

ΕΥΣΤΡΑΤΙΟΣ ΝΙΚΟΛΑΪΒΙΤΣ

Εργαστηριακό Διδακτικό Προσωπικό (Ε.ΔΙ.Π), Εθνικό Μετσόβιο Πολυτεχνείο

Τηλ: +2107723156 |email: snikolai@chemeng.ntua.gr

ΕΚΠΑΙΔΕΥΣΗ

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Σχολή Χημικών Μηχανικών-Εργαστήριο Βιοτεχνολογίας

Διδακτορικό στη Βιομηχανική Βιοτεχνολογία

06/2015-12/2019

Τίτλος: “Ανακάλυψη καινοτόμων μυκητιακών βιοκαταλυτών και εφαρμογή στη βιοεξυγίανση χλωριωμένων αρωματικών ρύπων”

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Δίπλωμα Χημικής Μηχανικής

10/2007-03/2014

Εξειδίκευση στη Βιοτεχνολογία και Τεχνολογία Τροφίμων

Βαθμός 7,24/10

Διπλωματική Εργασία: “Μηχανική της ετερολογής έκφρασης και χαρακτηρισμός μιας κουτινάσης του μύκητα *Fusarium oxysporum*”

ΓΛΩΣΣΕΣ

Αγγλικά-Επίπεδο C2

Γερμανικά-Επίπεδο B1

ΒΡΑΒΕΙΑ/ΔΙΑΚΡΙΣΕΙΣ/ΠΡΟΣΩΠΙΚΗ ΧΡΗΜΑΤΟΔΟΤΗΣΗ

Αρχηγός της νικήτριας ομάδας «Biorise» στο διεθνές [Hackathon PLASTIC FANTASTIC](#)

2024

Συμμετοχή στο Global Young Scientists Summit ([GYSS](#)), Σιγκαπούρη

2023

Χρηματοδότηση από το Adlerbertska Forskningsstiftelsen ύψους 82.000SEK για “Omic analyses of novel acidophilic fungi for the valorization of agro-industrial residues”

2022

Βραβείο καλύτερου Πόστερ (2^η Θέση) στο 8th International Conference on Sustainable Solid Waste Management

2021

Βραβείο Καλύτερης Δημοσίευσης στο

1st International Electronic Conference on Catalysis Sciences

2020

Βραβείο Ιδρύματος Dimitris N. Chorafas

Για την καλύτερη Διδακτορική Διατριβή ΕΜΠ 2019 (1^η Θέση)

2020

Βραβείο “Ιάκωβος Γκιουρουνλιάν” από Κοινωφελές Ίδρυμα Μιχαήλ Ν. Στασινόπουλος-BIOΧΑΛΚΟ για την καλύτερη Διδακτορική Διατριβή των Χημικών Μηχανικών με αντικείμενο βιομηχανικού ενδιαφέροντος για το 2019 (2^η Θέση)

2020

“Θωμάϊδειο Βραβείο” για δημοσίευση από φοιτητές του ΕΜΠ

2017-2019

Υποτροφία για Εκπόνηση Διδακτορικής Διατριβής από το Ίδρυμα Κρατικών Υποτροφιών (ΙΚΥ)

2016-2019

Υποτροφία από το COST Action CM1303 (*Systems Biocatalysis*) για εκπόνηση ερευνητικής αποστολής μικρής διάρκειας

2017

ΔΙΔΑΚΤΙΚΗ ΕΜΠΕΙΡΙΑ ΚΑΙ ΕΠΙΒΛΕΨΗ ΦΟΙΤΗΤΩΝ

Πανεπιστήμιο της Βερόνα

Τμήμα Βιοτεχνολογίας

Επισκέπτης Καθηγητής**05/2023**Μάθημα “New Frontiers in Biocatalysis” του Μεταπτυχιακού Προγράμματος
“Biotechnology for Bioresources and Sustainable Development”

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Σχολή Χημικών Μηχανικών

Τομέας Σύνθεσης και Ανάπτυξης Βιομηχανικών Διεργασιών

Εργαστηριακό Διδακτικό Προσωπικό**12/2022-**Εργαστηριακά Μαθήματα: Βιομηχανική Βιοτεχνολογία, Περιβαλλοντική

Βιοτεχνολογία, Εμβιομηχανική, Χημεία/Μικροβιολογία/Συντήρηση

Τροφίμων

Φροντιστηριακά Μαθήματα: Βιοχημική Μηχανική

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Σχολή Χημικών Μηχανικών-Εργαστήριο Βιοτεχνολογίας

Επίβλεψη Εργασιών**06/2015-**Προπτυχιακοί/Μεταπτυχιακοί: N. Mendoza-Vallejo (2023), I.

