; Simopoulos, C.; Kourkoutas, Y. Novel probiotic foods containing immobilized lactic acid bacteria. In: Soccol, C.R.; Pandey, A.; Soccol, V.T.; Larroche, C. Advances in bioprocesses in food industry, Asiatech Publishers INC, New Delhi, 2011, (pp. 83-93).
4. Sidira, M.; Dimitrellou, D., Kanellaki, M.; Kourkoutas, Y. Volatile compounds of probiotic fermented sausages produced using immobilized *L. casei* on wheat. In: Ho, C-T.; Mussinan, C.J., Shahidi, F., Tratras Contis, E. Recent advances in food and flavor chemistry. Food flavors and encapsulation, health benefits, analytical methods and molecular biology of functional foods, RSC Publishing, Cambridge, UK, 2010, (pp.178-184).
5. Kourkoutas, Y.; Manolović, V.; Nedović, V. Immobilization of microbial cells for alcoholic and malolactic fermentation of wine and cider. In: Zuidam, N. J.; Nedović, V. Encapsulation technologies for active food ingredients and food processing, Springer, New York, 2010, (pp. 327-343).
6. Kourkoutas, Y.; Kanellaki, M.; Koutinas, A.A. Fruit-based immobilized biocatalysts: Their potential in food production. In: Vendkateswar Rao, L.; Pandey, A.; Larroche, C.; Soccol, C.R.; Dussap, C-G. Current topics on bioprocesses in food industry, Asiatech Publishers, INC, New Delhi, 2010, (pp. 93-104).
7. Kourkoutas, Y. The potential of kefir starter culture in food production. In: Pandey, A.; Larroche, C.; Soccol, C.R.; Dussap, C.G. New horizons in biotechnology, Asiatech Publishers, INC, New Delhi, 2009, (pp. 323-335).
8. Kourkoutas, Y. Materials used as immobilized yeast support. In: Auxiliary Materials in Brewing Technology. 2008, (pp. 39-52).
9. Psarianos, C., Kourkoutas, Y. Functional foods: Immobilization of probiotic bacteria on plant vectors for the production of value added and healthy products. In: Govil, J.N., Singh, V.K., Khalil Ahmad. Recent Progress in Medicinal Plants. Biopharmaceuticals. 2006, vol. 14, (pp. 453-475).
10. Kourkoutas, Y.; Kanellaki, M.; Bekatorou, A.; Iconomopoulou, M.; Malouchos A.; Koutinas, A.A. Flavor in wines produced by cells immobilized on various supports. In: Spanier, A.M.; Shahidi, F.; Parliament, T.H.; Mussinan, C.; Ho, C-T.; Tratras, Contis, E. Food flavor and chemistry. Explorations into the 21<sup>st</sup> Century, UK, 2005, (pp. 51-60).
11. Kourkoutas, Y.; Banat, I.M. Biosurfactant production and application. In: Concise Encyclopedia of Bioresource Technology, Haworth Press, (Ashok Pandey Ed.), USA, 2004, (pp. 505-515).

**Proceedings in International Conferences:**



Dr. Kourkoutas has published more than 90 proceedings in international conferences.

Selected proceedings in international conferences:

