

Βιογραφικό Σημείωμα



Παρθένα Κοτζεκίδου-Ρουκά

Καθηγήτρια Μικροβιολογίας Τροφίμων

Εργαστήριο Μικροβιολογίας & Υγιεινής Τροφίμων
Τομέας Επιστήμης & Τεχνολογίας Τροφίμων
Τμήμα Γεωπονίας
Αριστοτέλειο Πανεπιστήμιο Θεσ/νίκης, Τ.Θ. 250
Θεσ/νίκη Τ.Κ. 54124

Τηλ. : 2310991648

e-mail : kotzekid@agro.auth.gr

<http://food-science.agro.auth.gr/>

<http://users.auth.gr/kotzekid>

Η **Παρθένα Κοτζεκίδου-Ρουκά** είναι Καθηγήτρια στον *Τομέα Επιστήμης & Τεχνολογίας Τροφίμων* της *Σχολής Γεωπονίας, Δασολογίας & Φυσικού Περιβάλλοντος* του Α.Π.Θ. Σπούδασε στο *Τμήμα Γεωπονίας* της *Γεωπονοδασολογικής Σχολής* του Α.Π.Θ. και αποφοίτησε το 1976. Συνέχισε τις σπουδές της για εκπόνηση διδακτορικής διατριβής στο Πολυτεχνείο του Μονάχου, Γερμανίας με υποτροφία της Γερμανικής Υπηρεσίας Ακαδημαϊκών Ανταλλαγών (DAAD) από όπου πήρε διδακτορικό δίπλωμα (*Dr Agr.*) το 1980. Επέστρεψε στην Ελλάδα και το 1981 διορίστηκε στη βαθμίδα του Λέκτορα στον Τομέα Επιστήμης και Τεχνολογίας Τροφίμων του Τμήματος Γεωπονίας του Α.Π.Θ. με γνωστικό αντικείμενο «Μικροβιολογία Τροφίμων» και εκλέχθηκε Καθηγήτρια το 1998. Ήταν επισκέπτρια ερευνήτρια στο Τμήμα Βιοεπιστημών και Βιοτεχνολογίας του Πανεπιστημίου Strathclyde, Μεγ. Βρετανία (05/1986-10/1986), στο Εργαστήριο Βακτηριολογίας του Πολυτεχνείου του Μονάχου, Γερμανία (09/1988-12/1988 & 02/1992-05/1992) και στο Τμήμα Επιστήμης και Τεχνολογίας Τροφίμων του Πανεπιστημίου Washington, Seattle, ΗΠΑ (05/1997-09/1997). Τα ερευνητικά της ενδιαφέροντα περιλαμβάνουν τη μελέτη βακτηρίων, ζυμών και μυκήτων που απαντώνται στα τρόφιμα, την ανίχνευση παθογόνων μικροοργανισμών με Real-Time PCR, τη μικροβιολογία ζυμούμενων τροφίμων, την εφαρμογή καλλιεργειών εκκινήσεως στην παραγωγή τροφίμων καθώς και τη βιοτεχνολογική παραγωγή οργανικών οξέων, ενζύμων και καροτενίων. Έχει δημοσιεύσει περισσότερες από 51 ερευνητικές εργασίες σε έγκυρα επιστημονικά περιοδικά του εξωτερικού και 2 πατέντες. Υπάρχουν περισσότερες από 2600 αναφορές στο έργο της (h-index 26). Έχει δημοσιεύσει αρκετά κεφάλαια σε ξενόγλωσσα βιβλία και είναι συγγραφέας 3 βιβλίων (“Μικροβιολογία Τροφίμων”, “Μικροβιολογική Ανάλυση Τροφίμων” και “Μικροβιολογία Τροφίμων & Μικροβιολογική Ανάλυση Τροφίμων”) για την εκπαίδευση των προπτυχιακών φοιτητών, καθώς και επιστημονικός εκδότης του βιβλίου με τίτλο “Food Hygiene and Toxicology in Ready-to-Eat Foods” (Academic Press, 2016). Είναι μέλος του Editorial Board των επιστημονικών περιοδικών “Food Biotechnology” και “Italian Journal of Food Safety”. Συμμετείχε σε ερευνητικά προγράμματα. Διδάσκει Μικροβιολογία Τροφίμων στους

προπτυχιακούς φοιτητές καθώς και Προχωρημένα Μαθήματα στη Μικροβιολογία Τροφίμων και Μικροβιολογία Οίνου στο Μεταπτυχιακό Πρόγραμμα Σπουδών του Τμήματος Γεωπονίας.