Σοφριανόπουλος (2023), K. Μακρυγιάννης (2021-Βραβείο), Φ.

Δημοπούλου (2020), E. Πρινέα (2020), P. Σιαπέρας (2019), M.

Παναγιωτοπούλου (2018), A. Αγραφιώτης (2017), A. Χαλιμά (2016-

Βραβείο), I. Καραγιαννάκη (2016), Γ. Μακρής (2015), Γ.Φ. Νόρρα (2015)

Διδακτορικοί: Γ. Ταξείδης (2020-), K. Μακρυγιάννης (2021-), M. Παπή (2024-)ΕΡΕΥΝΗΤΙΚΗ ΕΜΠΕΙΡΙΑ

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Συνεργαζόμενος Ερευνητής**09/2024-12/2024**[TwInn4MicroUp](#) “Twinning Innovation Hub For Microbial Platforms In
Plastic Upcycling”

Horizon Europe

ΕΛΙΔΕΚ Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Συνεργαζόμενος Ερευνητής**02/2024-12/2024**[EnZyReMix](#) “Chemoenzymatic recycling of mixed plastic waste”

ΕΛΙΔΕΚ

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Συνεργαζόμενος Ερευνητής**01/2023-12/2024**[PlastOmics](#) “Discovery of novel enzymes for the bioconversion of plastics
using multi-omics”

ΕΛΙΔΕΚ

Chalmers University of Technology

Μεταδιδακτορικός Ερευνητής**09/2021-12/2022**[“Exploring fungal extremophiles in South East Asia biodiversity”](#)

Swedish Research Council

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Μεταδιδακτορικός Ερευνητής**01/2020-09/2021**[BioICEP](#) “Bio Innovation of a Circular Economy for Plastics”,

Horizon 2020

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Ερευνητής**11/2015-09/2019**

[TASCMAR](#) "Tools And Strategies to access original bioactive compounds by Cultivating MARine invertebrates and associated symbionts", Horizon 2020

TECHNION-Israel Institute of Technology

Ερευνητής**02/2017-03/2017**

"Bioconversion of cinnamic acid derivatives towards the production of caffeic acid using engineered monooxygenase and PPO", EU COST Action CM1303 *Systems Biocatalysis*

Εθνικό Μετσόβιο Πολυτεχνείο (ΕΜΠ)

Ερευνητής**10/2014-09/2015**

"The Sustainable Integrated Method for the Production of Lignocellulosic Ethanol-SIMPLE", SYNERGASIA 2011-ΕΣΠΑ

Εθνικό Ίδρυμα Ερευνών (ΕΙΕ)

Τμήμα Βιολογικών Ερευνών και Βιοτεχνολογίας

Πρακτική**09/2011-12/2011**

Development of bacterial strains for screening of rescuers for neurodegenerative diseases

ΚΡΙΤΗΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ

Υπηρετώ ως κριτής σε πάνω από 20 επιστημονικά περιοδικά, έχοντας ολοκληρώσει >70 κριτικές. Επιλεγμένα περιοδικά φαίνονται παρακάτω:

Archives of Microbiology – Springer (IF 2.8)

Synthetic Biology – Oxford Academic (IF 3.2)

Environmental Pollutants and Bioavailability – Taylor & Francis (IF 3.3)

Royal Society Open Science – Royal Society Publishing (IF 3.7)

World Journal of Microbiology and Biotechnology – Springer (IF 4.3)

Toxics – MDPI Publishing (IF 4.5)

Catalysts (Reviewer Board Member) – MDPI Publishing (IF 4.5)

Int. Journal of Environmental Research and Public Health – MDPI Publishing (IF 4.6)

Process Biochemistry – Elsevier (IF 4.9)

Microorganisms – MDPI Publishing (IF 4.9)

Molecules – MDPI Publishing (IF 4.9)

Applied and Environmental Microbiology – ASM Journals (IF 5.0)

Molecular Catalysis – Elsevier (IF 5.1)

Food and Bioproducts Processing – Elsevier (IF 5.1)