1. Mitropoulou, G.; Oreopoulou, A.; Papavassilopoulou, E.; Vamvakias, M.; Fragias, S.; Panas, P.; Kourkoutas, Y. Antimicrobial activity of *Oregano vulgare* spp. *hirtum* against *Saccharomyces cerevisiae*, *Aspergillus niger* and *Clostridium difficile* in tomato juice. International Conference on Nutraceuticals and Functional Foods-Superfoods for Nutrition and Well-Being, Kalamata, Greece, 7-9 July 2016 (pp. 101-102).
2. Mitropoulou, G.; Tsimogiannis, D.; Bimpilas, A.; Oreopoulou, V.; Chorianopoulos, N.; Tassou, C.; Kourkoutas, Y. Assessment of antimicrobial activity of *Satureja thymbra* essential oils and extracts against food spoilage and pathogenic species. IFAP's 12<sup>th</sup> European Symposium on Food Safety, Athens, Greece, 11-13 May 2016.
3. Bardouki, H.; Vamvakias, M.; Papavassilopoulou, E.; Mitropoulou, G.; Kourkoutas, Y. Composition and antimicrobial properties of spearmint (*Mentha spicata*) essential oil and hydrosol fractions. 29<sup>th</sup> EFFoST International Conference, Athens, Greece, 10-12 November 2015.
4. Bardouki, H.; Vamvakias, M.; Georganakis, D.; Mitropoulou, G.; Kourkoutas, Y. Characterization and antimicrobial properties of sweet basil (*Ocimum basilicum* L.) essential oil and hydrosol fractions. 29<sup>th</sup> EFFoST International Conference, Athens, Greece, 10-12 November 2015.
5. Mitropoulou, G.; Bimpilas, A.; Tsimogiannis, D.; Oreopoulou, V.; Kourkoutas, Y. Antimicrobial properties of the essential oil, ethanol and ethyl acetate extract of *Satureja thympra* against food spoilage and pathogenic bacteria. 38<sup>th</sup> SOMED Congress, Verona, Italy, 11-13 October 2015 (p. 89).
6. Santarmaki, V.; Kiourtzidis, M.; Galanis, A.; Ypsilantis, P.; Kourkoutas, Y. Comparative study of the survival and potential adherence to the intestinal mucosa of probiotic strains in Wistar rats. 38<sup>th</sup> SOMED Congress "Human Microbiome: From the bench to health benefits", Verona, Italy, 11-13 October 2015 (p. 87).
7. Mitropoulou, G.; Sidira, M.; Chorianopoulos, N.; Argiri, A.; Papadopoulou, O.; Tassou, C.; Kourkoutas, Y. Assessment of *Lactobacillus plantarum* T-571 as a potent probiotic culture for Greek feta-type cheese production and characterization of microbial flora by next-generation sequencing technology. 38<sup>th</sup> SOMED Congress "Human Microbiome: From the bench to health benefits", Verona, Italy, 11-13 October 2015 (p. 86).
8. Sidira, M.; Kiourtzidis, M.; Chorianopoulos, N.; Tassou, C.; Kaloutsas, S.; Mitropoulou, G.; Varzakas, T.; Kourkoutas, Y. Volatile compounds in probiotic yoghurts containing immobilized *Lactobacillus plantarum* 2035 on whey protein. 9<sup>th</sup> International Conference on Instrumental Methods of Analysis: Modern Trends and Applications, Kalamata, Greece, 20-24 September 2015 (p. 115).
9. Sidira, M.; Kandyliis, P.; Bosnea, L.; Kanellaki, M.; Varzakas, T.; Kourkoutas, Y. Volatile compounds in probiotic dry-fermented sausages. 9<sup>th</sup> International Conference on Instrumental Methods of Analysis: Modern Trends and Applications, Kalamata, Greece, 20-24 September 2015 (p. 114).
10. Mitropoulou, G.; Galanis, A.; Vamvakias, M.; Bardouki, H.; Kourkoutas, Y. Essential oils from Greek endemic species as antimicrobial agents against *Saccharomyces cerevisiae* and *Aspergillus niger* responsible for food spoilage. SGM - Irish Division Meeting: Microbial Interfaces, Galway, Ireland, 17-19 June 2015.
11. Mitropoulou, G.; Papavassilopoulou, E.; Vamvakias, M.; Oreopoulou, A.; Kourkoutas, Y. Assessment of antibacterial properties of *Origanum onites* and *Origanum dictamnus* (*dittany*)

essential oils against food spoilage and pathogenic species. SGM - Irish Division Meeting: Microbial Interfaces, Galway, Ireland, 17-19 June 2015.

12. Mitropoulou, G.; Chorianopoulos, N.; Tassou, C.; Kourkoutas, Y. Characterization of microbial flora in Greek feta-type cheeses by next-generation sequencing technology. SGM - Irish Division Meeting: Microbial Interfaces, Galway, Ireland, 17-19 June 2015.

13. Kourkoutas Y. Application of cell immobilization technology in probiotic food production. :SGM - Irish Division Meeting: Microbial Interfaces, Galway, Ireland, 17-19 June 2015. Oral presentation.

14. Sidira, M.; Kiourtzidis, M.; Chorianopoulos, N.; Tassou, C.; Mitropoulou G.; Kaloutsas, S.; Kourkoutas Y. Assessment of immobilized *Lactobacillus plantarum* 2035 on whey protein in probiotic yoghurt production. 2<sup>nd</sup> International Conference on Food and Biosystems Engineering FABE 2015, Myconos Island, Greece, 28-31 May 2015 (pp. 134-135).

15. Tompoulidou, E.; Giorgalli, M.; Tiptiri-Kourpeti, A.; Aindelis, G.; Spyridopoulou, K.; Santarmaki, V.; Saxami, G.; Galanis, A.; Kourkoutas, Y.; Dimitrellou, D.; Chlichlia, K. *Lactobacillus casei*-induced anti-proliferative and pro-apoptotic effect against colon cancer cells: Identification of molecular targets. 37<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences, Volos, Greece, 21-23 May 2015 (p. 384-385).

16. Tiptiri Kourpeti, A.; Aindelis, G.; Spyridopoulou, K.; Santarmaki, V.; Tompoulidou, E.; Saxami, G.; Simopoulos, C.; Ypsilantis, P.; Galanis, A.; Kourkoutas, I.; Dimitrellou, D.; Chlichlia, K. Antiproliferative effects of *Lactobacillus casei* ATCC 393 against colon carcinoma. Abstracts. *J Biotechnol*, 2015, 208 S83.

