Curriculum vitae of Seraphim Papanikolaou, Professor in Food Biotechnology – Bioprocesses

1. Personal data

Name:	Papanikolaou Seraphim
Date of birth:	10 February 1970
Nationality:	Hellenic
Professional address:	Agricultural University of Athens (AUA), Iera Odos 75, 11855, Department of Food Science & Human Nutrition (DFSHN), Laboratory of Food Microbiology & Biotechnology (LFMB)
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2. Studies and Formation

I. Undergraduate studies

1987-1993: Agricultural University of Athens (AUA), Department of Food Science & Technology (DFST), Diploma degree 8.04/10.

II. Postgraduate studies

1993-1994: Diplôme d'Etudes Approfondies (DEA), "Biotechnologies et Industries Alimentaires", Institut National Polytechnique de Lorraine -INPL-France.

1994-1995: Diplôme de Thèse de l'INPL, "Biotechnologies et Industries Alimentaires", INPL-CNRS-France; specialization: "Industrial Fermentations". Supervisor: Dr Michel Fick, Professor in the INPL in Biotechnology. Mention "Très Honorable".

1995-1998: Doctorat INPL, INPL-CNRS-France; specialization "Microbial Biotechnology". Supervisor: Dr Ivan Marc, Research Director (1st class) CNRS in Biotechnology. Mention "Très Honorable". Co-supervisors: Dr Isabelle Chevalot, Assistant Professor in the INPL; Dr George Aggelis, Assistant Professor in the AUA.

2.3. Postdoctoral studies

November 2000-October 2001: Postdoctoral fellowship by the "State Scholarship Foundation", Athens Greece. AUA, Department of Agricultural Biotechnology, Laboratory of General & Agricultural Microbiology. Supervisor: Dr George Aggelis, Assistant Professor in the AUA.

3. Professional skills, scientific experience, academic carrier

January 1999-February 1999 and September 2000-March 2003: AUA, Department of Agricultural Biotechnology, Laboratory of General & Agricultural Microbiology. Post-doctoral researcher and/or non-permanent Lecturer.

September 2000-January 2002: Non-permanent Senior Lecturer in the Technical and Educational Institute of Kalamata (Department of Technology of Agricultural Products).

January 2002-January 2004: Agricultural Engineer in the Hellenic Food Authority (EFET), Direction of Education & Informatics, 5 Karystou Street, Athens, 11523.

February 2004-April 2009: Lecturer (non-permanent) in "Food Biotechnology – Bioprocesses" in the AUA, DFST, LFMB. Document of appointment ΦΕΚ τνπδδ 15 (20/01/2004).

April 2009-November 2013: Assistant Professor (Senior Lecturer) (non-permanent) in "Food Biotechnology – Bioprocesses" in the AUA, DFST, LFMB. Document of appointment ΦΕΚ τΓ' 258 (09/04/2009).

November 2013-July 2015: Assistant Professor (Senior Lecturer) (Tenured) in "Food Biotechnology – Bioprocesses" in the AUA, DFSHN, LFMB. Document of appointment ΦΕΚ τΓ' 1273 (04/11/2013).

July 2015-March 2020: Associate Professor (Reader) in "Food Biotechnology – Bioprocesses" in the AUA, DFSHN, LFMB. Document of appointment Φ.Ε.Κ. τΓ' 651 (10/07/2015).

March 2020-now: Professor in "Food Biotechnology – Bioprocesses" in the AUA, DFSHN, LFMB. Document of appointment Φ.Ε.Κ. τΓ' 229 (05/03/2020).

February 2011-October 2011: Director of the Laboratory of Food Microbiology & Biotechnology.

July 2015, July 2017, July 2019: Visiting Professor, INPL, Nancy, France.

4. Educative experience (selections)

I. Undergraduate and post-graduate courses (selection)

September 2004-February 2005, …, September 2018-February 2019: Teaching of the theoretical and the practical part of the course "Treatment of Food Industry Wastes" of the under-graduate courses program of the DFSHN-AUA.

