

# Ioannis Pavlidis

## Assistant Professor of Biological Chemistry

### GENERAL INFORMATION

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Address Enzyme Technology Laboratory,  
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Date & Place of Birth 08 March 1983 - Thessaloniki, Greece

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### EDUCATION

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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

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2018-today Assistant Professor, Dept. of Chemistry, School of Sciences & Engineering.  
*University of Crete // Heraklion, GR*

2015-2018 Group leader, group of Biotechnology, Dept. of Biochemistry, FB 10: Mathematics & Natural Sciences.  
*University of Kassel // Kassel, DE*

2011-2015 Post-Doc, Dept. of Biotechnology & Enzyme Catalysis, Institute of Biochemistry.  
*University of Greifswald // Greifswald, DE*

2012 Two-month secondment in the frame of ITN Marie-Curie Fellowship.  
*BRAIN AG // Zwingenberg, DE*

2007-2011 PhD student, Biotechnology laboratory, Dept. of Biological Applications & Technologies  
*University of Ioannina // Ioannina, GR*

2003 One month as laboratory assistant, Plant Pathology laboratory, Dept. of Agriculture  
*Aristoteles University // Thessaloniki, GR*

2002 One month as research assistant  
*non-profit company "ARCTURUS" // Thessaloniki, GR and Nestorio, GR*

### FELLOWSHIPS AND AWARDS

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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.

## INFRASTRUCTURE

Enzyme Technology Laboratory is part of the Division of Biochemistry, Department of Chemistry. The Department of chemistry is well equipped for molecular biology experiments (thermocycler, DNA and SDS-PAGE electrophoresis chambers, UV table etc), expression of proteins (laminar flow bench, incubators, bioreactors, sonicator, lyophilizer, FPLC etc), analytics (HPLC, GC, UV-Vis spectrophotometer, fluorospectrometer etc). More than that, the group has access to NMR and MS facilities.

## PUBLICATIONS

My published scientific work consists of:

- 32** Publications in peer-review international journals
- 7** Chapters in international books, after peer-review
- 1** Patent application
- 56** Conference proceedings (**11** oral presentations)

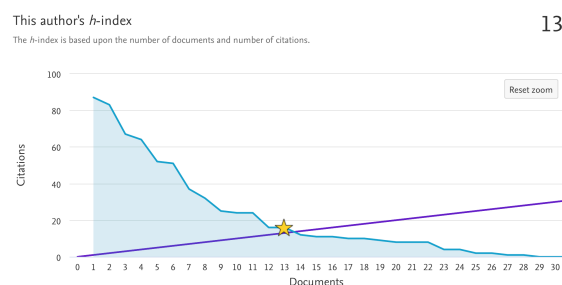
### Bibliometric Data †:

Citations	679
h-factor	13
Total I.F. (2017)	180

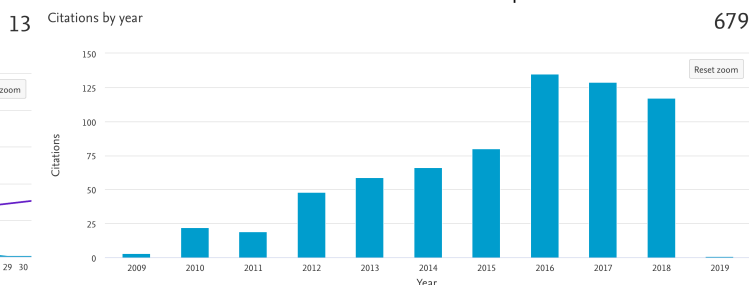
† Source: Scopus // 04.08.2018

This author's h-index

The h-index is based upon the number of documents and number of citations.



13 Citations by year



## RESEARCH PROJECTS

Participation in 10 national and international projects. Here the one participating as scientific responsible:

**2018-2021**

*Biovalorization of olive mill wastewater to microbial lipids and other products via *Rhodotorula glutinis* fermentation.*

University of Kassel (PI: F.W. Herberg; Scientific responsible: I.V. Pavlidis)

Funding: ERA-CoBioTech [ID:12]

- 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 - EAKE [ID:10123]
- 2016-2017** *Localized immobilization of enzymatic cascades onto ultrananocrystalline diamond films for innovative biocatalytic applications.*  
University of Kassel (Scientific coordinator: I.V. Pavlidis)  
Funding: University of Kassel - ZFF-PROJEKT (Application number: 1963)
- 2016-2018** *Application of methyltransferases for the production of high value-added products*  
University of Kassel (Scientific coordinator: I.V. Pavlidis)  
Funding: Fonds der Chemischen Industrie - Sachkostenzuschüsse