17. Nikolaou, A.; Varzakas, T.; Kourkoutas, Y. Effect of organic fertilisation and oil variety on the volatile metabolic profile of fried potato tubers in extra virgin olive, corn and soybean oil. IJFST 50<sup>th</sup> Celebration Conference: The future of food innovation, nutrition and technology, Lincoln, New Zealand, 17-19 February 2014 (p. 60).

18. Varzakas, T.; Alghamdi, A.; Alghamdi, H.; Linforth, R.; Connerton, I.; Harding, S.; Arapoglou, D.; Israilides, C.; Kourkoutas, I. The effect of organic fertilization on sugars, amino acids and acrylamide of three potato cultivars (Lady Rosetta, Voyager, Spunta) and fried in extra virgin olive oil, corn and soybean oil. IJFST 50<sup>th</sup> Celebration Conference: The future of food innovation, nutrition and technology, Lincoln, New Zealand, 17-19 February 2014 (p. 24).

19. Mitropoulou, G.; Vamvakias, M.; Bardouki, H.; Panas, P.; Kourkoutas, Y. A comparison study of antimicrobial properties of louisa (*Lippia citriodora*) and citrus (*Citrus medica*) essential oils against food spoilage and pathogenic bacteria. IJFST 50<sup>th</sup> Celebration Conference: The future of food innovation, nutrition and technology, Lincoln, New Zealand, 17-19 February 2014 (pp. 71-72).

20. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y. Probiotic fermented milk with freeze dried immobilized *Lactobacillus casei* ATCC 393 cells on apples pieces. Natural resources, green technology & sustainable development. Zagreb, Croatia, 25-28 November 2014 (p.71).

21. Dimitrellou D.; Kandyliis P.; Sidira M.; Kourkoutas Y. Assessment of freeze-dried immobilized *Lactobacillus casei* ATCC 393 on probiotic yoghurt production. Annual Conference & Exhibition. Functional Foods, Nutraceuticals, Natural Health Products, and Dietary Supplements, Istanbul, Turkey, 14-17 October 2014, (p.245).

22. Mitropoulou G.; Chachalis P.; Panas P.; Kiourtzidis M.; Kourkoutas Y. A comparison study of antimicrobial properties of Cinnamon and Chios mastic gum essential oils against foodborne pathogens. Annual Conference and Exhibition on Functional Foods, Nutraceuticals, Natural Health Products and Dietary Supplements, Istanbul, Turkey, 14-17 October 2014 (p. 201).

23. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y. Physicochemical and microbiological characteristics of probiotic yogurts produced with freeze dried immobilized cells on casein. 14th

International Nutrition & Diagnostics Conference, Prague, Czech Republic, 2-5 September 2014 (p.101).

24. Dimitrellou, D.; Sidira, M.; Ypsilantis P.; Charalampopoulos, D.; Saxami, G.; Galanis, A.; Simopoulos, C.; Kourkoutas, Y. Probiotic Properties of Immobilized *Lactobacillus casei* ATCC 393. Anaerobe, Chicago, USA, 28 June-1 July 2014 (p. 162).

25. Mitropoulou G.; Vamvakias M.; Bardouki H.; Panas P.; Kourkoutas Y. Assessment of antimicrobial properties of basil essential oil against foodborne pathogens. Anaerobe, Chicago, 28 June-1 July 2014 (p.182).

26. Mitropoulou G., Vamvakias M., Bardouki H., Panas P., Kourkoutas Y. Assessment of antimicrobial properties of Chios mastic gum essential oil against foodborne pathogens. Anaerobe, Chicago, 28 June-1 July 2014 (p.161).

27. Vekiari S.; Kourkoutas Y.; Fitsiou E.; Pappa A.; Zamanidis P.; Eleftheriadis E. Phytosterol composition, antioxidant potential and antimicrobial properties of the unsaponifiable fractions from leaves of three Russian Sea Buckthorn varieties (*Hippophae rhamnoides* L.) and *Lycium Barbarrum* (Godji berry) cultivated in Greece. ISHS Postharvest Unlimited Symposium, Paphos, Cyprus, 10-13 June 2014 (p. 119).

28. Santarmaki, V., Nikolaou, A., Galanis, A., Panas, P., Michalopoulos, I., Kourkoutas, Y. Probiotic ice cream production using free or immobilized *Lactobacillus casei* on dry nuts and pastry products. 3<sup>rd</sup> International ISEKI Food Conference, Athens, Greece, 21-23 May 2014 (p. 258).