September 2005-February 2006, …, September 2008-February 2009: Teaching of the theoretical and practical part of the course "Industrial Fermentations" of the under-graduate courses program of the DFHN-AUA.

February 2005-June 2005, …, February 2010-June 2010: Teaching of the theoretical and the practical part of the course "Principles of Food Biotechnology" of the under-graduate courses program of the DFSHN-AUA (together with Assoc. Prof. M. Galiotou-Panayotou).

February 2011-June 2011, …, February 2021-now: Teaching of the theoretical and the practical part of the course "Principles of Food Biotechnology" of the under-graduate courses program of the DFSHN-AUA.

September 2004-February 2005, …, September 2020-February 2021: Teaching of the theoretical course "Management of Food Industry Wastes" of the post-graduate courses programs of the DFSHN-AUA.

February 2010-June 2010, …, February 2019-June 2019: Teaching of the theoretical course "Wine Microbiology and Fermentation Technology" of the interdepartmental post-graduate courses programs of Oenology of the AUA.

September 2012-February 2013, …, September 2017-February 2018, February 2019-June 2019, …, February 2021-now: Teaching of the theoretical course "Industrial Biotechnology" of the post-graduate courses programs of the DFSHN-AUA.

September 2012-February 2013, …, September 2020-February 2021: Teaching of the theoretical course "Enzyme and Microbial Processes in Foods" of the post-graduate courses programs "of the DFSHN-AUA.

II. Supervision of phD theses (selection)

1) A. Chatzifragkou (February 2009-April 2012): phD successfully defended, DFSHN-AUA. Title: "Study of the biotechnological production of 1,3-propanediol during growth of *Clostridium butyricum* on substrates based on raw glycerol" (defense on 2nd April 2012).

2) M. Metsoviti (February 2009-April 2013): phD successfully defended, DFSHN-AUA. Title: "Biotechnological production of 1,3-propanediol, 2,3-butanediol and ethanol during growth of selected microbial prokaryotic strains on renewable carbon sources" (defense on 1st April 2013).
3) D. Sarris (June 2008-January 2014): phD successfully defended, DFSHN-AUA. Title: "Biotechnological treatment of olive mill wastewaters-based media: production of added-value compounds with the use of strains of yeasts *Yarrowia lipolytica* and *Saccharomyces cerevisiae*" (defense on 17th January 2014).
4) S. Sadjeu-Tchakouteu (September 2011-December 2014): phD successfully defended, DFSHN-AUA. Title: "Study of the production of lipids, polysaccharides and other metabolic compounds of biotechnological interest during growth of yeasts on low-cost renewable substrates" (defense on 19th December 2014).

5. Honors

Participation as member of the **Editorial Board** in the peer-reviewed journals "Fermentation Technology" (OMICS group) (2012-now), "International Scholarly Research Notices" (sections "Biotechnology" and "Energy") (International Scholarly Research Network publisher) (2013-2016), "Conference Papers in Science" (section "Biotechnology") (International Scholarly Research Network publisher) (2013-2015), "International Journal of Biochemistry Research & Review" (Sciencedomain International) (2015-2017), "American Journal of Bioengineering and Biotechnology" (Columbia International Publishing) (2013-now), "Fermentation" (MDPI AG) (2016-now), "Engineering in Life Sciences" (Wiley) (2016-now), "Microorganisms" (MDPI AG) (2017-now) and "FEMS Microbiology Letters" (Oxford Academic) (2018-now).

Editor-in-Chief in the peer-reviewed journal "Carbon Resources Conversion" (Elsevier and KeAi) (2019-now).

"**Guest Editor**" in the Special Issues of the journal "Engineering in Life Sciences" entitled "Single Cell Oils", of the journal "FEMS Microbiology Letters" entitled "Microbial Products from Wastes and Residues", of the journal "Microorganisms" entitled "Yeast and Fungal Metabolites" and of the journal "Carbon Resources Conversion" entitled "Valorisation of Wastes, Residues and Bioresources with the use of Enzyme and Microbial Technology".

