Ioannis Pavlidis

Assistant Professor of Biological Chemistry

General Information

Work Address	Enzyme Technology Laboratory, Dept. of Chemistry, University of Crete, Voutes University Campus, 70013 Heraklion, Greece
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Date & Place of Birth	08 March 1983 - Thessaloniki, Greece
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Education

2011	PhD - Biotechnology, Enzyme Technology | *University of Ioannina, GR*
2005	Diploma of Biology | *Dept. of Biological Applications and Technology, University of Ioannina, GR*
2013	BSc Education | *Dept. of Primary Education, University of Ioannina, GR*

Professional & Research Experience

Since 2018	Assistant Professor, Dept. of Chemistry. *University of Crete, GR* **2019-today:** Deputy director of studies of the MSc curriculum "Protein Biotechnology" **2018-today:** Coordinator of the "pedagogic and teaching competence program" of School of Sciences and Engineering
2015-2017	Junior Group leader, group of Biotechnology, Dept. of Biochemistry, FB 10: Mathematics & Natural Sciences. *University of Kassel, DE*
2011-2015	Post-Doc, Dept. of Biotechnology & Enzyme Catalysis, Institute of Biochemistry. *University of Greifswald, DE*
2012	Two-month secondment in the frame of ITN Marie-Curie Fellowship. *BRAIN AG, DE*
2007-2011	PhD student, Biotechnology laboratory, Dept. of Biological Applications & Technologies. *University of Ioannina, GR*

Publications

My published scientific work consists of:

39	Publications in peer-review international journals
7	Chapters in international books , **1** editing of book
1	Patent application
69	Conference proceedings (**14** oral presentations, **4** of them invited)

Bibliometric Data †:

Citations	1145
h-factor	17
Total I.F. (2019)	225,1
Average I.F. per article	5,8

† Source: Scopus // 28.02.2021

FELLOWSHIPS AND AWARDS

2014	DAAD fellowship for the participation in GRC Biocatalysis conference at Smithfield, USA
2011-2012	ITN Marie-Curie Fellowship through the program Actions (research associate), Institute of Biochemistry, Dept. Of Biotechnology & Enzyme Catalysis, University of Greifswald, DE.
2007-2011	Bodossaki Foundation Fellowship for the PhD thesis.

RESEARCH INTERESTS

My research focuses on the fields of **Enzyme Technology & Applied Biocatalysis**. I am mostly active on:

Development of industrially relevant bioprocesses: Development of green bioprocesses using enzymes or microorganisms for the production of high-added value products, interesting for the food and pharma industry.

Development of enzymatic cascades: *In vitro* reconstitution of enzymatic pathways of two and more enzymes for the production of high-added value products.

Identification of novel enzymes and metabolic pathways: Identification of interesting biocatalysts for the aforementioned processes via database analysis, sequence homology and selection screening.

Biocatalysts optimization via protein engineering: Evolution of enzymes by means of rational design and directed evolution. Development of new methods of protein engineering.

Bioinformatic analysis of biocatalytic behavior: Study of the mechanistic aspects of biocatalysis, by molecular docking simulation, homology models and other *in silico* methods.

Valorization of wastes: Development of bioprocesses for the valorization of industrial and agricultural wastes.

RESEARCH PROJECTS

Participation in >10 national and international projects. Here the one participating as principal investigator:

2020-2023	*New catalytic enzymes and enzymatic processes from the marine microbiome for refining marine seaweed biomass* University of Crete (PI: I.V. Pavlidis) Funding: BlueBio [ID: 127]
2020-2023	*Sustainable biocatalytic production of advanced biodiesel using novel biocatalysts produced from conventional biodiesel industrial byproducts* University of Crete (PI: I.V. Pavlidis) Funding: G.S.R.T. [Project code: T2ΕΔΚ-00573]
2020-2023	*Development of sustainable chemoenzymatic processes for optically pure amines from alcohols or alkynes* University of Crete (PI: I.V. Pavlidis) Funding: H.F.R.I. [Application number: 664]
2020-2021	Novel sweetener proteins as food additives University of Crete (PI: I.V. Pavlidis) Funding: University of Crete - ΕΛΚΕ [ID:10712]
2019-2020	*Production and evolution of cytochrome P450 for the synthesis of bioactive compounds* University of Crete (PI: I.V. Pavlidis) Funding: University of Crete - ΕΛΚΕ [ID:10325]
2018-2019	*Biocatalytic amination of furane derivatives using transaminases, for the production of biopolymer building blocks (Fur2Biopol).* University of Crete (PI: I.V. Pavlidis) Funding: University of Crete - ΕΛΚΕ [ID:10123]