29. Mitropoulou, G.; Galanis, A.; Vamvakias, M.; Bardouki, H.; Kourkoutas, Y. Assessment of antimicrobial properties of spearmint essential oil against foodborne pathogens. 3<sup>rd</sup> International ISEKI Food conference, Athens, Greece, 21-23 May 2014 (p.127).

30. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y. Freeze dried apple and casein supported biocatalysts for probiotic dairy products production. European Biotechnology Congress 2014, Lecce, Italy, 15-18 May, *J Biotechnol*, 2014, 185S, S78–S79.

31. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y. Physicochemical and microbiological characteristics of probiotic yogurts produced with immobilized cells. European Biotechnology Congress 2014, Lecce, Italy, 15-18 May, *J Biotechnol*, 2014, 185S, S78.

32. Nikolaou, A.; Nikakou, M.; Galanis, A.; Kourkoutas, Y. Effect of cell immobilization and temperature on microbial composition of kefir culture during cider fermentation. 36th Scientific Conference of Hellenic Association for Biological Sciences, Ioannina, Greece, 8-10 May 2014 (pp. 260-261).

33. Mitropoulou G.; Nikolaou A.; Bimpilas A.; Tsimogiannis D.; Oreopoulou V.; Kourkoutas Y. Antimicrobial activity of *Origanum vulgare* ssp. *hirtum* (carvacrol chemotype) essential oil against foodborne pathogenic bacteria. 36th Scientific Conference of Hellenic Association for Biological Sciences, Ioannina, 8-10 May, 2014, (pp. 226-227).

34. Santarmaki, V.; Panas, P.; Michalopoulos, I.; Kourkoutas, Y. Whey exploitation for the production of dried probiotic *Lactobacillus casei* ATCC 393 biomass. International Conference on Advances in Biotechnology and Bioinformatics-ICABB-2013, Pune, India, 25-27 November 2013 (p. C235-C236).

35. Mitropoulou, G.; Santarmaki, V.; Panas, P.; Michalopoulos, I.; Kourkoutas, Y. An economic evaluation for production of dried probiotic immobilized starter culture using whey. International Conference on Environment, Health and Industrial Biotechnology- BioSangam-2013, Allahabad, India, 21-23 November 2013 (p. 441).

36. Dimitrellou, D.; Kandyliis, P.; Lević, S.; Petrović, T.; Dimitrijević-Branković, S.; Nedović, V.; Kourkoutas, Y. Survival of microencapsulated *Lactobacillus casei* ATCC 393 under simulated