Participation as **member in panels for the review of projects** submitted in the "Czech Science Foundation" (Czech Republic), the "Danish Agency for Science Technology and Innovation" (Kingdom of Denmark), the "Christian Doppler Research Association" (Austrian Republic), the "French National Research Agency (ANR)" (French Republic), the "German Federal Ministry of Education and Research (BMBF)" (German Republic), the "Ministerio de Ciencia, Technologia e Ensino Superior" (Republic of Portugal), the "National Science Centre (Narodowe Centrum Nauki – NCN)" (Republic of Poland) and the GSRT and the Hellenic Foundation of Research and Innovation (ΕΛΙΔΕΚ) (Ministry of National Education and Religious Affairs, Hellenic Republic).

Official invitation for performing **review** in the several journals **(>1000 invitation in >120 Journals**) like: "African Journal of Biotechnology", "Anaerobe", "Annals of Microbiology", "Applied and Environmental Microbiology", "Applied Microbiology and Biotechnology", "Biocatalysis and Agricultural Biotechnology", "Biochemical Engineering Journal", "Bioresource Technology", "Biotechnology Advances", "Biotechnology for Biofuels", "Chemical Engineering Communications", "Current Microbiology", "Energy and Fuels", "Energy", "Engineering in Life Sciences", "Enzyme and Microbial Technology", "FEMS Yeast Research", "Food Chemistry", "Food Research International", "Fuel", "Journal of Agricultural and Food Chemistry", "Journal of Applied Microbiology", "Journal of Hazardous Materials", "Journal of the American Oil Chemist's Society", "Metabolic Engineering", "New Biotechnology", "Process Biochemistry", "Trends in Food Science and Technology", "World Journal of Microbiology and Biotechnology", etc.

Presence of **several articles in which I participate** in the catalogue of the **most accessed**, **Top 25 Hottest** or **most cited** articles for different periods in the journal that they appeared including but not limited to:

Papanikolaou et al (2006) Curr Microbiol, 52, 134-142
Papanikolaou et al (2008) Biomass Bioenerg, 32, 60-71
Fakas et al (2009) Biomass Bioenerg, 33, 573-580
Papanikolaou and Aggelis (2009) Lipid Technol, 21, 83-87
André et al (2010) Ind Crops Prod, 31, 407-416
Vamvakaki et al (2010) Eng Life Sci, 10, 348-360
Chatzifragkou et al (2011) Energy, 36, 1097-1108

Papanikolaou and Aggelis (2010) Eur J Lipid Sci Technol, 113, 1031-1051
Papanikolaou (2012) Ferment Technol 1, e103
Metsoviti et al (2012) Eng Life Sci, 12, 57-68
Tchakouteu et al (2015) J Appl Microbiol, 118, 911-927
Sarris and Papanikolaou (2016) Eng Life Sci, 16, 307-329

Favorable comments of the article entitled "Lipid production by oleaginous Mucorales cultivated on renewable carbon sources" [Papanikolaou et al (2007) Eur J Lipid Sci Technol, *109*, 1060-1070], by the Professor Frank Gunstone in his article "Research Highlights" of the journal "Lipid Technology" [February 2008, Vol. 20 (2) 43-45].

Favorable comments of the article entitled "*Yarrowia lipolytica*: a model microorganism used for the production of tailor-made lipids" [Papanikolaou and Aggelis (2010) Eur J Lipid Sci Technol, *112*, 639-654]", by the Professor Frank Gunstone and the Research Director Frédéric Destaillats in their article "Research Highlights" of the journal "Lipid Technology" [August 2010, Vol. 22 (8) 187-189].

Official invitation made by the Professor Frank Gunstone in order to write a mini-review in the journal "Lipid Technology" (September 2008).

Official invitation made by the Professor Alexander Steinbüchel in order to write a review-article in the journal "Applied Microbiology and Biotechnology" (March 2012).

Official invitation made by the Professor Phil Collier in order to write a review-article in the journal "Journal of Applied Microbiology" (March 2016).

Official invitation made by Emeritus the Professor Ian Maddox in order to write a mini-review in the journal "World journal of Microbiology and Biotechnology" (December 2017).