Antibiotics (Reviewer Board Member) – MDPI Publishing (IF 5.2)

Frontiers in Chemistry – Frontiers (IF 5.6)

Journal of Fungi – MDPI Publishing (IF 5.7)

Biomolecules – MDPI Publishing (IF 6.1)
Frontiers in Bioengineering and Biotechnology – Frontiers (6.1)
Computational and Structural Biotechnology Journal – Elsevier (IF 6.2)
International Journal of Molecular Sciences – MDPI Publishing (IF 6.2)
Food & Function – Royal Society of Chemistry (IF 6.3)
Journal of Hazardous Materials – Elsevier (IF 13.6)
Chemical Engineering Journal – Elsevier (IF 15.1)
Biotechnology Advances – Elsevier (IF 16)

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΠΕΡΙΟΔΙΚΑ ΜΕ ΚΡΙΤΕΣ

31. Caputo, F.; Siaperas, R.; Dias, C.; **Nikolaivits, E.** & Olsson, L. Elucidating *Thermothielavioides terrestris* secretome changes for improved saccharification of mild steam-pretreated spruce. *Biotechnol. Biofuels.* **2024**, 17, 127.
30. Taxeidis, G.; **Nikolaivits, E.**; Nikodinovic-Runic, J.; Topakas, E. Mimicking the enzymatic plant cell wall hydrolysis mechanism for the degradation of polyethylene terephthalate. *Environ. Pollut.* **2024**, 356, 124347.
29. Pentari, C.; Kosinas, C.; **Nikolaivits, E.**; Dimarogona, M.; Topakas, E. Structural and molecular insights into a bifunctional glycoside hydrolase 30 xylanase specific to glucuronoxylan. *Biotechnol & Bioeng.* **2024**, 1-12.
28. Makryniotis, K.;[#] **Nikolaivits, E.**;[#] Nikodinovic-Runic, J.; Topakas, E. Exploring the substrate spectrum of phylogenetically distinct bacterial polyesterases. *Biotechnol. J.* **2024**, 19, 2400053.
27. Taxeidis, G.; Djapovic, M.; **Nikolaivits, E.**; Maslak, V.; Nikodinovic-Runic, J.; Topakas, E. New Labeled PET Analogues Enable the Functional Screening and Characterization of PET-Degrading Enzymes. *ACS Sustain. Chem. Eng.* **2024**, 12, 15, 5943–5952.
26. Makryniotis, K.; **Nikolaivits, E.***; Gkountela, C.; Vouyiouka, S.; Topakas, E. Discovery of a polyesterase from *Deinococcus maricopensis* and comparison to the benchmark LCC^{ICCG} suggests high potential for semi-crystalline post-consumer PET degradation. *J. Hazard. Mater.* **2023**, 455, 131574.
25. Taxeidis, G.; **Nikolaivits, E.**; Siaperas, R.; Gkountela, C.; Vouyiouka, S.; Pantelic, B.; Nikodinovic-Runic, J.; Topakas, E. Triggering and identifying the polyurethane and polyethylene-degrading machinery of filamentous fungi secretomes. *Environ. Pollut.* **2023**, 325, 121460.
24. Ferousi, C.; Kosinas, C.; **Nikolaivits, E.**; Topakas, E.; Dimarogona, M. Crystal structure of the *Fusarium oxysporum* tannase-like feruloyl esterase FaeC in complex with *p*-coumaric acid provides insight into ligand binding. *FEBS Lett.* **2023**, 597: 1415-1427.
23. **Nikolaivits, E.**; Taxeidis, G.; Gkountela, C.; Vouyiouka, S.; Maslak, V.; Nikodinovic-Runic, J.; Topakas, E. A polyesterase from the Antarctic bacterium *Moraxella* sp. degrades highly crystalline synthetic polymers, *J. Hazard. Mater.* **2022**, 434, 128900.
22. Attallah, O.A.; Azeem, M.; **Nikolaivits, E.**; Topakas, E.; Fournet, M.B. Progressing ultragreen, energy-efficient biobased depolymerization of poly(ethylene terephthalate) via microwave-assisted green deep eutectic solvent and enzymatic treatment, *Polym.* **2022**, 14.