2016-2017 *Localized immobilization of enzymatic cascades onto ultrananocrystalline diamond films for innovative biocatalytic applications.*
University of Kassel (PI: I.V. Pavlidis)
Funding: University of Kassel - ZFF-PROJEKT [Application number: 1963]

2015-2018 *Application of methyltransferases for the production of high value-added products*
University of Kassel (PI: I.V. Pavlidis)
Funding: Fonds der Chemischen Industrie – Sachkostenzuschüsse [Konto: SK197/08]

2015-2017 *Nanoscale enzymatic production lines*
University of Kassel (PI: I.V. Pavlidis)
Funding: Hochschulpakt 2020, BMBF via University of Kassel [Auftragsnummer: 95385301]

INDEPENDENT TEACHING EXPERIENCE

2018-today **University of Crete:** In BSc Chemistry: "Principles of Biology" (core), "Enzyme Biotechnology" (elective); In MSc Chemistry: "Protein Engineering" (elective). In MSc Protein Biotechnology: "Drug Development Technologies" and "Bioinformatics". Supervision of 10 BSc, 5 MSc and 4 PhD students.

2015-today **University of Kassel:** "Biotechnology", "Biocatalysis" and "Applied Biotechnology" classes to the BSc and MSc Curriculum respectively of both Nanostructure Science and Biology. Supervision of 15 BSc and MSc students during their internship in my laboratories and one BSc thesis and one MSc thesis. Co-supervision of 2 PhD students of my "Biotechnology group" with Prof. F.W. Herberg, due to my position in UoC.

INVITED LECTURES IN UNIVERSITIES, RESEARCH INSTITUTES AND COMPANIES

- **Postponed due to COViD-19:** KTH, Stockholm, SE and University of Amserdam, the Netherlands, NL.
- **26 Oct 2020:** Department of Material Science and Technologies, University of Crete, GR.
- **7 Sep 2019:** Institute of Biochemistry, University of Greifswald, DE.
- **11 Apr 2019:** School of Chemical Engineering, National Technical University of Athens, GR.
- **17 May 2017:** University of Warmia and Mazury, Olsztyn, PL.
- **09 Jun 2015**: 1st Science and Innovation Forum, F. Hoffmann-La Roche, Basel, CH.
- **05 May 2015**: Beijing University of Chemical Technology, Beijing, CN.
- **29 Apr 2015**: South China University of technology Guangzhou, CN.
- **26 Feb 2013**: Department of Biological Applications and Technologies, University of Ioannina, GR.

OTHER SCIENTIFIC ACTIVITIES

Member of scientific forums

2016-2017 German Society for Biochemistry and Molecular Biology (GBM)
Since 2009 European Federation of Biotechnology (EFB)
Since 2007 Hellenic Society of Biochemistry and Molecular Biology
Since 2007 Greek Lipid Forum
Since 2021 Global Talent Mentoring

Editorial

- Biotechnology and Applied Biochemistry (Wiley), Editorial Board Member, since 2018

- Guest editor, Catalysts (MDPI), Special Issue "Biocatalysis for Industrial Applications", 2018
- Catalysts (MDPI), Editorial Board Member Section "Biocatalysis", 2019-2020.
- Experimental Results (Cambridge University Press), Reviewing Editor in Biochemistry, since 2020
- Frontiers in Catalysis (Frontiers), Review Editorial Board Member, since 2020.

Reviewer after invitation for

- Swiss National Science Academy (2013, 2016, 2019)
- Icelandic Research Fund (2016)
- Polish National Science Centre (2018)
- Croatian Science Foundation (2019, 2020)
- >60 international peer-review journals: (http://www.publons.com/a/1301200/)

Most reviews for: Process Biochemistry, RSC Advances, Catalysts
Higher IF Journals: ACS Catalysis, Biotechnology Advances, Nature Catalysis, Nature Communications, PNAS.

PUBLICATIONS IN INTERNATIONAL JOURNALS

A40 I. Metaxas, E. Michailidi, D. Stavrou*, I.V. Pavlidis* (2021) Quantum Confinement: Reconstructing its scientific content for implementation in tertiary education. Chemistry Teacher International. (under Preparation)

A39 Q. Tang, C. Grathwol, A.S. Aslan-Üzel, S. Wu, A. Link, I. V. Pavlidis*, C. Badenhorst*, U.T. Bornscheuer* (2020) Directed evolution of a halide methyltransferase enables biocatalytic synthesis of diverse SAM analogues. *Angewandte Chemie International Edition*. DOI: 10.1002/anie.202013871.

A38 K. Myrtollari, N. Katsoulakis, D. Zarafeta, I.V. Pavlidis, G. Skretas, I. Smonou* (2020) Activity and specificity studies of the new thermostable esterase EstDZ2. *Bioorganic Chemistry*. **104**: art. No. 104214.

A37 Q. Tang, Y.M. Vianney, K. Weisz, C.W. Grathwol, A. Link, U.T. Bornscheuer, I.V. Pavlidis* (2020) Influence of substrate binding residues on the substrate scope and regioselectivity of a plant *O*-methyltransferase against flavonoids. *ChemCatChem.* **12**: 3721-3727.

A36 A. Su, S. Kiokekli, M. Naviwala, A.N. Shirke, I.V. Pavlidis*, R.A. Gross (2020) Cutinases as stereoselective catalysts: Specific activity and enantioselectivity of cutinases and lipases for menthol and its analogs. *Enzyme and Microbial Technology*, **133**: 109467.

A35 Q. Tang, U.T. Bornscheuer, I.V. Pavlidis* (2019) Specific residues expand the substrate scope and enhance the regioselectivity of a plant *O*-methyltransferase. *ChemCatChem*, 11(14): 3227-3233 // **Young Researchers Series (Invited)**.

A34 P. Kelefiotis-Stratidakis, T. Tyrikos-Ergas, I.V. Pavlidis* (2019) The challenge of using isopropylamine as amine donor in transaminase catalyzed reactions. *Organic and Biomolecular Chemistry,* **17**: 1634-1642 // **New Talent Issue (Invited)**.

A33 A. Su, T. Tyrikos-Ergas, A.N. Shirke, Y. Zou, A. Dooley, I.V. Pavlidis*, R.A. Gross (2018) Revealing cutinases' capabilities as enantioselective catalysts. *ACS Catalysis*, **8**: 7944-7951.

A32 D. Merker, M. Kesper, L.L. Kailing, F.W. Herberg, J.P. Reithmeier, I.V. Pavlidis, C. Popov (2018) Nanostructured modified ultrananocrystalline diamond surfaces as immobilization support for lipases. *Diamond and Related Materials*, **90**: 32-39.

A31 A.W.H. Dawood, M.S. Weiß, C. Schulz, I.V. Pavlidis, H. Iding, R.O.M.A. de Souza, U.T. Bornscheuer (2018) Isopropylamine as amine donor in transaminase-catalyzed reactions: Better acceptance through reaction and enzyme engineering. *ChemCatChem*, **10** (18): 3943-3949 // **Hot Topic: Biocatalysis**.

A30 N. Noby, H. Saeed, A.M. Embaby, I.V. Pavlidis, A. Hussein (2018) Cloning, expression and characterization of cold active esterase (EstN7) from *Bacillus cohnii* strain N1: a novel member of family IV. *International Journal of Biological Macromolecules*, **120**: 1247-1255.

A29 L.L. Kailing, D. Bertinetti, C.E. Paul, T. Manszewski, M. Jaskolski, F.W. Herberg, I.V. Pavlidis* (2018) *S*-Adenosyl-L-homocysteine hydrolase inhibition by a synthetic nicotinamide cofactor biomimetic. *Frontiers in Microbiology*, **9**: 505.

A28 R. Lorenz, E.-W. Moon, J.J. Kim, S. Schmidt, B. Sankaran, I.V. Pavlidis, C. Kim, F.W. Herberg (2017) Mutations of PKA cyclic nucleotide binding domains reveal novel aspects of cyclic nucleotide selectivity. *Biochemical Journal,* **474** (14): 2389-2403.

A27 L.L. Kailing, D. Bertinetti, F.W. Herberg, I.V. Pavlidis* (2017) A coupled photometric assay for characterization of *S*-adenosyl-L-homocysteine hydrolases in the physiological hydrolytic direction. *New Biotechnology*, **39**: 11-17.

A26 M.S. Weiß, I.V. Pavlidis, P. Spurr, S.P. Hanlon, B. Wirz, H. Iding, U.T. Bornscheuer (2017) Amine transaminase engineering for spatially bulky substrate acceptance. *ChemBioChem*, **18**: 1022-1026.

A25 A.M. Knight, A. Nobili, T. van den Bergh, M. Genz, H.-J. Joosten, D. Albrecht, K. Riedel, I.V. Pavlidis, U.T. Bornscheuer (2017) Bioinformatic analysis of fold type III PLP-dependent enzymes discovers multimeric racemases. *Applied Microbiology and Biotechnology*, **101**: 1499-1507.

A24 M.S. Weiß, I.V. Pavlidis, P. Spurr, S.P. Hanlon, B. Wirz, H. Iding, U.T. Bornscheuer (2016) Protein-engineering of an amine transaminase for the stereoselective synthesis of a pharmaceutically relevant bicyclic amine. *Organic and Biomolecular Chemistry*, **14**: 10249-10254.

A23 I.V. Pavlidis, M.S. Weiß, M. Genz, P. Spurr, S.P. Hanlon, B. Wirz, H. Iding, U.T. Bornscheuer (2016) Identification of (*S*)-selective transaminases for the asymmetric synthesis of bulky chiral amines. *Nature Chemistry*, **8(11)**: 1076-1082.

A22 Q. Tang, G.M. Popowicz, X. Wang, J. Liu, I.V. Pavlidis, Y. Wang (2016) Lipase-driven epoxidation is a two-stage synergistic process. *Chemistry Select*, **1**(**4**): 836-839.

A21 M. Patila, I.V. Pavlidis, A. Kouloumpis, K. Dimos, K. Spyrou, P. Katapodis, D. Gournis, H. Stamatis (2016) Graphene oxide derivatives with variable alkyl chain length and terminal functional groups as supports for stabilization of cytochrome c. *International Journal of Biological Macromolecules*, **84**: 227-235.

A20 Y. Tao, R. Dong, I.V. Pavlidis, B. Chen, T. Tan (2016) Using imidazolium-based ionic liquids as dual solvent- catalysts for sustainable synthesis of vitamin esters: inspiration from bio- and organo-catalysis. *Green Chemistry* **18**: 1240-1248 **// Issue's front cover**.

A19 D. Last, J. Müller, A.W.H. Dawood, E.J. Moldenhauer, I.V. Pavlidis, U.T. Bornscheuer (2016) Highly efficient and easy protease-mediated protein purification. *Applied Microbiology and Biotechnology* **100:** 1945-1953**.**

A18 S. Guo, J. Xu, I.V. Pavlidis, D. Lan, U. T. Bornscheuer, J. Liu, Y. Wang (2015) Structure of product-bound SMG1 lipase: active site gating implications. *FEBS Journal* **282**: 4538-4547.

A17 Y. Tao, G. Chen, I.V. Pavlidis, Y. Jiang, L. Qie, C. Cui, L. Liu, B. Chen, T. Tan (2015) A water-dependent kinetics guide complex lipase-mediated synthesis of biolubricants in a water activity control reactor. *Catalysis Science & Technology*, **5**: 5120-5128 **// Issue's inside front cover**.

A16 D. Lan, G.M. Popowicz, I.V. Pavlidis, P. Zhou, U.T. Bornscheuer, Y. Wang (2015) Conversion of a mono- and diacylglycerol lipase into a triacylglycerol lipase by protein engineering. *ChemBioChem* **16**: 1431-1434.

A15 A. Nobili, Y. Tao, I.V. Pavlidis, T. van den Bergh, H.-J. Joosten, T. Tan, U.T. Bornscheuer (2015) Simultaneous use of *in silico* design and a correlated mutation network as a tool to efficiently guide enzyme engineering. *ChemBioChem*, **16**: 805-810.

A14 M.S. Weiß, I.V. Pavlidis, C. Vickers, M. Höhne, U.T. Bornscheuer (2014) A glycine oxidase based high-throughput solid-phase-assay for substrate profiling and directed evolution of (*R*)- and (*S*)-selective amine transaminases. *Analytical Chemistry* **86**(23): 11847–11853 // **ACS Editors' choice**.

A13 I.V. Pavlidis, M. Patila, U.T. Bornscheuer, D. Gournis, H. Stamatis. (2014) Graphene-based nanobiocatalytic systems: Recent advances and future prospects. *Trends in Biotechnology* **32**(6): 312-320.

A12 M. Gall, M. Thomsen, C. Peters, I.V. Pavlidis, P. Jonczyk, P.P. Grünert, S. Beutel, T. Scheper, E. Gross, M. Backes, J.P. Ley, J.M. Hilmer, G. Krammer, G.J. Palm, W. Hinrichs, U.T. Bornscheuer (2014) Enzymatic conversion of flavonoids using bacterial chalcone isomerase and enoate reductase. *Angewandte Chemie International Edition* **53**: 1429-1442.

A11 S. Hackenschmidt, E.J. Moldenhauer, G.A. Behrens, M. Gand, I.V. Pavlidis, U.T. Bornscheuer. (2014) Enhancement of promiscuous amidase activity of a *Bacillus subtilis* esterase by formation of a π-π network *ChemCatChem* **6**: 1015-1020. // **Special issue: Biocatalysis**.

A10 M.G. Gall, A. Nobili, I.V. Pavlidis, U.T. Bornscheuer (2014) Improved thermostability of a *Bacillus subtilis* esterase by domain exchange. *Applied Microbiology and Biotechnology* **98**: 1719-1726.

A9 M. Patila, I.V. Pavlidis, E. K. Diamanti, P. Katapodis, D. Gournis, H. Stamatis (2013) Enhancement of cytochrome c catalytic behaviour by affecting the heme environment using functionalized carbon-based nanomaterials. *Process Biochemistry* **48**(7): 1010-1017.

A8 A. Nobili, M.G. Gall, I.V. Pavlidis, M.L. Thompson, M. Schmidt, U.T. Bornscheuer (2013) Use of "small but smart" libraries to enhance the enantioselectivity of an esterase from *Bacillus stearothermophilus* towards tetrahydrofuran-3-yl acetate. *FEBS Journal* **280**: 3084-3093.

A7 I.V. Pavlidis, T. Vorhaben, D. Gournis, G.K. Papadopoulos, U.T. Bornscheuer, H. Stamatis (2012) Regulation of catalytic behavior of hydrolases through interactions with functionalized carbon-based nanomaterials *Journal of Nanoparticle Research* **14**(5): 1-10 // Article 842.

A6 I.V. Pavlidis, T. Vorhaben, T. Tsoufis, P. Rudolf, U.T. Bornscheuer, D. Gournis, H. Stamatis (2012) Development of effective nanobiocatalytic systems through the immobilization of hydrolases on functionalized carbon-based nanomaterials. *Bioresource Technology* **115**: 164-171.

A5 I.V. Pavlidis, K. Tzafestas, H. Stamatis (2010) Water-in-ionic liquid microemulsion-based organogels as novel matrices for enzyme immobilization. *Biotechnology Journal* **5**: 805-812.

A4 I.V. Pavlidis, T. Tsoufis, A. Enotiadis, D. Gournis, H. Stamatis (2010) Functionalized multi-wall carbon nanotubes for lipase immobilization. *Advanced Engineering Materials* **10**: B179-B183.

A3 A.A. Tzialla, I.V. Pavlidis, M. Felicissimo, P. Rudolf, D. Gournis, H. Stamatis. (2010) Lipase immobilization on smectite nanoclays: Characterization and application to the epoxidation of α-pinene *Bioresource Technology* **101**: 1587-1594.

A2 I.V. Pavlidis, D. Gournis, G.K. Papadopoulos, H. Stamatis (2009) Lipases in water-in-ionic liquid microemulsions. Structural and activity studies *Journal of Molecular Catalysis B: Enzymatic* **60**: 50-56.

A1 E. Serefoglou, K. Litina, D. Gournis, E. Kalogeris, A.A. Tzialla, I.V. Pavlidis, H. Stamatis, E. Maccallini, M. Lubomska, P. Rudolf (2008) Smectite clays as solid supports for immobilization of β-glucosidase: Synthesis, characterization and biochemical properties *Chemistry of Material* **20**: 4106-4115.

CHAPTERS IN INTERNATIONAL BOOKS

B8 I.V. Pavlidis, C. Peters. Principles of protein engineering. (expected in 2022) Wiley-VCH Verlag, ISBN 978-3-527-34807-7. *Under preparation*.

B7 I.V. Pavlidis. Chapter 47: Identification and evolution of biocatalysts of interest (2018) in *Advanced Nanotechnologies for Detection and Defense Against CBRN Agents* (Eds P. Petkov *et al.*), Springer, pp. 477-485, ISBN: 978-94-024-1298-7.

B6 I.V. Pavlidis, N.M. Hendrikse, P.O. Syrén. Chapter 5: Computational techniques for efficient biocatalysis (2018) in *Modern Biocatalysis: Advances Towards Synthetic Biological Systems* (Eds. G. Williams & M. Hall), RSC Catalysis Series, pp. 119-152, ISBN: 978-1-78262-726-5.

B5 M. Patila, G. Orfanakis, A. Polydera, I.V. Pavlidis, H. Stamatis. Chapter 6: Graphene-based nanobiocatalytic systems (2017) in *Biocatalysis & Nanotechnology* (Ed. P. Grunwald), Pan Stanford Series on Biocatalysis, pp. 243-277 ISBN: 978-9-814-61369-9.

B4 I.V. Pavlidis. Chapter 12: Catalysis (2016) in *Graphene oxide: Fundamentals and Applications* (Eds A. Dimiev and S. Eigler), Wiley-VCH Verlag, pp. 382-409 ISBN: 978-1-119-06940-9.

B3 I.V. Pavlidis, M. Gall, T. Geissler, E. Gross, U.T. Bornscheuer. Chapter 9: Flavonoid biotechnology – New ways to high added-value products (2016) in *Applied biocatalysis: from fundamental science to industrial application* (Eds. A. Liese *et al.*), Wiley-VCH Verlag pp. 179-198 ISBN: 978-3-527-33669-2.

B2 I.V. Pavlidis, M. Patila, A.C. Polydera, D. Gournis, H. Stamatis. Chapter 5: Immobilization of enzymes and other biomolecules on graphene (2014) in *Functionalisation of graphene* (V. Georgakilas ed.) Wiley-VCH Verlag, pp.139-172 ISBN: 978-3-527-33551-0.

B1 I.V. Pavlidis, A.A. Tzialla, A. Enotiadis, H. Stamatis, D. Gournis. Chapter 2: Enzyme immobilization on layered and nanostructured materials (2010) Biocatalysis in polymer chemistry (K. Loos ed.), Wiley-VCH Verlag, pp.35-64 ISBN: 978-3-527-32618-9.

PATENT APPLICATION

C1 U.T. Bornscheuer, I.V. Pavlidis, M.S. Weiß, H. Iding, B. Wirz, H.P. Steven, P. Spurr. (2016) Mutant transaminases as well as methods and uses relating thereto. PCT International application WO2016166120 A1; US application US2016304843 A1 (publication date: 20.10.2016).

ACTIVE PARTICIPATION IN CONFERENCES

Oral presentations are denoted with blue (14 given by IVP, 4 of them invited)

D69 I.V. Pavlidis*. Design of *O*-methyltransferases with altered substrate scope and regioselectivity. 3rd CCBIO Symposium on Industrial Biocatalysis, Zurich University of Applied Sciences, CH // 10.06.2021. (Invited oral presentation).

D68 Q. Tang, C. Badenhorst, U.T. Bornscheuer, I.V. Pavlidis*. Expanding the synthetic potential of *O*-methyltransferases via protein engineering. NextGenBiocat, Online // 11-12.02.2021. (Oral presentation).

D67 V. Tsopanakis, M.V. Oikonomou, P.N. Polymenakou, A. Magoulas, I.V. Pavlidis*. Identification of novel polysaccharide-degrading enzymes from metagenomic libraries of extreme environments. *NextGenBiocat*, Online // 11-12.02.2021.

D66 E. Konia, N. Kaloudis, P. Kelefiotis-Stratidakis, I.V. Pavlidis*. Amine transaminases for biopolymer synthesis. *Protein Engineering Congress EU*, Online // 24.11-01.12.2020.

D65 L.L. Kailing, Q. Tang, F.W. Herberg, U.T. Bornscheuer, I.V. Pavlidis*. Bringing methyltransferases to the forefront of organic synthesis. 70th National Conference of the Hellenic Society of Biochemistry and Molecular Biology, Athens, GR // 29.11-01.12.2019. (Oral presentation)

D64 J. Peterle, K. Bērziņš, A. Pentjušs, A. Karakaya, S. Takaç, E. Stalidzāns, F.W. Herberg, I.V. Pavlidis*. The metabolic and genomic basis of *Rhodotorula glutinis* olive mill wastewater valorization. *70th National Conference of the Hellenic Society of Biochemistry and Molecular Biology*, Athens, GR // 29.11-01.12.2019.

D63 P. Kelefiotis Stratidakis, D. Minopoulou, I.V. Pavlidis*. Enzymatic amination of furanoids for the production of biopolymers. 70th National Conference of the Hellenic Society of Biochemistry and Molecular Biology, Athens, GR // 29.11-01.12.2019 (Oral presentation by PKS).

D62 Q. Tang, U.T. Bornscheuer, I.V. Pavlidis*. Engineering of a plant O-methyltransferase for methylated flavonoid production. *Protein Engineering Congress EU*, Frankfurt, DE // 12-13.11.2019.

D61 K. Bērziņš, A. Pentjušs, J. Peterle, F.W. Herberg, I.V. Pavlidis, A. Karakaya, S. Takaç, E. Stalidzāns*. Model-based optimisation of phenol consumption by yeast *Rhodotorula glutinis*. *Metabolic Pathway Analysis 2019*, Riga, LV // 12-16.08.2019.

D60 J. Peterle, K. Bērziņš, A. Pentjušs, A. Karakaya, S. Takaç, E. Stalidzāns, F.W. Herberg, I.V. Pavlidis*. The metabolic and genomic basis of olive mill wastewater fermentation in *Rhodotorula glutinis*. *BioTrans2019,* Groningen, NL // 7-11.07.2019.

D59 L.L. Kailing, F.W. Herberg, I.V. Pavlidis*. What's the metal with you? *BioTrans2019,* Groningen, NL // 7-11.07.2019.

D58 Q. Tang, U.T. Bornscheuer, I.V. Pavlidis*. Molecular basis of substrate preference of an O-methyltransferase. *BioCat2018*, Hamburg, DE // 26-30.08.2018.

D57 A. Giannakopoulou, M. Patila, E. Gkantzou, A.V. Chatzikonstantinou, A. Polydera, I.V. Pavlidis, H. Stamatis*. Development of multienzyme nanobiocatalysts for cascade reactions. *BioCat2018*, Hamburg, DE // 26-30.08.2018.

D56 P. Kelefiotis-Stratidakis, A. Pentjuss, E. Stalidzans, F.W. Herberg, I.V. Pavlidis* Exploring the metabolic pathway of *Rhodotorula glutinis* for the valorization of olive mill wastewater. *BioCat2018*, Hamburg, DE // 26-30.08.2018.

D55 L.L. Kailing, D. Bertinetti, C.E. Paul, T. Manszewski, M. Jaskolski, F.W. Herberg, I.V. Pavlidis*. *S*-adenosyl-L-homocysteine hydrolase and synthetic nicotinamide cofactor biomimetics. *BioCat2018*, Hamburg, DE // 26-30.08.2018.

D54 Q. Tang, U.T. Bornscheuer, I.V. Pavlidis*. Study on substrate selectivity mechanism of an O-methyltransferase. *8th International CeBiTec Conference*, Bielefeld, DE // 09-11.04.2018.

D53 L.L. Kailing, D. Bertinetti, C.E. Paul, T. Manszewski, M. Jaskolski, F.W. Herberg, I.V. Pavlidis*. *S*-adenosyl-L-homocysteine hydrolase and synthetic nicotinamide cofactor biomimetics. *69. Mosbacher Kolloquium*, Mosbach, DE // 22-24.03.2018.

D52 I.V. Pavlidis*. Enzymes against biological & chemical weapons. NATO ASI "Advanced Technologies for Detection & Defense Against CBRN Agents", Sozopol, BG // 15.09.2017. (Invited oral presentation)

D51 L.L. Kailing, D. Bertinetti, F.W. Herberg, I.V. Pavlidis*. Characterization of S-adenosyl-L-homocysteine hydrolases in the physiological direction. *4th Summer School Biotransformations,* Hannover, DE // 16-19.07.2017.

D50 A.S. Aslan Üzel, C.P.S. Badenhorst, I.V. Pavlidis, D. Böttcher, M. Dörr, U.T. Bornscheuer*. Interconversion of epoxide hydrolase and haloalkane dehalogenase. *4th Summer School Biotransformations,* Hannover, DE // 16-19.07.2017.

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