## INVITED LECTURES

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- ❖ **15 Sep 2017:** Advanced Technologies for Detection & Defense Against CBRN Agents, NATO ASI, Sozopol, BG after invitation of Prof. Plamen Petkov.  
*Title: Enzymes against biological and chemical weapons.*
- ❖ **12 Dec 2015:** University of Ioannina, GR after invitation of Prof. A. Tselepis, in the frame of the 1<sup>st</sup> International Seminar of the Interdepartmental postgraduate programme "Medical Chemistry".  
*Title: Bioactive compound production via biotechnological processes.*
- ❖ **05 May 2015:** Beijing University of Chemical Technology, Beijing, CN after invitation of Prof. T. Tao.  
*Title: Protein Engineering approaches for the development of tailor-made enzymes.*
- ❖ **29 Apr 2015:** South China University of technology Guangzhou, CN after invitation of Prof. Y. Wang.  
*Title: Protein Engineering approaches for the development of tailor-made enzymes.*
- ❖ **26 Feb 2014:** University of Ioannina, GR after invitation of Prof. H. Stamatidis.  
*Title: Protein Engineering approaches for the development of tailor-made enzymes.*

## TEACHING EXPERIENCE

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Involved in teaching since 2006 in all institutions I worked. Here the independent teaching experience.

- PhD students** Lyn Lisette Kailing, Department of Biochemistry, Institute of Biology, University of Kassel (Enrolled: Apr. 2016). Co-supervision with Prof. Dr. F.W. Herberg.
- Qingyun Tang, Department of Biotechnology and Enzyme Catalysis, Institute of Biochemistry, University of Greifswald (enrolled: Oct. 2016). Co-supervision with Prof. Dr. U.T. Bornscheuer.
- 2018-today** "Enzyme Technology", elective module, BSc Chemistry, University of Crete and "Protein Engineering", elective module, MSc Chemistry, University of Crete. Participation in the "Biocatalysis for organic synthesis" elective module, MSc Chemistry and to the practical courses "Biochemistry" and "Advanced Biochemistry". Member of the electoral board and lecturer of "Protein Biotechnology" MSc of the Department of Biology, University of Crete.
- 2015-2017** "Biotechnology" and "Biocatalysis" classes to the BSc and MSc Curriculum respectively of both Nanostructure Science and Biology, University of Kassel. Supervision of 15 BSc and MSc students during their internship in my laboratories and a BSc thesis.

## OTHER SCIENTIFIC ACTIVITIES

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### 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

Editorial

❖ Guest editor, Catalysts (MDPI), Special Issue "Biocatalysis for Industrial Applications"

Reviewer after invitation for

❖ Swiss National Science Academy (2013, 2016)

❖ Icelandic Research Fund (2016)

❖ 39 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 Communications, PNAS.*

## PUBLICATIONS IN INTERNATIONAL JOURNALS

- 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*, submitted (DIAMOND\_2018\_351).
- 1. 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.
- 2. 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*, DOI:10.1002/cctc.201800936 // **Hot Topic: Biocatalysis**.
- 3. 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*, DOI: 10.1016/j.ijbiomac.2018.07.169
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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**.

14. 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.
15. 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.
16. 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.**
17. 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.
18. 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.
19. 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.**
20. 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.
21. 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.
22. 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  $\pi$ - $\pi$  network *ChemCatChem* **6**: 1015-1020.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.

28. 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.
29. 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.
30. A.A. Tziaila, I.V. Pavlidis, M. Felicissimo, P. Rudolf, D. Gournis, H. Stamatis. (2010) Lipase immobilization on smectite nanoclays: Characterization and application to the epoxidation of  $\alpha$ -pinene *Bioresource Technology* **101**: 1587-1594.
31. 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.
32. E. Serefoglou, K. Litina, D. Gournis, E. Kalogeris, A.A. Tziaila, I.V. Pavlidis, H. Stamatis, E. Maccallini, M. Lubomska, P. Rudolf (2008) Smectite clays as solid supports for immobilization of  $\beta$ -glucosidase: Synthesis, characterization and biochemical properties *Chemistry of Material* **20**: 4106-4115.

## CHAPTERS IN INTERNATIONAL BOOKS

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1. I.V. Pavlidis\*. Chapter 47: Identification and evolution of biocatalysts of interest (2018) in *Advanced Nanotechnologies for Detection and Defence Against CBRN Agents* (Eds P. Petkov et al.), Springer, pp. 477-485, ISBN: 978-94-024-1298-7.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. I.V. Pavlidis, A.A. Tziaila, 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

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1. 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).