21. Zerva, A.; Pentari, C.; Ferousi C.; **Nikolaivits E.**; Karnaouri, A.; Topakas E. Recent advances on key enzymatic activities for the utilisation of lignocellulosic biomass, *Bioresour. Technol.* **2021**, 342, 126058.
20. **Nikolaivits, E.**; Pentari, C.; Kosinas, C.; Feiler, C.; Spiliopoulou, G.; Weiss, M.S.; Dimarogona, M.; Topakas, E. Unique features of the bifunctional GH30 from *Thermothelomyces thermophila* revealed by structural and mutational studies. *Carbohydr. Polym.* **2021**, 273, 118553.
19. **Nikolaivits, E.**; Pantelic, B.; Azeem, M.; Taxeidis, G.; Babu, R.; Topakas, E.; Brennan Fournet, M.; Nikodinovic-Runic, J. Progressing plastics circularity: A review of mechano-biocatalytic approaches for waste plastic (re)valorization. *Front. Bioeng. Biotech.* **2021**, 9, 535.
18. **Nikolaivits, E.**; Valmas, A.; Dedes, G.; Topakas, E.; Dimarogona, M. Considerations on activity determinants of fungal polyphenol oxidases based on mutational and structural studies. *Appl. Environ. Microbiol.* **2021**, AEM.00396-21.
17. Djapovic, M.; Milivojevic, D.; Ilic-Tomic, T.; Lješević, M.; **Nikolaivits, E.**; Topakas, E.; Maslak, V.; Nikodinovic-Runic, J. Synthesis and characterization of polyethylene terephthalate (PET) precursors and potential degradation products: Toxicity study and application in discovery of novel PETases. *Chemosphere.* **2021**, 275, 130005.
16. **Nikolaivits, E.**; Siaperas, R.; Agrafiotis, A.; Ouazzani, J.; Gioti, A.; Topakas, E. Functional and transcriptomic investigation of laccase activity in the presence of PCB29 identifies two novel enzymes and the multicopper oxidase repertoire of a marine-derived fungus. *Sci. Total Environ.* **2021**, 775, 145818.
15. **Nikolaivits, E.**; Agrafiotis, A.; Baira, E.; Le Goff, G.; Tsafantakis, N.; Chavanich, S.; Benayahu, Y.; Ouazzani, J.; Fokialakis, N.; Topakas, E. Degradation mechanism of 2,4-dichlorophenol by fungi isolated from marine invertebrates. *Int. J. Mol. Sci.* **2020**, 21(9), 3317.
14. Gioti, A.; Siaperas, R.; **Nikolaivits, E.**; Le Goff, G.; Ouazzani, J.; Kotoulas, G.; Topakas, E. Draft genome sequence of a *Cladosporium* species isolated from the mesophotic ascidian *Didemnum maculosum*. *Microbiol. Resour. Announc.*, **2020**, 9, e00311-20.
13. Paz, A.; **Nikolaivits, E.**; Topakas, E. Valorization of olive mill wastewater towards the production of L-asparaginases. *Biomass Convers. Biorefin.* **2020**, 1-8.
12. **Nikolaivits, E.**; Agrafiotis, A.; Termentzi, A.; Machera, K.; Le Goff, G.; Álvarez, P.; Chavanich, S.; Benayahu, Y.; Ouazzani, J.; Fokialakis, N.; Topakas, E. Unraveling the detoxification mechanism of 2,4-dichlorophenol by marine-derived mesophotic symbiotic fungi isolated from marine invertebrates. *Mar. Drugs.* **2019**, 17, 564.
11. Mandic, M.; Djokic, L.; **Nikolaivits, E.**; Prodanovic, R.; O'Connor, K.; Jeremic, S.; Topakas, E.; Nikodinovic-Runic, J. Identification and characterization of new laccase biocatalysts from *Pseudomonas* species suitable for degradation of synthetic textile dyes. *Catalysts.* **2019**, 9, 629.
10. **Nikolaivits, E.**; Kanelli, M.; Dimarogona, M.; Topakas E. A middle-aged enzyme still in its prime: Recent advances in the field of cutinases. *Catalysts.* **2018**, 8(12), 612.
9. **Nikolaivits, E.**; Dimarogona, M.; Karagiannaki I.; Chalima A.; Fishman A.; Topakas E. Characterization and protein engineering of a novel versatile fungal polyphenol oxidase with chlorophenol bioremediation potential. *Appl. Environ. Microbiol.* **2018**, 84, e01628-18.
8. **Nikolaivits, E.**; Termentzi, A.; Skaltsounis, A.-L.; Fokialakis, N.; Topakas, E. Enzymatic tailoring of oleuropein from *Olea europaea* leaves and product identification by HRMS/MS spectrometry. *J. Biotechnol.* **2017**, 253, 48–54.
7. **Nikolaivits, E.**; Makris, G.; Topakas, E. Immobilization of a cutinase from *Fusarium oxysporum* and application in pineapple flavor synthesis. *J. Agric. Food Chem.* **2017**, 65 (17), 3505–3511.