- gastrointestinal conditions. 19<sup>th</sup> International Symposium on Microencapsulation, Pamplona, Spain, 9-11 September 2013 (p. 151).
37. Nikolaou, A.; Georgana, I.; Roussos, S.; Galanis, A.; Kourkoutas, Y. DGGE methodology for molecular identification of microorganisms in solid oil mill byproducts. 35<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences, Nafplio, Greece, 23-26 May 2013 (pp.248-249).
38. Tiptiri-Kourpeti, A.; Iliaki, S.; Simoglou-Karali, C.; Dimitrellou, D.; Karoutsou, M.; Santarmaki, V.; Ypsilantis, P.; Simopoulos, C.; Kourkoutas Y.; Chlichlia, K. Anti-cancer properties of *Lactobacillus casei*: Inhibition of growth of colon adenocarcinoma cells *in vitro* and *in vivo*. 35<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences, Nafplio, Greece, 23-25 May 2013 (pp. 350-351).
39. Kandyliis, P.; Santarmaki, V.; Panas, P.; Mixalopoulos, I.; Kourkoutas, Y. Freeze-dried immobilized *Lactobacillus casei* on dried nuts and pastry products as starter culture for probiotic foods. 35<sup>th</sup> Annual Conference, Hellenic Society for Biological Sciences, Nafplio, Greece, 23-25 May 2013 (pp.124-125).
40. Dimitrellou, D.; Kandyliis, P.; Kourkoutas, Y.; Kanellaki, M. Feta-type cheese with kefir entrapped in milk proteins. 5<sup>th</sup> International Conference on Industrial Bioprocesses, IFIB-2012, Taipei, Taiwan, 7-10 October 2012 (p. 334).
41. Santarmaki, V.; Vatikioti, N.P.; Triantafilli, O.; Sidira, M.; Panas, P.; Mixalopoulos, I.; Kourkoutas, Y. Thermally-dried immobilized *Lactobacillus casei* on dried nuts and pastry products as starter culture for probiotic foods. 5<sup>th</sup> International Conference on Industrial Bioprocesses, IFIB-2012, Taipei, Taiwan, 7-10 October 2012 (p. 317).
42. Dimitrellou, D.; Kandyliis, P.; Sidira, M.; Galanis, A.; Koutinas, A.A.; Kourkoutas, Y. Probiotic feta-type cheese production by free or immobilized *Lactobacillus casei* ATCC 393 on whey protein. 5<sup>th</sup> International Conference on Industrial Bioprocesses, IFIB-2012, Taipei, Taiwan, 7-10 October 2012 (p. 316).
43. Sidira, M.; Bosnea, L.; Galanis, A.; Kanellaki, M.; Kourkoutas, Y. Probiotic dry-fermented sausages production using immobilized *Lactobacillus casei* on prebiotic supports. 6<sup>th</sup> Central European Congress on Food, CEFood, Novi Sad, Serbia, 23-26 May 2012 (p. 429).
44. Dimitrellou, D.; Sidira, M.; Saxami, S.; Santarmaki, S.; Kanellaki, M.; Galanis, A.; Kourkoutas, Y. Probiotic yoghurt production using immobilized *Lactobacillus casei* on prebiotic supports. 6<sup>th</sup> Central European Congress on Food, CEFood, Novi Sad, Serbia, 23-26 May 2012 (p. 428).
45. Sidira, M.; Saxami, G.; Karapetsas, A.; Kanellaki M.; Kourkoutas, Y.; Galanis, A. Denaturing gradient gel electrophoresis analysis to monitor dynamic changes in the microbial population during maturation of probiotic dry fermented sausages. 34<sup>th</sup> Annual conference of Hellenic Society for Biological Sciences (EEBE), Trikala, Greece, 17-19 May 2012 (p. 248).
46. Saxami, G.; Nikolaou, M.; Kiourtzidis, M.; Belik, D.; Ypsilantis, P.; Simopoulos C.; Kourkoutas, Y.; Galanis A. Study of the *in vivo* adhesion properties of *Lactobacillus casei* ATCC 393 in the rat gastrointestinal tract. 62<sup>th</sup> Meeting of the Hellenic Society of Biochemistry and Molecular Biology, Athens, Greece, 9-11 December 2011.
47. Sidira, M.; Ypsilantis P.; Saxami, G.; Galanis, A.; Simopoulos C.; Kourkoutas, Y. *In vitro* and *in vivo* study of gastrointestinal survival of *Lactobacillus casei* ATCC 393, adhesion to intestinal mucosa and modulation of intestinal microbial flora. 4<sup>th</sup> Food Congress “Modern Approach to Food Hygiene and Safety” of the Hellenic Veterinary Medical Society (HVMS), Thessaloniki, Greece, 11-13 November 2011 (pp. 55-66).

48. Saxami, G.; Nikolaou, A.; Karapetsas, A.; Kourkoutas Y.; Galanis, A. A new methodology for rapid detection of lactic acid bacteria based on Multiplex PCR. 5<sup>th</sup> Meeting of Hellenic Society of Bioscientists, Athens, Greece, 25-27 November 2010 (p. 3).
49. Sidira, M.; Galanis, A.; Ypsilantis, P.; Belik, D.; Simopoulos, C.; Kourkoutas Y. Probiotic potential of immobilized *Lactobacillus casei* ATCC 393: Effect of fermented milk administration on gastrointestinal survival and modulation of intestinal microbial flora in Wistar rats. 5<sup>th</sup> Meeting of Hellenic Society of Bioscientists, Athens, Greece, 25-27 November 2010 (p. 2).
50. Nikolaou, A.; Saxami, G.; Kourkoutas, Y.; Galanis, A. A new methodology for rapid detection of *L. delbrueckii* subsp. *bulgaricus* based on Multiplex PCR. 61<sup>th</sup> Conference of the Hellenic Society of Biochemistry and Molecular Biology, Alexandroupolis, Greece, 15-17 October 2010 (p.55).
51. Sidira, M.; Galanis, A.; Ypsilantis, P.; Semelidiou, O.; Belik D.; Simopoulos C.; Kourkoutas Y. Probiotic potential of fermented milk produced by immobilized or free *Lactobacillus casei* ATCC 393. 61<sup>th</sup> Conference of the Hellenic Society of Biochemistry and Molecular Biology, Alexandroupolis, Greece, 15-17 October 2010 (p.55).
52. Sidira, M.; Galanis, A.; Ypsilantis, P.; Simopoulos, C.; Kourkoutas, Y. Probiotic potential of *Lactobacillus casei* ATCC 393: Gastrointestinal survival and modulation of intestinal microbial flora in Wistar rats. XXXIII International Congress on Microbial Ecology and Disease (SOMED 2010), Greece, 6-10 September 2010 (p.88).
53. Sidira, M.; Progaki Z.; Efstratiou E.; Galanis A.; Ypsilantis P.; Simopoulos.; Kourkoutas, Y. Molecular and microbiological study of the role of probiotics on the regulation of fecal microbial flora in Wistar rats. 60<sup>th</sup> Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, Greece, 20-22 November 2009 (p. 145).
54. Karapetsas, A.; Vavoulidis, E.; Sandaltzopoulos, R.; Kourkoutas, Y.; Galanis, A. Rapid detection and identification of probiotic *Lactobacillus casei* ATCC 393 by multiplex PCR. 60<sup>th</sup> Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, Greece, 20-22 November 2009 (p. 85).
55. Sidira, M.; Bosnea, L.; Kanellaki, M.; Kourkoutas, Y. Probiotic fermented sausage production using immobilized *L. casei* on wheat. 3<sup>rd</sup> International Congress on Bioprocesses in Food Industries & 5<sup>th</sup> Convention of the Biotech Research Society, Hyderabad, India, 6-8 November 2008 (p. 70).
56. Dimitrellou, D.; Kandyliis, P.; Kanellaki, M.; Koutinas, A.A.; Kourkoutas, Y. Evaluation of thermally-dried immobilized kefir on casein as a starter culture for whey-cheese production. International Conference on New Horizons in Biotechnology NHBT-2007, Trivandrum, India, 26-29 November 2007 (p. 248).
57. Bosnea, L.; Kourkoutas, Y.; Kopsahelis, N.; Agouridis, N.; Kanellaki, M. Use of fruits as substrates for cell immobilization for food production. 2<sup>nd</sup> International Congress on Bioprocesses in Food Industries. ICBF-2006. Patras, Greece, 18-21 June 2006 (pp. 37-38).
58. Kourkoutas, Y.; Sipsas, V.; Soupioni, M.; Panas, P.; Dooley, J.S.G.; Koutinas, A.A. Use of freeze-dried kefir co-culture as a starter in cheese production. 2<sup>nd</sup> International Congress on Bioprocesses in Food Industries. ICBF-2006. Patras, Greece, 18-21 June 2006 (pp. 65-66).
59. Kourkoutas, Y.; Kanellaki, M.; Koutinas, A.A. Apple pieces as immobilization support of various microorganisms. European Symposium on Apple Processing, Rennes, France, 16-18 March 2005 (p. 24).
60. Kanellaki, M.; Bekatorou, A.; Koutinas, A.A.; Kourkoutas, Y.; Iconomopoulou, M.; Malouchos, A. Flavor in wines produced by cells immobilized on various supports. 11<sup>th</sup>

