

# **CURRICULUM VITAE**

**HARALAMBOS (Haris) STAMATIS**

**Professor**

*Department of Biological Applications and  
Technologies  
University of Ioannina*

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## **Education**

1989 Bachelor of Science Studies - Chemistry (field of expertise Biochemistry) / University of Belgrade

1995 PhD- Institute of Biological Research and Biotechnology, National Hellenic Research Foundation, Athens in collaboration with University of Patras, Greece

## **Professional and Research Activities**

1990-94 PhD studies Institute of Biological Research and Biotechnology National Hellenic Research Foundation, Athens

1994-95 Military service.

1995-2000 Postdoctoral fellowship Laboratory of Biotechnology, School of Chemical Engineering, National Technical University of Athens

1999-2000 Postdoctoral fellowship Institute of Biological Research and Biotechnology. National Hellenic Research Foundation, Athens

2001-2008 Assistant Professor of Enzyme Biotechnology Department of Biological Applications and Technologies University of Ioannina

2008-2012 Associate Professor of Enzyme Biotechnology Department of Biological Applications and Technologies University of Ioannina

2012- Professor of Enzyme Biotechnology Department of Biological Applications and Technologies University of Ioannina

2014- Director of Biotechnology Laboratory of Biological Applications and Technologies University of Ioannina

## **Sabbaticals and Short term visits**

1/1993-6/1993 Institute fur Technische Chemie der Universitat Hannover, Germany

3/1996 Institute of Organic Chemistry and Biochemistry, Academy of Sciences Czech Republic

11-12/1997 Instituto de Catalisis de Madrid CSIC Spain, Applied Biocatalysis Group

6/2000-9/2001 & 6/2002-9/2002 Faculty of Pharmacy, Universidad Complutense de Madrid, Madrid, Spanish Research Council

10/2005 National Polytechnical Institute of Lorraine Laboratoire biocatalyse bioprocedes Nancy France

6/2008 Faculty of Bioengineering and Bioinformatics, Lomonosov Moscow State University, Ρωσία

9/2011 Institute of Chemistry & Biochemistry, Dept. of Technical Chemistry & Biotechnology, Ernst-Moritz-Arndt-University Greifswald, Germany.

9/2016 Institute of Chemistry, University of Belgrade, Σερβία

### **Research filed**

Main research interests are in the field of Applied Biocatalysis, Biotransformations and Nanobiotechnology and especially:

- Development of new “green” biocatalytic processes in conventional and non-conventional media for the production of high-value products (antioxidants, nutraceuticals, compounds with antiplatelet, anticancer, anti-angiogenic antimicrobial and anti-aging activity)
- Development of nanobiocatalysts, bionanoassemblies and bionanodevices and their application in biocatalytic processes, drug delivery and biosensing
- Development of micro and nanobioreactors for biosynthetic processes
- Development of green processes for the production of nanomaterials
- Production, cloning, overexpression, purification and characterization of enzymes, Improvement of enzymes properties using enzyme engineering approaches
- Production of high-value products and biofuels by microbial cultures and microalgae (Modeling/Optimization/ Scale-up).
- Enzymatic and microbial biotransformations and utilization of industrial and agroindustrial by-products.

### ***Undergraduate and Postgraduate Teaching at the University of Ioannina, University of Athens and National Technical University of Athens***

Biotechnology

Biochemical Engineering

Enzyme Biotechnology and Engineering

Bioprocess Engineering

Biochemistry

Nanobiotechnology

### ***Diploma and PhD Student supervision***

Supervision of 80 diploma thesis projects for BAT -UOI students

### **PhD Student supervision**

#### **Already finished**

1 Maria Zoumbanioti “Study of immobilized bioactive molecules in non-conventional media: microemulsions and organogels 2002-2007 (co-supervision with Dr A. Xenakis)

2. Katerina Tzialla “Development of biocatalytic processes for the selective modification of mastic oil constituents” 2005-2009

3. Maria Katsoura “Biotransformation of natural antioxidants in ionic liquids” 2006-2010

4 Ioannis Pavlidis «Biocatalysis in organized nanostructures in non conventional media” 2007-2011

5. Michaela Patila “Enzyme immobilization in nanomaterials” 2011-2016

6 Athena Papadopoulou „Biocatalysis in third generation ionic solvents“ 2013-2017

7. Evgenia Mitsou Development of microemulsions for the administration of bioactive compounds” 2016-2019 (co-supervision with Dr A. Xenakis)
- 8 Alexandra Chatzikonstantinou “Biocatalytic systems for the selective modification of natural products for the evaluation of their properties” 2015-2019
9. Elena Gkantzou Development of nanobiocatalytic devices with hydrolytic and oxidoreduction activity 2017-2021

*Ongoing*

- 10 Archontoula Giannakopoulou «Enzymatic catalyzed cascade reactions with nanobiocatalytic tools” ongoing 2018-
- 11 Renia Fotiadou «Development and applications of green nanobiocatalytic processes for the preparation of natural products derivatives» 2019-
- 12 Georgios Bakratsas “Production of Fungal Mycelial Protein in Submerged Cultures” 2021-
- 13 Myrto Bellou “Development of biocatalytic processes in neoteric media” 2021-
14. Panagiotis Athanasiou “Biocatalytic valorization of bioactive natural compounds” 2021-
15. Angelos Papanikolaou “Development and modelling of biocatalytic modifications of bioactive products” 2021-
16. Christina Alatzoglou “ Development of nanobiocatalytic systems for bioanalytical purposes” 2021-
- 17 Stamatia Spyrou “Development of innovative bioprocesses for the utilization of bioactive compounds from algae”

**Postgraduate student supervision (Master thesis)**

- 14 Master Thesis of the University of Ioannina

***Other activities***

- Member of various Hellenic and European Scientific Societies
- Member of the Organizing and Scientific Committees of National and International Conferences
- Expert Evaluator in National and International Research Projects
- Member of the Editorial board of ISRN Biotechnology
- Member of the Editorial board of Frontiers in Materials
- Member of the Editorial board of Nanomedicine Research Journal
- Member of the Editorial board of Nanomaterials
- Member of the Editorial board of Processes
- Member of the Editorial board of Processes of Methods in Molecular Biology
- Invited speaker, Session Chairman in National and International Conferences
- Referee in more than 40 international journals (Nature communication, Journal of Molecular Catalysis, Applied Biochemistry and Biotechnology, Enzyme and Microbial Technology, Biotechnology Progress, Process Biochemistry, Biotechnology and Bioengineering, Bioresource Technology, International Journal of Biological Macromolecules, Langmuir, Colloids and Surfaces B Biointerphases, Trends in Biotechnology, Biotechnology Advances, Nanomaterials etc)

## **Research projects**

- 1 Program “Pythagoras 1”, GSRT-EPEAEK II 2004-2006. Modification of natural products with antioxidant and anti-inflammatory properties using biocatalytic processes-Study of their action on atherothrombosis mechanisms. Coordinator H. Stamatis
2. Program PENED 2005-2008 (GSRT). Development and application of biocatalytic processes for the upgrade of mastic and mastic oil value as food additives for prevention of atherogenesis UOI Coordinator H. Stamatis
3. Joint research program Greece-Czech republic 2006-2008 (GSRT) Enzymatic modification of flavonoids—preparation of novel hybrid antioxidants with improved antiradical and anti-inflammatory properties. Coordinator H. Stamatis
4. Program of the Research Committee of the UOI 2008-2010 Study of the structure-activity relationship of lipolytic enzymes in nanodispersions. Application on the development of nano-bioreactors Coordinator H. Stamatis
5. Research Promotion Foundation's Framework Programme For Research, Technological Development and Innovation (RPF'S FP Cyprus) 2009-2011 Soil Recovery from Oil residues at the old Oil refinery area in Larnaca, a pilot project. UoI Coordinator H. Stamatis
- 6 Research Promotion of The Exchange and Scientific Cooperation Between Greece and Germany 2010-2011 (IKY- DAAD) Development of efficient biocatalysts based on enzymes immobilization onto nanomaterials. Coordinator H. Stamatis
- 7 Purification of waste waters with microalgae and utilization of biomass for the production of bioenergy 2012-2015 PER of Epirus (EU-Greece, NSRF 2007-2013) Coordinator H. Stamatis
8. Joint research program Greece –Slovakia 2013-2015 Biocatalytic preparation of novel hybrid molecules with improved cardioprotective properties (GSRT)
9. Programme for the Promotion of the Exchange and Scientific Cooperation between Greece and Germany 2015-2016 Development of novel biotechnological tools for the efficient treatment of agroindustrial lignocellulosic wastes (DAAD) Coordinator H. Stamatis
10. Production of oxidoreductases for the biocatalysis selective oxidations pf pharmaceutical interest 2018-19 (Pharmathen SA) Coordinator H. Stamatis
11. Operational Program "Human Resources Development, Education and Lifelong Learning, "Innovative nanobiocatalytic tools for the valorization of plant biomass, 2018-19 Coordinator H. Stamatis
12. Exploitation of pharmaceutical and aromatic plants of the Region of Epirus for the development of anti-aging preparations and functional dairy products Regional Programmes of Epirus - EU-Greece Partnership Agreement for the Development Framework 2018-2020 (UoI- BAT Group Leader: H. Stamatis)
13. Phenotypic characterization, molecular fingerprinting and oenological evaluation of indigenous vitis cultivars from Epirus region Regional Programmes of Epirus - EU-Greece Partnership Agreement for the Development Framework 2018-2020 (UoI-BAT Group Leader: H. Stamatis)
14. Synthetic Biology from omic technologies to genomic engineering “Reinforcement of the Research and Innovation Infrastructure” -Competitiveness, Entrepreneurship and Innovation (EU-Greece NSRF), 2018-2021 Uoi Coordinator H. Stamatis <https://www.omic-engine.com/about>
15. Development of Innovative Cosmetic Products and Food Supplements Based on Nanoencapsulation of Natural Bioactive Compounds Competitiveness,

Entrepreneurship and Innovation (EU-Greece NSRF), 2018-2021 Coordinator H. Stamatis

16. Operational Program Competitiveness, Entrepreneurship and Innovation, under the call "Aquaculture" - "Industrial Materials" - "Open Innovation In Culture" Development of Green Processes For The Recovery Of Bioactive Products With Anti-Ageing & Antioxidant Activity From Marine Algae 2019-2022 UoI Coordinator H. Stamatis (<http://bat.uoi.gr/research/biomalga>)

17. Operational Program Competitiveness, Entrepreneurship and Innovation Development of innovative functional meat analogues using alternative sources of plant proteins and novel technologies (EU-Greece NSRF), 2021-2023 UoI Coordinator H. Stamatis

18. Operational Program Competitiveness, Entrepreneurship and Innovation (EU-Greece NSRF), Development of new functional fish-superfood for more efficient fish farming) 2021-2023 Coordinator I. Leonardos (UoI- BAT Group Leader: H. Stamatis)

19. Operational Program Competitiveness, Entrepreneurship and Innovation, under the call "Industrial Materials" Flexible films with antimicrobial and antioxidant activity for food packaging), 2021-2023 (UoI- BAT Group Leader: H. Stamatis) Coordinator N. Barkoula

20. Operational Program Competitiveness, Entrepreneurship and Innovation, Design and development of a sweat-based glucose monitoring graphene nanodevice (closed-loop) with controlled transdermal nanoemulsion release for hypoglycemic drug delivery), 2021-2023, Coordinator D. Gournis, (UoI- BAT Group Leader: H. Stamatis)

21. Operational Program Competitiveness, Entrepreneurship and Innovation (EU-Greece NSRF 2014-2020), 2020-2023 Development of innovative functional meat analogs using alternative sources of plant proteins and novel technologies UoI Coordinator H. Stamatis

22. Exploitation of Greek microbial diversity for the development of innovative cosmeceuticals and food supplements Operational Program Competitiveness, Entrepreneurship and Innovation (EU-Greece NSRF 2014-2020), 2020-2023 (UoI-BAT Group Leader: H. Stamatis),

### **Publication List**

1 Phd Thesis

140 Publications in International peer reviewed Journals (127) and Chapters in International Books and Book Series (13)

1 Patent

49 Publications in Proceeding of National and International Conferences

>190 Oral and Poster Presentations in National and International Conferences

Citations<sup>\*</sup>: > 5500

h-index<sup>\*</sup>: 44,

\* Google Scholar (11/2022)

<https://scholar.google.de/citations?user=1r1GaTIAAAJ&hl=en>

### ***PhD Thesis***

H. Stamatis «Enzymatic modification of amphiphilic substrates in microemulsions»  
1995 PhD Thesis Institute of Biological Research and Biotechnology National Hellenic Research Foundation, Athens- Department of Chemistry, University of Patras

### ***Patents***

"A. Tzakos, H. Stamatis, I. Gerothanassis, A. Chatzikonstantinou, M. Chatziathanasiadou System and method for the production, characterization and biological evaluation of natural product analogues" Hellenic Industrial Property Organisation OBI-GREECE 1009100.

### ***Book series***

Methods in Molecular Biology Multienzymatic Assemblies (Editor H. Stamatis)  
2022, Springer Nature Series ISSN 1064-3745

### ***Publications in International peer reviewed Journals***

#### **1993**

- 1) A. Xenakis, H. Stamatis, A. Malliaris, F.N. Kolisis. Effect of alcohols on the structure of AOT reverse micelles with respect to different enzyme activity. *Progress in Colloid and Polymer Science*, 93, 373-376, 1993. <https://doi.org/10.1007/BFb0118630>
- 2) H. Stamatis, A. Xenakis, M. Provelegiou F.N. Kolisis. Esterification reactions catalyzed by lipases in microemulsions. The role of enzyme localization in relation to its selectivity. *Biotechnology and Bioengineering*, 42, 103-110, 1993. <https://doi.org/10.1002/bit.260420114>
- 3) H. Stamatis, F.N. Kolisis, A. Xenakis. Enantiomeric selectivity of a lipase from *Penicillium simplicissimum* in the esterification of menthol in microemulsions. *Biotechnology Letters*, 15 (5), 471-476, 1993. <https://doi.org/10.1007/BF00129321>
- 4) H. Stamatis, A. Xenakis, U. Menge and F.N. Kolisis. Kinetic study of lipase catalyzed esterification reactions in microemulsions. *Biotechnology and Bioengineering*, 42, 931-937, 1993. <https://doi.org/10.1002/bit.260420803>
- 5) H. Stamatis, F.N. Kolisis, A. Xenakis, U. Bornscheuer, T. Scheper, U. Menge. *Pseudomonas cepacia* lipase: Esterification reactions in AOT microemulsion systems. *Biotechnology Letters* 15(7), 703-708, 1993. <https://doi.org/10.1007/BF01080143>

#### **1994**

- 6) U. Bornscheuer, H. Stamatis, A. Xenakis, T. Yamane, F.N. Kolisis. A comparison of different strategies for lipase-catalysed synthesis of partial glycerides. *Biotechnology Letters* 16, 697-702, 1994. <https://doi.org/10.1007/BF00136474>
- 7) H. Stamatis, A. Xenakis, F.N. Kolisis, A. Malliaris. Lipase localization in w/o microemulsions studied by fluorescence energy transfer. *Progress in Colloid and Polymer Science*, 97, 253-255, 1994 <https://doi.org/10.1007/BFb0115178>

#### **1995**

- 8) H. Stamatis, A. Xenakis, E. Dimitriadis, F.N. Kolisis. Catalytic behavior of *Pseudomonas cepacia* lipase in w/o microemulsions. *Biotechnology and Bioengineering*, 45, 33-41, 1995. <https://doi.org/10.1002/bit.260450106>
- 9) H. Stamatis, A. Xenakis, F.N. Kolisis. Studies on enzyme reuse and product recovery in lipase catalyzed-reactions in microemulsions. *Annals of the New York*

Academy of Science, 750, 237-241, 1995. <https://doi.org/10.1111/j.1749-6632.1995.tb19958.x>

10) A. Ballesteros, U. Bornscheuer, A. Capewell, D. Combes, J-S. Condoret, K. Koenig, F.N. Kolisis, A. Marty, U. Menge, T. Schepers, H. Stamatis, Enzymes in non-conventional phases. - Review article Biocatalysis and Biotransformations, 13, 1-42, 1995. <https://doi.org/10.3109/10242429509040103>

1996

11) J.B. Macris, H. Stamatis and F.N. Kolisis. Microemulsions as a tool for the regioselective lipase-catalysed esterification of aliphatic diols. Applied Microbiology and Biotechnology. 46, 521-524, 1996. <https://doi.org/10.1007/s002530050854>

12) V. Papadimitriou, A. Xenakis, C.T. Cazianis, H. Stamatis, M. Egmond. EPR studies of cutinase in microemulsions. Annals of the New York Academy of Science, 799, 275-280, 1996. <https://doi.org/10.1111/j.1749-6632.1996.tb33213.x>

13) H. Stamatis, J. Macris and F.N. Kolisis. Esterification of hydrophilic diols catalysed by lipases in microemulsions. Biotechnology Letters, 18, 541-546, 1996. <https://doi.org/10.1007/BF00140200>

14) S. Avramiotis, H. Stamatis, F.N. Kolisis, P. Lianos, A. Xenakis. Structural studies of lecithin and AOT-based water-in-oil microemulsions in the presence of lipase. Langmuir, 12, 6320-6328, 1996. <https://doi.org/10.1021/la9606862>

1997

15) S. Avramiotis, H. Stamatis, F.N. Kolisis, A. Xenakis. Pseudomonas cepacia lipase localization in lecithin and AOT w/o microemulsions. A fluorescence energy transfer study. Progress in Colloid and Polymer Science, 105, 180-183, 1997. <https://doi.org/10.1007/BFb0110984>

16) V. Sereti, H. Stamatis, F.N. Kolisis. Improved stability and reactivity of Fusarium solani cutinase in supercritical CO<sub>2</sub>. Biotechnology Techniques 11, 661-665, 1997. <https://doi.org/10.1023/A:1018407326284>

1998

17) C. Tsitsimpikou, H. Stamatis, V. Sereti, H. Daflos and F.N. Kolisis. Acylation of glucose catalysed by lipases in supercritical carbon dioxide. Journal of Chemical Technology and Biotechnology, 71, 309-314, 1998. [https://doi.org/10.1002/\(SICI\)1097-4660\(199804\)71:4<309::AID-JCTB859>3.0.CO;2-L](https://doi.org/10.1002/(SICI)1097-4660(199804)71:4<309::AID-JCTB859>3.0.CO;2-L)

18) H. Stamatis, P. Christakopoulos, D. Kekos, B.J. Makris, F.N. Kolisis. Studies on the synthesis of short-chain geranyl esters catalyzed by Fusarium oxysporum esterase in organic solvents. Journal of Molecular Catalysis B: Enzymatic, 4, 229-236, 1998. [https://doi.org/10.1016/S1381-1177\(98\)00003-4](https://doi.org/10.1016/S1381-1177(98)00003-4)

19) P. Christakopoulos, B. Tzalas, D. Mamma, H. Stamatis, Liadakis G.N., C. Tzia, D. Kekos, F.N. Kolisis, B.J. Makris. Production of an esterase from Fusarium oxysporum catalysing transesterification reactions in organic solvents. Process Biochemistry, 33(5), 585-594, 1998. [https://doi.org/10.1016/S0032-9592\(98\)00039-9](https://doi.org/10.1016/S0032-9592(98)00039-9)

20) H. Stamatis, V. Sereti and F.N. Kolisis. Studies on the enzymatic synthesis of sugar esters in organic medium and supercritical carbon dioxide. Chemical and Biochemical Engineering Quarterly, 12, 151-156, 1998. <http://hdl.handle.net/123456789/12921>

21) V. Sereti, H. Stamatis, E. Koukios and F.N. Kolisis. Enzymatic acylation of cellulose acetate in organic media. Journal of Biotechnology, 66, 219-223, 1998. [https://doi.org/10.1016/S0168-1656\(98\)00085-6](https://doi.org/10.1016/S0168-1656(98)00085-6)

1999

- 22) H. Stamatis and A. Xenakis. Biocatalysis using microemulsion-based polymer gels containing immobilized lipase, *Journal of Molecular Catalysis B: Enzymatic*, 6, 399-406, 1999 [https://doi.org/10.1016/S1381-1177\(98\)00142-8](https://doi.org/10.1016/S1381-1177(98)00142-8)
- 23) H. Stamatis, A. Xenakis, F.N. Kolisis, Bioorganic reactions in microemulsions: The case of lipase. *Biotechnology Advances*, 17(3), 293-318, 1999. (**Invited paper**) [https://doi.org/10.1016/S0734-9750\(99\)00007-5](https://doi.org/10.1016/S0734-9750(99)00007-5)
- 24) A. Xenakis and H. Stamatis. Lipase immobilization on microemulsion-based polymer gels. *Progress in Colloid and Polymer Science*, 112, 132-135, 1999 [https://doi.org/10.1007/3-540-48953-3\\_28](https://doi.org/10.1007/3-540-48953-3_28)
- 25) H. Stamatis, V. Sereti and F.N. Kolisis. Studies on the enzymatic synthesis of lipophilic derivatives of natural antioxidants, *Journal of the American Oil Chemist's Society*, 76(12), 1505-1510, 1999. <https://doi.org/10.1007/s11746-999-0193-1>
- 26) D.G. Hatzinikolaou, E. Kourentzi, H. Stamatis, P. Christakopoulos, F.N. Kolisis, D. Kekos and B.J. Makris. A novel lipolytic activity by Rhodotorula glutinis cells. Production, partial characterization and application in the synthesis of esters. *Journal of Bioscience and Bioengineering*, 88, 36-39, 1999. [https://doi.org/10.1016/S1389-1723\(99\)80175-3](https://doi.org/10.1016/S1389-1723(99)80175-3)

## 2000

- 27) H. Stamatis, E.C. Voutsas, C. Delimitsou, F.N. Kolisis and D. Tassios. Enzymatic production of alkyl esters through lipase-catalyzed transesterification reactions in organic solvents: Solvent effect and prediction of equilibrium conversions. *Biocatalysis and Biotransformation*, 18, 259-269, 2000. <https://doi.org/10.3109/10242420009015249>
- 28) A. Pastou, H. Stamatis and A. Xenakis Microemulsion-based organogels containing lipase: Application in the synthesis of esters. *Progress in Colloid and Polymer Science* 115, 192-195, 2000 [https://doi.org/10.1007/3-540-46545-6\\_39](https://doi.org/10.1007/3-540-46545-6_39)

## 2001

- 29) H. Stamatis, V. Sereti and F.N. Kolisis. Enzymatic synthesis of hydrophilic and hydrophobic derivatives of natural phenolic acids in organic media. *Journal of Molecular Catalysis B: Enzymatic* 11, 323-328, 2001 [https://doi.org/10.1016/S1381-1177\(00\)00016-3](https://doi.org/10.1016/S1381-1177(00)00016-3)
- 30) V. Sereti, H. Stamatis, C. Pappas, M. Polissiou and F.N. Kolisis Enzymatic acylation of hydroxypropyl cellulose in organic media and determination of the ester formation by Diffuse Reflectance Infrared Fourier Transform (DRIFT) spectroscopy. *Biotechnology and Bioengineering* 72, 495-500, 2001 [https://doi.org/10.1002/1097-0290\(20010220\)72:4<495::AID-BIT1012>3.0.CO;2-T](https://doi.org/10.1002/1097-0290(20010220)72:4<495::AID-BIT1012>3.0.CO;2-T)
- 31) A. Kontogianni, V. Skouridou, V. Sereti, H. Stamatis and F.N. Kolisis. Regioselective acylation of flavonoids catalysed by lipase in non-toxic media. *European Journal of Lipid Science and Technology*, 103, 655-660, 2001. [https://doi.org/10.1002/1438-9312\(200110\)103:10<655::AID-EJLT655>3.0.CO;2-X](https://doi.org/10.1002/1438-9312(200110)103:10<655::AID-EJLT655>3.0.CO;2-X)

## 2002

- 32) E.C. Voutsas, H. Stamatis, F.N. Kolisis and D. Tassios. Solvent effect on equilibrium position and initial rate of lipase-catalyzed esterification reactions in organic solvents: Experimental results and prediction capabilities. *Biocatalysis and Biotransformation*, 20, 101-109, 2002. <https://doi.org/10.1080/10242420290018087>
- 33) Ch. Delimitsou, M. Zoumpanioti, A. Xenakis and H. Stamatis Activity and stability studies of Mucor miehei lipase immobilized in novel microemulsion-based organogels *Biocatalysis and Biotransformation*, 20, 319-327, 2002 <https://doi.org/10.1080/10242420290025539>

34) E. Franqueville, H. Stamatis, H. Loutrari, A. Friboulet, F.N. Kolisis. Studies on the catalytic behavior of a cholinesterase-like abzyme in an AOT microemulsion system Journal of Biotechnology, 97, 177-182, 2002. [https://doi.org/10.1016/S0168-1656\(02\)00061-5](https://doi.org/10.1016/S0168-1656(02)00061-5)

### 2003

35) P. Christakopoulos, P. Katapodis, E. Kalogeris, D. Kekos, B.J. Macris, H. Stamatis, H. Skaltsa Antimicrobial activity of acidic xylo-oligosaccharides produced by family 10 and 11 endoxylanases. International Journal of Biological Macromolecules 31, 171-175, 2003 [https://doi.org/10.1016/S0141-8130\(02\)00079-X](https://doi.org/10.1016/S0141-8130(02)00079-X)

36) E., Topakas, H. Stamatis, P. Biely , D. Kekos, B.J. Macris , P. Christakopoulos, Purification and characterization of a feruloyl esterase from Fusarium oxysporum catalyzing esterification of phenolic acids in ternary water-organic solvent mixtures. Journal of Biotechnology, 102, 33-44, 2003 [https://doi.org/10.1016/S0168-1656\(02\)00363-2](https://doi.org/10.1016/S0168-1656(02)00363-2)

37) V. Skouridou, H. Stamatis and F.N. Kolisis Use of essential oils as media for the enantioselective esterification of the monoterpane perillyl alcohol catalyzed by lipase. European Journal of Lipid Science and Technology, 105 (3-4), 115-120, 2003. <https://doi.org/10.1002/ejlt.200390026>

38) E. Topakas, H. Stamatis, M. Mastihubova, P. Biely, D. Kekos, B.J. Macris, P. Christakopoulos Purification and characterization of a feruloyl esterase (FAE-I) from Fusarium oxysporum catalyzed transesterification of phenolic acid esters. Enzyme and Microbial Technology 33, 729-737, 2003. [https://doi.org/10.1016/S0141-0229\(03\)00213-8](https://doi.org/10.1016/S0141-0229(03)00213-8)

39) V. Skouridou, H. Stamatis and F.N. Kolisis. Lipase-mediated epoxidation of  $\alpha$ -pinene. Journal of Molecular Catalysis B: Enzymatic, 21, 67-69, 2003 [https://doi.org/10.1016/S1381-1177\(02\)00141-8](https://doi.org/10.1016/S1381-1177(02)00141-8)

40) Y. Sanakis, D. Mamma, P. Christakopoulos, H. Stamatis Catechol 1,2-Dioxygenase from Pseudomonas putida in organic media - An Electron Paramagnetic Resonance study International Journal of Biological Macromolecules 33, 101-106, 2003 [https://doi.org/10.1016/S0141-8130\(03\)00073-4](https://doi.org/10.1016/S0141-8130(03)00073-4)

41) A. Kontogianni, V. Skouridou, V. Sereti, H. Stamatis and F.N. Kolisis. Lipase-catalyzed esterification of rutin and naringin with fatty acids of medium carbon. Journal of Molecular Catalysis B: Enzymatic, 21, 59-62, 2003. [https://doi.org/10.1016/S1381-1177\(02\)00139-X](https://doi.org/10.1016/S1381-1177(02)00139-X)

42) V. Skouridou, H. Stamatis and F.N. Kolisis. A study on the process of the lipase-catalyzed synthesis of  $\alpha$ -pinene oxide in organic solvents. Biocatalysis and Biotransformation 21, 285-290, 2003 <https://doi.org/10.1080/10242420310001597801>

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