6. **Nikolaivits, E.**; Dimarogona, M.; Fokialakis, N.; Topakas, E. Marine-derived biocatalysts: Importance, accessing, and application in aromatic pollutant bioremediation. *Front. Microbiol.* **2017**, 8, 265.
5. El-Gamal, R.; **Nikolaivits, E.**; Zervakis, G. I.; Abdel-Maksoud, G.; Topakas, E.; Christakopoulos, P. The use of chitosan in protecting wooden artifacts from damage by mold fungi. *Electron. J. Biotechnol.* **2016**, 24, 70–78.
4. **Nikolaivits, E.**; Kokkinou, A.; Karpusas, M.; Topakas, E. Microbial host selection and periplasmic folding in *Escherichia coli* affect the biochemical characteristics of a cutinase from *Fusarium oxysporum*. *Protein Expr. Purif.* **2016**, 127, 1–7.
3. **Nikolaivits, E.**; Norra, G.-F.; Voutsas, E.; Topakas, E. Cutinase from *Fusarium oxysporum* catalyzes the acylation of tyrosol in an aqueous medium: optimization and thermodynamic study of the reaction. *J. Mol. Catal. B Enzym.* **2016**, 129, 29–36.
2. Kanelli, M.; Vasilakos, S.; **Nikolaivits, E.**; Ladas, S.; Christakopoulos, P.; Topakas, E. Surface modification of poly(ethylene terephthalate) (PET) fibers by a cutinase from *Fusarium oxysporum*. *Process Biochem.* **2015**, 50 (11), 1885–1892.
1. Dimarogona, M.; **Nikolaivits, E.**; Kanelli, M.; Christakopoulos, P.; Sandgren, M.; Topakas, E. Structural and functional studies of a *Fusarium oxysporum* cutinase with polyethylene terephthalate modification potential. *Biochim. Biophys. Acta - Gen. Subj.* **2015**, 1850 (11), 2308–2317.

ΔΗΜΟΣΙΕΥΣΕΙΣ ΑΠΟ ΣΥΝΕΔΡΙΑ ΚΑΙ ΣΕ ΠΕΡΙΟΔΙΚΑ ΧΩΡΙΣ ΚΡΙΤΕΣ

6. **Nikolaivits, E.**, Dimopoulou, P., Maslak, V., Nikodinovic-Runic, J., Topakas, E. Discovery and biochemical characterization of a novel polyesterase for the degradation of synthetic plastics. *Chem. Proc.* **2020**, 2, 33.
5. **Nikolaivits, E.**; Dimarogona M.; Karagiannaki I.; Chalima A.; Fishman A.; Topakas, E. Discovery and mutation of a novel enzyme for the removal of environmental pollutants. *Atlas of Science* **2020**, May 20
4. **Nikolaivits, E.**; Agrafiotis, A.; Fokialakis, N.; Topakas, E. Biodegradation of 2, 4, 5-trichlorobiphenyl (PCB29) by marine-derived mesophilic fungi. *N. Biotechnol.* **2018**, 44, S136–S137.
3. **Nikolaivits, E.**; Topakas, E. Improved characteristics of an industrial biocatalyst expressed in engineered *E. coli*. *Atlas of Science* **2017**, February 8
2. **Nikolaivits, E.**; Termentzi, A.; Skaltsounis, A.; Fokialakis, N.; Topakas, E. Enzymatic tailoring of oleuropein isolated from *Olea europaea* leaves. *Planta Med.* **2016**, 81 (S 01), S1–S381.
1. Topakas, E.; **Nikolaivits, E.**; Kanelli, M.; Christakopoulos, P. A cutinase from *Fusarium oxysporum* with potential for PET surface modification. *N. Biotechnol.* **2014**, 31, Supple (0), S90.