International Flavor Conference. 3<sup>rd</sup> George Charalambous Memorial Symposium. Samos Island, Greece, 1-4 June 2004 (p. 9).

61. Athanasiadis, I.; Becatorou, A.; Lidner, C.; Kourkoutas, J.; Iconomopoulou, M.; Boskou, D.; Blekas, G. Whey liquid waste of dairy industry as raw material for fermentation by kefir granules. 7<sup>th</sup> International Conference on Environmental Science and Technology, Ermoupolis, Syros Island, Greece, 3-6 September 2001 (pp. 226-232).

62. Kourkoutas, Y.; Dimitropoulou, S.; Marchant, R.; Nigam, P.; Banat, I.M.; Kioseglou, V.; Psarianos, C.; Koutinas, A.A. Whey liquid waste of dairy industry as raw material for fermentation with the thermophilic *Kluyveromyces marxianus* IMB3. 7<sup>th</sup> International Conference on Environmental Science and Technology, Ermoupolis, Syros Island, Greece, 3-6 September 2001 (pp. 14-20).

63. Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M.; Psarianos, K. Immobilization of yeast on apple for room and low-temperature wine-making. 2<sup>nd</sup> International Conference of the Chemical Societies of the South-Eastern European Countries on Chemical Sciences for Sustainable Development, Chalkidiki, Makedonia, Greece, 6-9 June 2000 (p. 159).

#### **Invited Talks:**

Dr. Kourkoutas has been invited as a plenary keynote lecturer and has served as Chairman in several conferences.

#### Oral presentations after invitation (selected):

1. Kourkoutas, Y. Emerging immobilization technologies of probiotic bacteria in industrial food production. International Conference on Nutraceuticals and Functional Foods-Superfoods for Nutrition and Well-Being, Kalamata, Greece, 7-9 July 2016 (p. 46).

2. Kourkoutas Y. Advances of cell immobilization technology in industrial production of probiotic foods. 38<sup>th</sup> SOMED Congress, Verona, Italy, 11-13 October 2015 (p. 47).

3. Santarmaki, V.; Sidira, M.; Ypsilantis, P.; Charalampopoulos, D.; Saxami, G.; Galanis, A.; Simopoulos, C.; Kourkoutas, Y. Assessment of GI survival, adhesion ability and modulation of intestinal microbial flora of presumptive probiotic cultures. International ITU Molecular Biology and Genetics Student Congress '14, Istanbul, 15-18 August 2014 (pp.16-17).