Δημοσιεύσεις σε διεθνή περιοδικά με σύστημα κριτών

- 1 Roukas, T., **Kotzekidou, P.** 2020. Pomegranate peel waste: a new substrate for citric acid production by *Aspergillus niger* in solid-state fermentation under non-aseptic conditions. *Environmental Science and Pollution Research*, **27**: 13105–13113
- 2 Roukas, T., **Kotzekidou, P.** 2020. Rotary biofilm reactor: A new tool for long-term bioethanol production from non-sterilized beet molasses by *Saccharomyces cerevisiae* in repeated-batch fermentation. *Journal of Cleaner Production*, **257**: 120519.
- 3 Chranioti, C., **Kotzekidou, P.**, Gerasopoulos, D. 2018. Effect of starter cultures on fermentation of naturally and alkali-treated cv. Conservolea green olives. *LWT-Food Science and Technology*, **89**: 403-408
- 4 Nanou, K., Roukas, T., Papadakis, E., **Kotzekidou, P.** 2017. Carotene production from waste cooking oil by *Blakeslea trispora* in a bubble column reactor: The role of oxidative stress. *Engineering in Life Sciences*, **17**: 775-780
- 5 Tataridou, M., **Kotzekidou, P.** 2015. Fermentation of table olives by oleuropeinolytic starter culture in reduced salt brines and inactivation of *Escherichia coli* O157:H7 and *Listeria monocytogenes*. *International Journal of Food Microbiology*, **208**: 122–130
- 6 Kaltsa A., Papaliaga D., Papaioannou E., **Kotzekidou P.** 2015. Characteristics of oleuropeinolytic strains of *Lactobacillus plantarum* group and influence on phenolic compounds in table olives elaborated under reduced salt conditions. *Food Microbiology*, **48**: 58-62
- 7 Roukas T., Varzakakou M., **Kotzekidou P.** 2015. From cheese whey to carotenes by *Blakeslea trispora* in a bubble column reactor. *Applied Biochemistry and Biotechnology* **175**: 182-193

- 8 Papagora C., Roukas T., **Kotzekidou P.** 2013. Optimization of extracellular lipase production by *Debaryomyces hansenii* isolates from dry-salted olives using response surface methodology. *Food and Bioproducts Processing*, **91** : 413-420
- 9 Pragalaki T., Bloukas J.G., **Kotzekidou P.** 2013. Inhibition of *Listeria monocytogenes* and *Escherichia coli* O157:H7 in liquid broth medium and during processing of fermented sausage using autochthonous starter cultures. *Meat Science*, **95** : 458-464
- 10 **Kotzekidou P.** 2013. Survey of *Listeria monocytogenes*, *Salmonella* spp. and *Escherichia coli* O157:H7 in raw ingredients and ready-to-eat products by commercial real-time PCR kits. *Food Microbiology*, **35** : 86-91.
- 11 **Kotzekidou P.** 2013. Microbiological examination of ready-to-eat foods and ready-to-bake frozen pastries from university canteens. *Food Microbiology*, **34** : 337-343.
- 12 Filotheou, A., Nanou, K., Papaioannou, E., Roukas, T., **Kotzekidou, P.**, Liakopoulou-Kyriakides M. 2012. Application of response surface methodology to improve carotene production from synthetic medium by *Blakeslea trispora* in submerged fermentation. *Food and Bioprocess Technology*, 5:1189–1196
- 13 Baka A.M., Papavergou E.J., Pragalaki T., Bloukas J.G., **Kotzekidou P.** 2011. Effect of selected autochthonous starter cultures on processing and quality characteristics of Greek fermented sausages. *LWT - Food Science and Technology*, **44**: 54-61
- 14 Varzakakou, M., Roukas, T., Papaioannou, E., **Kotzekidou, P.** and Liakopoulou-Kyriakides M. 2011. Autolysis of *Blakeslea trispora* during carotene production from cheese whey in an airlift reactor. *Preparative Biochemistry and Biotechnology*, 41:7-21
- 15 Roukas, T., Niavi, P., **Kotzekidou, P.** 2011. A new medium for spore