ΠΑΡΑΚΟΛΟΥΘΗΣΗ ΜΑΘΗΜΑΤΩΝ/ΣΕΜΙΝΑΡΙΩΝ ΕΞΕΙΔΙΚΕΥΣΗΣ

5. “Creating and managing effective teams” – Μάθημα γενικών και μεταβιβάσιμων δεξιοτήτων που παρέχεται από το Chalmers University of Technology (2023)

4. **[“Webinars on Fridays 2021”](#)** από Ελληνική Επιστημονική Εταιρία “MikroBioKosmos”
– Προφορική παρουσίαση
“Plastic Biodegradation: Can the existing microbial enzymatic system be a sustainable solution?”
3. **3rd International Meeting of the Hellenic Crystallographic Association’s Young Researchers (Patras, Greece 2019)** - Προφορική παρουσίαση
“Structural and functional characterization of a novel fungal polyphenol oxidase and its variants”
2. **Diffraction Data Collection Using Synchrotron Radiation Workshop by the German Crystallographic Society – DGK-AK1 (Berlin, Germany 2019)** - Προφορική παρουσίαση
“Structural studies of a novel GH30 xylanase with unique catalytic properties”
1. **COST Action “Systems Biocatalysis” Training School (Siena, Italy 2016)** - Προφορική παρουσίαση
“Heterologous expression, crystal structure, evolution and immobilization of a cutinase with a variety of applications”

ΠΑΡΟΥΣΙΑΣΕΙΣ ΣΕ ΔΙΕΘΝΗ ΣΥΝΕΔΡΙΑ

22. **7th LignoBiotech Symposium (Toulouse, France 2024)**
“Mimicking the enzymatic plant cell wall hydrolysis machinery for the degradation of polyethylene terephthalate”,
“Harnessing the catalytic potential of a ferulic acid esterase for MHET hydrolysis” και
“Exploration and expansion of the diversity and characteristics of acidophilic filamentous fungi through environmental sampling and whole-genome sequencing” - Βραβείο
21. **10th MIKROBIOKOSMOS Conference (Larissa, Greece 2023)**
“A novel PET hydrolase with high potential for degradation of crystalline plastics”
20. **16th BIOTRANS (La Rochelle, France 2023)**
“The first crystal structure of a tannase-like feruloyl esterase in complex with a hydroxycinnamic acid” και
“Novel fluorescent compounds for screening and characterizing PET-degrading enzymes”
“Side to side comparison of a novel wild-type polyesterase from *Deinococcus maricopenis* with LCC^{ICCG} indicates promising degradation of semi-crystalline post-consumer PET”
19. **Carbohydrate Bioengineering Meeting (CBM14) (Oslo, Norway 2022)**
“Investigation of CAZymes induced by *Thielavia terrestris*’ growth on mildly steam treated spruce”
18. **FEMS Conference in Microbiology (Belgrade, Serbia 2022)**
“Lignocellulose-degrading potential of novel acidophilic fungi”
17. **21st European Meeting on Environmental Chemistry (Novi Sad, Serbia 2021)**
“Discovery of novel polyesterases capable of degrading a variety of synthetic polyesters”
16. **8th International Conference on Sustainable Solid Waste Management (Virtual, 2021)**
“Discovery of a novel PETase-like enzyme for the degradation of plastic waste” - Βραβείο Καλύτερου Πόστερ
15. **European Federation of Biotechnology Conference (Virtual, 2021)**
“The ability of a known plant-biomass degrading fungus to break down polyurethane” και
“Selective degradation of polyethylene terephthalate (PET)-related substrates by *Penicillium* sp. MM41”
14. **15th BIOTRANS (Virtual, 2021)**
“Repurposing of plant-biomass hydrolyzing enzymes for the degradation of polyethylene terephthalate (PET)”,
“Investigation of the dual function of a GH30_7 xylanase through structural studies” και
“Towards novel polyethylene terephthalate (PET)-ases: Whole-cell biotransformation of PET-related substrates”

13. **Protein Data Bank Symposium-PDB50 (Virtual, 2021)**
"Structural and functional characterization of a novel fungal GH30_7 xylanase with xylobiohydrolase auxiliary activity"
12. **1st International Electronic Conference on Catalysis Sciences (Virtual, 2020)**
"Discovery and biochemical characterization of a novel polyesterase for the degradation of synthetic plastics" – *Βραβείο Καλύτερης Δημοσίευσης*
11. **14th BIOTRANS (Groningen, the Netherlands 2019)**
"Structural and functional characterization of a novel fungal GH30_7 xylanase with xylobiohydrolase auxiliary activity"
10. **6th International Conference on Novel Enzymes (Darmstadt, Germany 2018)**
"Discovery of a novel enzymatic activity from a marine-derived fungus: Catalase with catechol dioxygenase activity" και
"Expression and purification of a novel laccase from a marine-derived mesophotic PCB-degrading fungus"
9. **18th European Congress On Biotechnology (Geneva, Switzerland 2018)**
"Biodegradation of 2,4,5-trichlorobiphenyl (PCB29) by marine-derived mesophotic fungi"
8. **6th International Conference on Sustainable Solid Waste Management (Naxos, Greece 2018) -Oral presentation**
"Potential of marine-derived mesophotic fungi for the bioremediation of 2,4-dichlorophenol-contaminated wastewaters"
8. **13th BIOTRANS (Budapest, Hungary 2017)**
"Discovery of marine-derived mesophotic biocatalysts for the degradation of persistent organic pollutants" και
"Protein engineering of a fungal Polyphenol oxidase and its potential application in bioconversion of POPs"
6. **8th European Meeting on OxiZymes (Wageningen, the Netherlands 2016)**
"Protein engineering of a catechol oxidase and its potential application in bioconversion of POPs"
5. **5th International Conference on Novel Enzymes (Groningen, the Netherlands 2016)**
"Protein engineering of a polyphenol oxidase towards enhancement of its monophenolase activity"
4. **12th BIOTRANS (Vienna, Austria 2015)**
"Study of the synthetic potential of a *Fusarium oxysporum* cutinase in water-oil biphasic reaction system"
3. **9th Joint Meeting in Medicinal Chemistry (Athens, Greece 2015)**
"Enzymatic tailoring of oleuropein isolated from *Olea europaea* leaves"
2. **11th Carbohydrate Bioengineering Meeting (Espoo, Finland 2015)**
"Structural and functional studies of a *Fusarium oxysporum* cutinase with poly(ethylene terephthalate) modification potential"
1. **16th European Congress on Biotechnology (Edinburgh, Scotland 2014)**
"A cutinase from *Fusarium oxysporum* with potential for PET surface modification"

ΠΑΡΟΥΣΙΑΣΕΙΣ ΣΕ ΕΘΝΙΚΑ ΣΥΝΕΔΡΙΑ

9. **14^ο Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής (Θεσσαλονίκη 2024)**
"Repurposing fungal plant biomass-hydrolyzing enzymes for the degradation of polyethylene terephthalate" – *Βραβείο*
"Discovery of a thermotolerant MHET hydrolase scaffold using bioinformatics and machine learning" και
"Investigation of structural determinants of plastic degrading enzymes via X-ray crystallography and molecular docking"

8. **13^ο Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής (Πάτρα 2022)**
“High throughput screening assay for the discovery of novel PETase enzymes” και
“Discovery of novel polyesterases capable to degrade plastic waste”
7. **9^ο Συνέδριο Μικροβιόκοσμος (Αθήνα 2021)**
“The potential of novel fungal isolates for the degradation of non-biodegradable synthetic polymers”
6. **8^ο Συνέδριο Μικροβιόκοσμος (Πάτρα 2019)**
“Exploiting marine fungal biodiversity of the mesophotic zone for biodegradation of organic pollutants”
5. **11^ο Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής (Θεσσαλονίκη 2017)**
“Study of the enzymatic polymerization and mass postpolymerization towards poly(cuccinic butyl ester)”
4. **7^ο Συνέδριο Μικροβιόκοσμος (Αθήνα 2017)**
“Protein engineering of a polyphenoloxidase from fungus *Myceliophthora thermophila* aiming to the increase its monophenolase activity” και
3. **10^ο Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής (Πάτρα 2015)**
“Acylation of tyrosol in biphasic systems using a cutinase from the fungus *Fusarium oxysporum*”
2. **6^ο Συνέδριο Μικροβιόκοσμος (Αθήνα 2015) - Προφορική παρουσίαση**
“Structural and functional studies of a cutinase from *Fusarium oxysporum* with synthetic activity in water-oil biphasic systems and thermodynamic study of the reaction system”
1. **9^ο Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής (Αθήνα 2013)**
“Surface modification of synthetic textile products using a cutinase from the fungus *Fusarium oxysporum*”