*6. Indicative Publications (research papers, *corresponding author) (<u>total number 131</u>)*

S. Papanikolaou, S. Sarantou, M. Komaitis and G. Aggelis. Repression of reserve lipid turnover in *Cunninghamella echinulata* and *Mortierella isabellina* cultivated in multiple-limited media. Journal of Applied Microbiology, 2004, 97, 867-874

S. Papanikolaou*, S. Fakas, M. Fick, I. Chevalot, M. Galiotou-Panayotou, M. Komaitis, I. Marc and G. Aggelis. Biotechnological valorisation of raw glycerol discharged after bio-diesel (fatty acid methyl-esters) manufacturing process: production of 1,3-propanediol, citric acid and single cell oil. Biomass and Bioenergy, 2008, 32, 60-71

A. André, P. Diamantopoulou, A. Philippoussis, D. Sarris, M. Komaitis and **S. Papanikolaou***. Biotechnological conversions of bio-diesel derived waste glycerol into added-value compounds by higher fungi: production of biomass, single cell oil and oxalic acid. Industrial Crops and Products, 2010, 31, 407-416

A.-N. Vamvakaki, I. Kandarakis, S. Kaminarides, M. Komaitis and **S. Papanikolaou***. Cheese whey as a renewable substrate for microbial lipid and biomass production by Zygomycetes. Engineering in Life Sciences, 2010, 10, 348-360

A. Chatzifragkou, **S. Papanikolaou***, D. Dietz, A.I. Doulgeraki, G-J.E. Nychas and A.-P. Zeng. Production of 1,3-propanediol by *Clostridium butyricum* growing on biodiesel-derived crude glycerol through a non-sterilized fermentation process. Applied Microbiology and Biotechnology, 2011, 91, 101-112

A. Chatzifragkou, G. Aggelis, M. Komaitis, A.-P. Zeng and **S. Papanikolaou***. Impact of anaerobiosis strategy and bioreactor geometry on the biochemical response of *Clostridium butyricum* VPI 1718 during 1,3-propanediol fermentation. Bioresource Technology, 2011, 102, 10625-10632

M. Metsoviti, K. Paraskevaidi, A.A. Koutinas, A.-P. Zeng and **S. Papanikolaou***. Production of 1,3-propanediol, 2,3-butanediol and ethanol by a newly isolated *Klebsiella oxytoca* strain growing on biodiesel-derived glycerol based media. Process Biochemistry, 2012, 47, 1872-1882

A. Chatzifragkou, G. Aggelis, C. Gardeli, M. Galiotou-Panayotou, M. Komaitis and **S. Papanikolaou***. Adaptation dynamics of *Clostridium butyricum* in high 1,3-propanediol content media. Applied Microbiology and Biotechnology, 2012, 95, 1541-1552

M. Metsoviti, A.-P. Zeng, A.A. Koutinas and **S. Papanikolaou***. Enhanced 1,3-propanediol production by a newly isolated *Citrobacter freundii* strain cultivated on biodiesel-derived waste glycerol through sterile and non-sterile bioprocesses. Journal of Biotechnology, 2013, 163, 408-418

S. Papanikolaou*, A. Beopoulos, A. Koletti, F. Thevenieau, A.A. Koutinas, J.-M. Nicaud and G. Aggelis. Importance of the methyl-citrate cycle on glycerol metabolism in the yeast *Yarrowia lipolytica*. Journal of Biotechnology, 2013, 168, 303-314

D. Sarris, M. Giannakis, A. Philippoussis, M. Komaitis, A.A. Koutinas and **S. Papanikolaou***. Conversions of olive mill wastewater-based media by *Saccharomyces cerevisiae* through sterile and non-sterile bioprocesses. Journal of Chemical Technology and Biotechnology, 2013, 88, 958-969

A. Chatzifragkou, **S. Papanikolaou**, N. Kopsahelis, V. Kachrimanidou, M. Pilar Dorado and A.A. Koutinas. Biorefinery development through utilization of biodiesel industry by-products as sole fermentation feedstock for 1,3-propanediol production. Bioresource Technology, 2014, 159, 167-175