## CONFERENCE PROCEEDINGS

1. Q. Tang, U.T. Bornscheuer, I.V. Pavlidis\*. Molecular basis of substrate preference of an O-methyltransferase. *BioCat2018*, Hamburg, DE // 26-30.08.2018.
2. Giannakopoulou A., Patila M., Gkantzou E., Chatzikonstantinou A.V., Polydera A., Pavlidis I.V., Stamatis H. Development of multienzyme nanobiocatalysts for cascade reactions. *BioCat2018*, Hamburg, DE // 26-30.08.2018.
3. Kelefiotis-Stratidakis P., Pentjuss A., Stalidzans E., Herberg F.W., Pavlidis I.V.\* Exploring the metabolic pathway of *Rhodotorula glutinis* for the valorization of olive mill wastewater. *BioCat2018*, Hamburg, DE // 26-30.08.2018.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. L.L. Kailing, D. Bertinetti, F.W. Herberg, I.V. Pavlidis\*. Characterization of S-adenosyl-L-homocysteine hydrolases in the physiological direction. *Biotrans2017*, Budapest, HU // 9-13.07.2017.
10. Q. Tang, F.W. Herberg, U.T. Bornscheuer, I.V. Pavlidis\*. Understanding the regioselectivity mechanism of O-methyltransferases. *Biotrans2017*, Budapest, HU // 9-13.07.2017.
11. I. Cheriyska, L.L. Kailing, A. Voss, G. Ceccone, W. Kulisch, F.W. Herberg, J.P. Reithmaier, I.V. Pavlidis, C. Popov. Immobilization of enzymes on modified ultrananocrystalline diamond films. *SBDD XXII, 22nd Hasselt Diamond Workshop*, Hasselt, BE // 8-10.03.2017.
12. I.V. Pavlidis\*. Interdisciplinary approaches for the development of accurate representation of experimental data and development of critical thinking. *Hellenic conference on Innovative STEM Education*, Athens, GR // 16-18.12.2016 (**invited oral presentation**).
13. H. Iding, R. Reents, P. Spurr, S. Hanlon, B. Wirz, U.T. Bornscheuer, I.V. Pavlidis, M. Genz, M.S. Weiß. Development of ketoreductases and transaminases for drug synthesis, *ICC05-AEM2016*, Unazuki, Toyama, JP // 04-08.09.2016.
14. L. Kailing, A. Kuijpers, F.W. Herberg, C.E. Paul, I.V. Pavlidis\*. Investigation on the catalytic behaviour and mechanism of an S-adenosyl-L-homocysteine hydrolase and its affinity to synthetic nicotinamide cofactor analogues, *BioCat2016*, Hamburg, DE // 28.08.2016-01.09.2016.



15. I.V. Pavlidis, M.S. Weiß, M. Genz, P. Spurr, S.P. Hanlon, B. Wirz, H. Iding, U.T. Bornscheuer. Identification of (S)-selective transaminases for the asymmetric synthesis of bulky chiral amines, *Gordon Research Conference - Biocatalysis*, University of New England - Biddeford, ME, USA // 10-15.07.2016.
16. D.S. Da Silva Têlinhos, M. Reginka, I. Koch, D. Holzinger, O. Bertinetti, D. Bertinetti, A. Ehresmann, F.W. Herberg, I.V. Pavlidis\*. Novel click-chemistry immobilization approach enables direct in situ monitoring of immobilization quality and yield, 67. Mosbacher Kolloquium, Mosbach, DE // 31.03 - 02.04.2016.
17. I.V. Pavlidis\*. Oriented immobilization of enzymatic cascades in novel functionalized nanomaterials, *Sino-German Symposium on Biobased Chemicals and Biorefinery*, Frankfurt am Main, DE // 06-10.10.2015 (oral presentation).
18. A. Knight, A. Nobili, I.V. Pavlidis, M. Genz, M. Höhne, U.T. Bornscheuer. Investigation of PLP-dependent racemases with apparent activity in monomeric form, *BioTrans2015*, Vienna, AT // 26-30.07.2015.
19. A. Dawood, M. Genz, I.V. Pavlidis, M. Höhne, R.O.M.A. de Souza, U.T. Bornscheuer. Engineering and immobilization of transaminases for continuous-flow process applications. *TransAm 2.0*, Greifswald, DE // 04-06.03.2015.
20. M.S. Weiß, I.V. Pavlidis, M. Höhne, U.T. Bornscheuer. High-throughput screening of epPCR-based transaminase libraries by application of a glycine oxidase solid-phase assay, *TransAm 2.0*, Greifswald, DE // 04-06.03.2015.
21. A. Knight, A. Nobili, I.V. Pavlidis, M. Genz, M. Höhne, U.T. Bornscheuer. Altering the reaction specificity of PLP-dependent racemases, *TransAm 2.0*, Greifswald, DE, 04-06.03.2015 - p.p. POST-034.
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