- productin of *Blakeslea trispora* using response surface methodology. *World Journal of Microbiology and Biotechnology*, 27:307-317
- 16 Varzakakou, M., Roukas, T., **Kotzekidou, P.** 2010. Effect of the ratio (+) and (-) mating type of *Blakeslea trispora* on carotene production from cheese whey in submerged fermentation. *World Journal of Microbiology and Biotechnology*, 26:2151-2156
 - 17 Varzakakou M, Roukas T, **Kotzekidou P.**, Giamoustaris A. 2010 Effect of non-ionic surfactants and beta-ionone on the morphology of *Blakeslea trispora* and carotenoids production from cheese whey in submerged aerobic growth: A statistical approach. *Food Biotechnology*, **24**:197-214
 - 18 Papathomopoulou, K. and **Kotzekidou, P.** 2009. Inactivation of verocytotoxigenic *Escherichia coli* and *Listeria monocytogenes* co-cultured with *Lactobacillus sakei* in a simulated meat fermentation medium. *Journal of Food Safety*, **29** : 331-347
 - 19 **Kotzekidou, P.**, Giannakidis, P., Boulamatsis, A. 2008. Antimicrobial activity of some plant extracts and essential oils against foodborne pathogens *in vitro* and on the fate of inoculated pathogens in chocolate. *LWT - Food Science and Technology*, **41**:119-127
 - 20 Nanou, K., Roukas, T. and **Kotzekidou, P.** 2007. Role of hydrolytic enzymes and oxidative stresses in autolysis and morphology of *Blakeslea trispora* during β -carotene production in submerged fermentation. *Applied Microbiology and Biotechnology*, **74**: 447-453
 - 21 Psani, M. and **Kotzekidou, P.** 2006. Technological characteristics of yeast strains and their potential as starter adjuncts in Greek-style black olive fermentation. *World Journal of Microbiology and Biotechnology*, **22**: 1329-1336
 - 22 Psani, M., Roukas, T. and **Kotzekidou, P.** 2006. Evaluation of cheese whey as substrate for carotenoids production by *Blakeslea trispora*.

- 23 Tsapatsaris, S. and **Kotzekidou, P.** 2004. Application of central composite design and response surface methodology to the fermentation of olive juice by *Lactobacillus plantarum* and *Debaryomyces hansenii*. *International Journal of Food Microbiology*, **95**:157-168
- 24 Mantzouridou. F., Roukas, T., and **Kotzekidou, P.** 2004. Production of beta-carotene from synthetic medium by *Blakeslea trispora* in fed-batch culture. *Food Biotechnology*, **18**: 343-361
- 25 Goksungur, Y., Mantzouridou. F., Roukas, T., and **Kotzekidou, P.** 2004. Production of β -carotene from beet molasses by *Blakeslea trispora* in stirred-tank and bubble column reactors- Development of a mathematical modeling. *Applied Biochemistry and Biotechnology*, **112**: 37-54
- 26 Papamanoli, E., Tzanetakis, N., Litopoulou-Tzanetaki, E. and **Kotzekidou, P.** 2003. Characterization of lactic acid bacteria isolated from a Greek dry-fermented sausage in respect to their technological and probiotic properties. *Meat Science*, **65** : 859-867
- 27 Papamanoli, E., **Kotzekidou, P.**, Tzanetakis, N. and Litopoulou-Tzanetaki, E. 2002. Characterization of *Micrococcaceae* isolated from dry fermented sausage. *Food Microbiology*, **19** : 441-449.
- 28 Tsiotsias, A., Savvaidis, I., Vassila, A., Kontominas, M. and **Kotzekidou, P.** 2002. Control of *Listeria monocytogenes* by low-dose irradiation in combination with refrigeration in the soft whey cheese "Anthotyros". *Food Microbiology*, **19** : 117-126.
- 29 Mantzouridou, F., Roukas, T. and **Kotzekidou, P.** 2002. Optimization of β -carotene production from synthetic medium by *Blakeslea trispora* in a stirred tank reactor and relationship between morphological changes and pigment formation. *Food Biotechnology*, **16**: 167-187.