P. Diamantopoulou, **S. Papanikolaou**, M. Komaitis, G. Aggelis and A. Philippoussis. Patterns of major metabolites biosynthesis by different mushroom fungi grown on glucose-based submerged cultures. Bioprocess and Biosystems Engineering, 2014, 37, 1385-1400

D. Sarris, L. Matsakas, G. Aggelis, A.A. Koutinas and **S. Papanikolaou***. Aerated *vs* non-aerated conversions of molasses and olive mill wastewaters blends into bioethanol by *Saccharomyces cerevisiae* under non-aseptic conditions. Industrial Crops and Products, 2014, 56, 83-93

E. Tsouko, C. Kourmentza, D. Ladakis, N. Kopsahelis, I. Mandala, **S. Papanikolaou**, F. Paloukis, V. Alves and A.A. Koutinas. Bacterial cellulose production from industrial waste and by-product streams. International Journal of Molecular Sciences, 2015, 16, 14832-14849

S.S. Tchakouteu, O. Kalantzi, C. Gardeli, A.A. Koutinas, G. Aggelis and **S. Papanikolaou***. Lipid production by yeasts growing on biodiesel-derived crude glycerol: strain selection and impact of substrate concentration on the fermentation efficiency. Journal of Applied Microbiology, 2015, 118, 911-927

P. Diamantopoulou, **S. Papanikolaou**, G. Aggelis and A. Philippoussis. Adaptation of *Volvariella volvacea* metabolism in high carbon to nitrogen ratio media. Food Chemistry, 2016, 196, 272-280

S. Papanikolaou*, M. Rontou, A. Belka, M. Athenaki, C. Gardeli, A. Mallouchos, O. Kalantzi, A.A. Koutinas, I.K. Kookos, A.-P. Zeng and G. Aggelis. Conversion of biodiesel-derived glycerol into biotechnological products of industrial significance by yeast and fungal strains. Engineering in Life Sciences, 2017, 17, 262-281

C. Gardeli, M. Athenaki, E. Xenopoulos, A. Mallouchos, A.A Koutinas, G. Aggelis and **S. Papanikolaou*.** Lipid production and characterization by *Mortierella* (*Umbelopsis*) *isabellina* cultivated on lignocellulosic sugars. Journal of Applied Microbiology, 2017, 123, 1461-1477.

M. Dourou, P. Mizerakis, **S. Papanikolaou** and G. Aggelis. Storage lipid and polysaccharide metabolism in *Yarrowia lipolytica* and *Umbelopsis isabellina*. Applied Microbiology and Biotechnology, 2017, 101, 7213-7226

S. Papanikolaou*, E. Kampisopoulou, F. Blanchard, E. Rondags, C. Gardeli, A.A. Koutinas, I. Chevalot and G. Aggelis. Production of secondary metabolites through glycerol fermentation under carbon-excess conditions by the yeasts *Yarrowia lipolytica* and *Rhodosporidium toruloides*. European Journal of Lipid Science and Technology, 2017, 119, 1600507.

R. Filippousi, D. Antoniou, P. Tryfinopoulou, A.A. Nisiotou, G.-J. Nychas, A.A. Koutinas and **S. Papanikolaou***. Isolation, identification and screening of yeasts towards their ability to assimilate biodiesel-derived crude glycerol: microbial production of polyols, endopolysaccharides and lipid. Journal of Applied Microbiology, 2019, 127, 1080-1100

M. Tzirita, M. Kremmyda, D. Sarris, A.A. Koutinas and **S. Papanikolaou*.** Effect of salt addition upon the production of metabolic compounds by *Yarrowia lipolytica* cultivated on biodiesel-derived glycerol diluted with olive-mill wastewaters. Energies, 2019, 12, 3649

P. Diamantopoulou, R. Filippousi, D. Antoniou, E. Varfi, E. Xenopoulos, D. Sarris and **S. Papanikolaou***. Production of added-value microbial metabolites during growth of yeast strains on media composed of biodiesel-derived crude glycerol and glycerol/xylose blends. FEMS Microbiology Letters, 2020, 367, fnaa063