4. Sidira, M.; Ypsilantis, P.; Charalampopoulos, D.; Saxami, G.; Mitropoulou, G.; Galanis, A.; Simopoulos, C.; Kourkoutas, Y. Assessment of potential probiotic attributes of immobilized *Lactobacillus casei* ATCC 393. International Conference on Advances in Biotechnology and Bioinformatics-ICABB-2013, Pune, India, 25-27 November 2013 (p. B52-B53).

5. Sidira, M.; Mitropoulou, G.; Galanis, A.; Kourkoutas, Y. Immobilized probiotic starter cultures for probiotic meat products with enhanced resistant to microbial spoilage. International Conference on Environment, Health and Industrial Biotechnology-BioSangam-2013, Allahabad, India, 21-23 November 2013 (p. 414).

6. Sidira, M.; Bosnea, L., Galanis, A.; Kanellaki, M.; Kourkoutas, Y. Immobilized lactic acid bacteria on prebiotics as starter cultures for probiotic fermented meat products. 5<sup>th</sup> International Conference on Industrial Bioprocesses, IFIB-2012, Taipei, Taiwan, 7-10 October 2012 (p. 79).

7. Sidira, M.; Ypsilantis, P.; Saxami, G.; Galanis, A.; Simopoulos, C.; Kourkoutas, Y. *In vitro* and *in vivo* investigation of the probiotic properties of free and immobilized *Lactobacillus casei* ATCC 393. 6<sup>th</sup> Central European Congress on Food, CEFood, Novi Sad, Serbia, 23-26 May 2012 (p. 12).

8. Sidira, M.; Galanis, A.; Ypsilantis, P.; Simopoulos, C.; Kourkoutas, Y. Novel probiotic foods containing immobilized lactic acid bacteria: Their potential in human health. 4<sup>th</sup> International Congress on Bioprocesses in Food Industries (ICBF), Curitiba, Brazil, 5-8 October 2010.
9. Kourkoutas, Y.; Koutinas, A.A.; Kanellaki, M. Fruit-based immobilized biocatalysts: Their potential in food production. 3rd International Congress on Bioprocesses in Food Industries & 5th Convention of the Biotech Research Society, Hyderabad, India, 6-8 November 2008 (p. 21).
10. Kourkoutas, Y. Materials used as immobilized yeast support. 13th School of fermentation technology. Auxiliary materials in brewing technology. Krakow-Kocierz, Poland, 8-11 April 2008 (pp. 39-52).
11. Kourkoutas, Y.; Psarianos, C.; Koutinas, A.A. The potential of kefir starter culture in food production. International Conference on New Horizons in Biotechnology NHBT-2007, Trivandrum, India, 26-29 November 2007 (p. 38).

#### **Ad hoc Evaluator in National and International Calls for Proposals:**

Dr. Kourkoutas has served as evaluator of many National and European research projects including proposals submitted in the following calls:

1. 3<sup>rd</sup> National Plan for Research, Development and Innovation for the period 2015-2020 (PNCDI III)] (October 2016).
2. “Cooperation-2011”, EYDE-ETAK, Greece (July 2015-July 2016).
3. “Aristia II”, General Secretariat of Research and Technology, Greece (March 2016).
4. Research Grants Archimides III, Technological Educational Institute (TEI) of Athens, Greece (April 2015).
5. Call of the Czech-Norwegian Research Programme (May 2014).
6. Call of the Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding, Research within Priority Sectors Programme-RO14 (April 2014).
7. Call of the Estonian Research Council (ETAg), Norwegian-Estonian Research Cooperation Programme (May 2013).
8. Support of Research Personnel of SMEs call of the General Secretariat of Research and Technology, Greece (April 2013).
9. Call “Program for Updating Knowledge in University Graduates”, Greek Ministry of Education, Lifelong Learning and Religious Affairs (July 2012).
10. Call of the Estonian Science Foundation (ETF) (September 2011).
11. Support of Group of SMEs call of the Greek Ministry of Education, Lifelong Learning and Religious Affairs (June 2011).
12. COST OC-2009-2 Domain Food and Agriculture (February 2010).
13. IRAKLITOS II call of the Greek Ministry of Education, Lifelong Learning and Religious Affairs (October 2009).

#### **Member of the Editorial Board in Scientific Journals:**

1. Biomed Research International, Lead Guest Editor, Special issue on Bioactive Natural Products, 2016.
2. Current Research in Nutrition and Food Science, Associate Editor, 2015-today
3. Biomed Research International, Lead Guest Editor, Special issue on Application of Innovative Technologies for Improved Food Quality and Safety, 2015.