- 30 Mantzouridou, F., Roukas, T., **Kotzekidou, P.**, and Liakopoulou, M. 2002. Optimization of β -carotene production from synthetic medium by *Blakeslea trispora*: A mathematical modeling. *Applied Biochemistry and Biotechnology*, **101**(2): 153-175.
- 31 Mantzouridou, F., Roukas, T., and **Kotzekidou, P.** 2001. Effect of the aeration rate and agitation speed on β -carotene production and morphology of *Blakeslea trispora* in a stirred tank reactor: mathematical modeling. *Biochemical Engineering Journal*, **10**: 123-135
- 32 Roukas, T. and **Kotzekidou, P.** 1998. Lactic acid production from deproteinized whey by mixed cultures of free and coimmobilized *Lactobacillus casei* and *Lactococcus lactis* cells using fed-batch culture. *Enzyme and Microbial Technology*, **22** : 199-204
- 33 **Kotzekidou, P.** and Bloukas, J.G. 1998. Microbial and sensory changes in vacuum-packed frankfurter-type sausage by *Lactobacillus alimentarius* and fate of inoculated *Salmonella enteritidis*. *Food Microbiology*, **15** : 101-111
- 34 **Kotzekidou, P.** 1998. Microbial stability and fate of *Salmonella* Enteritidis in halva, a low moisture confection. *Journal of Food Protection*, **61** : 181-185
- 35 **Kotzekidou, P.** 1997. Identification of yeasts from black olives in rapid system microtitre plates. *Food Microbiology*, **14** : 609-616
- 36 Roukas, T. and **Kotzekidou, P.** 1997. Pretreatment of date syrup to increase citric acid production. *Enzyme and Microbial Technology*, **21** : 273-276
- 37 **Kotzekidou, P.** 1997. Heat resistance of *Byssoschlamys nivea*, *Byssoschlamys fulva* and *Neosartorya fischeri* isolated from canned tomato paste. *Journal of Food Science*, **62** : 410-412, 437.
- 38 Roukas, T. and **Kotzekidou, P.** 1996. Continuous production of lactic acid from deproteinized whey by coimmobilized *Lactobacillus casei* and

- Lactobacillus lactis* cells in a packed-bed reactor. *Food Biotechnology*, **10** : 231-242
- 39 **Kotzekidou, P.** 1996. A microtitre tray procedure for a simplified identification of *Bacillus* spp in spoiled canned foods. *Food Microbiology*, **13**: 35-40.
- 40 **Kotzekidou, P.** and Bloukas, J.G. 1996. Effect of protective cultures and packaging film permeability on shelf-life of sliced vacuum-packed cooked ham. *Meat Science*, **42**: 333-345.
- 41 **Kotzekidou, P.** 1992. Identification of staphylococci and micrococci isolated from an Intermediate Moisture meat product. *Journal of Food Science*, **57**: 249-251.
- 42 **Kotzekidou, P.** 1991. Production of polygalacturonase by *Byssoschlamys fulva*. *Journal of Industrial Microbiology*, **7**: 53-56.
- 43 Roukas, T. and **Kotzekidou, P.** 1991. Production of lactic acid from deproteinized whey by coimmobilized *Lactobacillus casei* and *Lactococcus lactis* cells. *Enzyme and Microbial Technology*, **13**: 33-38.
- 44 Roukas, T., Lazarides, H. and **Kotzekidou, P.** 1991. Ethanol production from deproteinized whey by *Saccharomyces cerevisiae* cells entrapped in different immobilization matrices. *Milchwissenschaft*, **46**: 438-441.
- 45 **Kotzekidou, P.** and Lazarides, H. 1991. Microbial stability and survival of pathogens in an Intermediate Moisture meat product. *LWT - Food Science and Technology*, **24**: 419-423.
- 46 **Kotzekidou, P.** 1990. Some properties of polygalacturonase produced by *Byssoschlamys fulva*. *LWT - Food Science and Technology*, **23**: 328-330.
- 47 **Kotzekidou, P.** and Roukas, T. 1987. Fermentation characteristics of lactobacilli in okra (*Hibiscus esculentus*) juice. *Journal of Food Science*, **52**: 487-488, 490.

- 48 Roukas, T. and **Kotzekidou, P.** 1987. Influence of some trace metals and stimulants on citric acid production from brewery wastes by *Aspergillus niger*. *Enzyme and Microbial Technology*, **9**: 291-294.
- 49 **Kotzekidou, P.** and Roukas, T. 1987. Quality characteristics of fermented and acidified canned okra. *LWT - Food Science and Technology*, **20**: 300-304.
- 50 **Kotzekidou, P.** and Roukas, T. 1986. Characterization and distribution of lactobacilli during lactic fermentation of okra (*Hibiscus esculentus*). *Journal of Food Science*, **51**: 623-625.
- 51 Roukas, T. and **Kotzekidou, P.** 1986. Production of citric acid from brewery wastes by surface fermentation using *Aspergillus niger*. *Journal of Food Science*, **51**: 225-226,228.

Διπλώματα ευρεσιτεχνίας

Ρουκάς, Τ., Μαντζουρίδου, Φ., Θεοδοσίου, Ε., **Κοτζεκίδου, Π.** και Λιακοπούλου, Μ. “Μέθοδος παραγωγής β-καροτένιου”. Δίπλωμα Ευρεσιτεχνίας, OBI 1004614/25-6-04.

Ρουκάς, Τ., **Κοτζεκίδου, Π.** και Βαρζακάκου, Μ. “Νέα μέθοδος παραγωγής καροτενίων από τυρόγαλα”. Δίπλωμα Ευρεσιτεχνίας, OBI 1006949/3-9-2010.

Κεφάλαια σε βιβλία

Kotzekidou, P. 2020. Improved Traditional Fermented Foods of the Mediterranean Region–Health Benefits as Functional Foods. In: *Functional Foods and Biotechnology: Biotransformation and Analysis of Functional Foods and Ingredients*. Eds. K. Shetty, D. Sarkar, CRC Press, Boca Raton, FL.

Kotzekidou, P., 2014. *Bacillus: Geobacillus stearothermophilus* (Formerly *Bacillus stearothermophilus*). In: Batt, C.A., Tortorello, M.L. (Eds.), *Encyclopedia of Food Microbiology*, vol 1, pp. 129–134, Elsevier Ltd, Academic Press.

Περιλαμβάνεται στο Reference Module in Food Science (2017) Elsevier

Kotzekidou, P., 2014. *Byssochlamys*. In: Batt, C.A., Tortorello, M.L. (Eds.), *Encyclopedia of Food Microbiology*, vol 1. pp. 344–350, Elsevier Ltd, Academic Press.

Περιλαμβάνεται στο Reference Module in Food Science (2017) Elsevier

Yildiz, F., **Kotzekidou, P.**, Michailidou, M.-A., Nocella, G. 2007. Functional Foods in Mediterranean and Middle Eastern Countries: History, Scope and Dietary Habits. In: *Anti-Angiogenic Functional and Medicinal Foods*, Eds. J.N. Losso, F. Shahidi & D. Bagchi. p. 177-212, CRC Press, Boca Raton, FL.

Kotzekidou, P., Tsakalidou, E. 2006. Fermentation Biotechnology of Plant Based Traditional Foods of the Middle East and Mediterranean Region. In : *Food Biotechnology*, Eds. K. Shetty, G. Paliyath, A. Pometto & R. Levin. p. 1795-1828, CRC Press, Boca Raton, FL.

Tsakalidou, E., **Kotzekidou, P.** 2006. Fermentation Biotechnology of Animal Based Traditional Foods of the Middle East and Mediterranean Region. In : *Food Biotechnology*, Eds. K. Shetty, G. Paliyath, A. Pometto & R. Levin. p. 1829-1872, CRC Press, Boca Raton, FL.

Kotzekidou, P. 1999. *Bacillus stearothermophilus*. In : *Encyclopedia of Food Microbiology*, Eds. R. Robinson, C. Batt & P. Patel. p. 124-129 Academic Press, London

Kotzekidou, P. 1999. *Byssochlamys*. In : *Encyclopedia of Food Microbiology*, Eds. R. Robinson, C. Batt & P. Patel. p. 328-333 Academic Press, London

Βιβλία

Kotzekidou, P. (Ed.), 2016. "Food Hygiene and Toxicology in Ready to Eat Foods", Academic Press (ISBN : 9780128020081), p. 474.

Κοτζεκίδου-Ρουκά, Π. 2016. "Μικροβιολογία Τροφίμων & Μικροβιολογική Ανάλυση Τροφίμων", Εκδόσεις Σ. Γιαχούδης & Σια Ο.Ε., σελ. 350 (ISBN: 978-960-6700-31-6).

Κοτζεκίδου-Ρουκά, Π. 2009. "Μικροβιολογία Τροφίμων", Εκδόσεις Σ. Γιαχούδης & Σια Ο.Ε., (ISBN: 978-960-6700-31-6).

Κοτζεκίδου-Ρουκά, Π. 2010. "Μικροβιολογική Ανάλυση Τροφίμων", Εκδόσεις Σ. Γιαχούδης & Σια Ο.Ε., (ISBN: 978-960-6700-50-7).