P. Diamantopoulou, N.G. Stoforos, E. Xenopoulos, D. Sarris, D. Psarianos, A. Philippoussis and **S. Papanikolaou***. Lipid production by *Cryptococcus curvatus* growing on commercial xylose and subsequent valorization of fermentation waste-waters for the production of edible and medicinal mushrooms. Biochemical Engineering Journal, 2020, 162, 107706

E. Tsouko, A. Papadaki, **S. Papanikolaou**, G.P. Danezis, C.A. Georgiou, D.M.G. Freire and A. Koutinas. Enzymatic production of isopropyl and 2-ethylhexyl esters using *γ*-linolenic acid rich fungal oil produced from spent sulphite liquor. Biochemical Engineering Journal, 2021, 169, 107956

M. Dimopoulou, V. Kefalloniti, P. Tsakanikas, **S. Papanikolaou** and G.-J. Nychas. Assessing the biofilm formation capacity of the wine spoilage yeast *Brettanomyces bruxellensis* through FTIR spectroscopy. Microorganisms, 2021, 9, 587

7. Indicative Publications (review and mini-review articles, *corresponding author) (<u>total number 14</u>)

S. Papanikolaou* and G. Aggelis. Lipids of oleaginous yeasts. Part I. Biochemistry of single cell oil production. European Journal of Lipid Science and Technology, 2011, 113, 1031-1051

S. Papanikolaou* and G. Aggelis. Lipids of oleaginous yeasts. Part II. Technology and potential applications. European Journal of Lipid Science and Technology, 2011, 113, 1052-1073

A. Chatzifragkou and **S. Papanikolaou***. Effect of impurities in biodiesel-derived waste glycerol on the performance and feasibility of biotechnological processes. Applied Microbiology and Biotechnology, 2012, 95, 13-27

M. Athenaki, C. Gardeli, S.S. Tchakouteu, P. Diamantopoulou, D. Sarris, A. Philippoussis and **S. Papanikolaou***. Lipids from yeasts and fungi: physiology, production and analytical considerations. Journal of Applied Microbiology, 2018, 124, 336-367

8. Indicative Publications (book chapters, *corresponding author) (<u>total number 10</u>)

S. Papanikolaou*. Microbial conversion of glycerol into 1,3-propanediol: Glycerol assimilation, biochemical events related with 1,3-propanediol biosynthesis and biochemical engineering of the process. *In*: Microbial conversions of raw glycerol. Ed: G. Aggelis, Nova Science Publishers Inc., New York – USA, 2009, Chapter *X*, pp. 137-168.

A. Koutinas and **S. Papanikolaou**. Biodiesel production from microbial oil. *In*: Handbook of biofuels production – Processes and technologies. Eds: R. Luque, J. Campelo, J.H. Clark, Woodhead Publishing Limited, Cambridge – UK, 2011, Chapter 8, pp. 177-198.

E. Carsanba, **S. Papanikolaou**, P. Fickers, B. Agirman and H. Erten. Citric acid production by *Yarrowia lipolytica*. In: Non-conventional yeasts: From basic research to applications. Ed. A. Sibirny, Springer, Cham – Switzerland, 2019, pp. 91-118

9. Participation in projects (<u>total number 27, as scientific responsible 12</u>) (selection)

June 2005-June 2007: <u>Scientific responsible</u> of the Greek party of the bilateral project between Greece and Slovak Republic entitled "Biotechnological production of bioactive lipids from agro-industrial byproducts", financed by GSRT (Greek Ministry of National Education and Religious Affairs). Collaboration with Faculty of Chemical and Food Technology, Slovak University of Technology (Slovak responsible Dr M. Certik, Assoc. Prof.). (Budget for the DFST-LFMB: 9,981 €).

January 2008-December 2011: <u>Scientific responsible</u> of the Agricultural University of Athens in the EU FP7 project entitled "Integrated bioconversion of glycerine into value-added products and biogas at pilot plant scale" (Acronym: Propanergy). Other partners: (1) Hamburg University of Technology (TUHH), Institute of Bioprocess and Biosystems Engineering, (2) Agraferm Technologies (Luxemburg), (3) Frings Biotech (Germany), (4) Biokraftwerke Fürstenwalde (Germany), (5) Landwirtschaftliche Fachschule Tulln (Austria). Scientific responsible of the whole consortium: Dr A.-P. Zeng, Prof.. (Budget for the DFST-LFMB: 195,000 €).

January 2014-December 2015: <u>Scientific responsible</u> of the Agricultural University of Athens in the bilateral project entitled "New bioprocess for microbial oil from crude glycerol and cellulosic sugars" (Acronym: Bio4Oil). Bilateral S&T collaboration between Greece and Germany, financed by GSRT. Other partners: (1) Hamburg University of Technology (TUHH), Institute of Bioprocess and Biosystems Engineering, (2) AGROINVEST SA (Greece). Scientific responsible of German part Dr A.-P. Zeng, Prof.. (Budget for the DFST-LFMB: 150,000 €).

July 2018-now: <u>Scientific responsible</u> of the Agricultural University of Athens in the "Investigate-Create-Innovate" ("Ερευνώ-Δημιουργώ-Καινοτομώ") action, in the project entitled "Exploitation of new natural microbial flora from Greek origin amenable for the production of high-quality wines" (Acronym: OENOVATION). Other partners: (1) Laboratory of Oenology, AUA; (2) Laboratory of Plant pathology, AUA; (3) Institute of Technology of Agricultural Products (ELGO-Demeter"); (4) SANTO-WINES Co. (Santorini). (Budget for the LFMB: 150,000 €).

***<u>10.</u>* <u>Major contributions to the early careers of excellent researchers</u>**

Professor Papanikolaou was supervisor in the phD theses of researchers who are now researchers/professors in faculties:

1) A. Chatzifragkou (February 2009-April 2012): phD successfully defended, under my supervision. Title: "Study of the biotechnological production of 1,3-propanediol during growth of *Clostridium butyricum* on

substrates based on raw glycerol" (defense on 2nd April 2012). Dr Chatzifragkou is currently Assistant Professor in the University of Reading (UK).
2) D. Sarris (June 2008-January 2014): phD successfully defended under my supervision. Title: "Biotechnological treatment of olive mill wastewaters-based media: production of added-value compounds with the use of strains of yeasts *Yarrowia lipolytica* and *Saccharomyces cerevisiae*" (defense on 17th January 2014). Dr Sarris currently works as post-doctoral researcher in my laboratory and is currently working as Assistant Professor in the University of Aegean (Gr).

Professor Papanikolaou was the supervisor in the end-of-studies thesis and member of the advisory committee of the phD thesis of Dr. Leonidas Matsakas (phD thesis entitled: "Production of high-added value products using high efficiency bioprocesses on sweet sorghum", defended in the National Technical University of Athens in 2015) who currently serves as Senior Lecturer in the Luleå University of Technology (Se).

Statistics at a glance:

Referee in various international peer reviewed journals: >1000 invitations
Number of journals involved as reviewer: >120 journals
Number of phD students that he supervises / has supervised in the AUA: 10
Number of phD students that he has co-supervised in foreign countries: 1
Number of MSc students supervised (in the AUA and other faculties): >35
Number of end-of-studies theses supervised in the AUA: >40
Participation in projects (post-doctoral researcher - experienced researcher - expert): 25
Participation in projects (scientific responsible): 12
Money already arrived in the LFMB-AUA (as salaries, consumables, travels, equipment, etc) due to the presence of Dr Papanikolaou as scientific responsible or experienced researcher: >1,100 k€
Number of publications in peer-reviewed journals found in the SCI and Scopus databases (research articles): 131
Number of publications in peer-reviewed journals found in the SCI and Scopus databases (review or mini-review articles): 14
Number of publications in book chapters: 10
Number of publications in international conferences: >85
Number of publications in Hellenic conferences: >47
Number of citations in the Scopus database (self-citations of selected author excluded): 7,800
Number of citations in patents, book chapters, and journals not included in Scopus database: >500
h-factor (from Scopus database, self-citations of selected author excluded): 50

Athens, 14/05/2021