4. Biomed Research International, Lead Guest Editor, Special issue on Bioactive Natural Products: Facts, Applications, and Challenges, 2014.
5. Journal of Nutrition and Metabolism, Lead Guest Editor, Special issue on Probiotics and Prebiotics: Health Benefits and Challenges, 2013.
6. Journal of Chemistry, Member of Editorial Board, 2012-today

#### **Ad hoc Reviewer in Scientific Journals:**

Anaerobe	Applied Microbiology & Biotechnology
Bioresource Technology	Biomass & Bioenergy
Biotechnology Progress	Chemical Engineering Communications
Food Chemistry	Food Hydrocolloids
Food Microbiology	Food Technology and Biotechnology
European Food Research and Technology	Journal of Food Engineering
International Journal of Food Microbiology	LWT-Food Science and Technology
Journal of Industrial Microbiology & Biotechnology	Process Biochemistry
Journal of Molecular Nutrition and Food Research	PlosOne
Journal of Agricultural and Food Chemistry	
International Journal of Molecular Sciences	

#### **Member of Scientific Societies:**

1. 2015-2017 Treasurer, Society of Microbial Ecology in Health and Disease (SOMED).
2. 2012-today Member of the International Forum on Industrial Bioprocesses (IFIBiop).
3. 1997-today Member of the Association of Greek Chemists.

#### **Member of the Organizing Committees of International Conferences:**

Dr. Kourkoutas has been member of the organizing committee of the following international conferences:

1. European Symposium on Food Safety, Athens, Greece, 11-13 May 2016.
2. Food Chemistry Days, Functional Foods, Athens, 26-27 November 2015.
3. 38th Congress of the Society for Microbial Ecology and Disease, Verona, 11-13 October 2015.
4. XXXIII International Congress on Microbial Ecology in Health and Disease (SOMED 2010), organized by SOMED and Democritus University of Thrace (Greece) on a cruise boat from Piraeus to the Greek islands of Myconos, Rhodes, Patmos, Crete, Santorini and to Kusadasi (ancient Ephesus), 6-10 September 2010.

#### **Supervisor in PhD thesis:**

1. G. Sgouros, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (Supervisor).
2. V. Santarmaki, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (Supervisor).
3. G. Mitropoulou, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (Supervisor).



4. A. Nikolaou, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (Supervisor).

#### **Member in PhD Committees:**

1. A. Terpou, Department of Chemistry, University of Patras, Greece (Supervisory Committee Member).
2. G. Saxami, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (Supervisory Committee Member).
3. M. Sidira, Department of Chemistry, University of Patras, Greece (graduated in 2014) (Supervisory Committee Member).

#### **External Examiner of PhD theses:**

1. E. Barouni, Department of Chemistry, University of Patras, Greece (date of examination: 23/12/2016).
2. V. Schoina, Department of Chemistry, University of Patras, Greece (date of examination: 22/12/2014).
3. M. Sidira, Department of Chemistry, University of Patras, Greece (date of examination: 11/04/2014).
4. O. Papadopoulou, Department of Food Science and Human Nutrition, Agricultural University of Athens, Greece (date of examination: 31/10/2013).
5. M. Kallis, Department of Chemistry, University of Patras, Greece (date of examination: 21/12/2012).
6. L. Bosnea, Department of Chemistry, University of Patras, Greece (date of examination: 26/06/2009).
7. N. Kopsahelis, Department of Chemistry, University of Patras, Greece (date of examination: 25/06/2009).
8. P. Kandylis, Department of Chemistry, University of Patras, Greece (date of examination: 22/06/2009).
9. D. Dimitrellou, Department of Chemistry, University of Patras, Greece (date of examination: 22/06/2009).
10. N. Agouridis, Department of Chemistry, University of Patras, Greece (date of examination: 31/10/2007).

#### **Supervisor in MSc theses:**

1. M. Kiourtzidis, MSc in Translational Research in Molecular Biology & Genetics, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece, 2014.

#### **Invited Lectures in MSc courses:**

1. MSc in Translational Research in Molecular Biology & Genetics, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (2013-today):
  - i) Safety in working with bacteria.
  - ii) Bioethics in genetically modified foods.

2. MSc in Sustainable Production Systems & the Environment in Agriculture, Department of Agricultural Development, Democritus University of Thrace, Greece (2008-2013):
  - i) Biotechnological applications in industrial and agricultural waste treatment.
  - ii) Innovative applications in probiotic products production.
3. MSc in Food Biotechnology, Department of Chemistry, University of Patras, Greece (2007-2011):
  - i) Milk: Ultra high temperature processing-Aseptic packaging.
  - ii) New trends and research results in brewing.

<b>Administrative work:</b>
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1. Member of the Under-Graduate Courses Committee, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (2014-today).
2. Member of the Post-Graduate Courses Committee, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (2014-today).
3. Member of the Steering Committee of MSc in Translational Research in Molecular Biology & Genetics, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece (2015-today).
4. Establishment of the Laboratory of Applied Microbiology & Biotechnology, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece.