

CURRICULUM VITAE

1. Name - Last name : Tunç ÇATAL

2. Date of Birth : 1980

3. Title : Prof. Dr.

4. Education:

Degree	Field	University	Year
BSc	Biology	Istanbul University	2001
MSc	Biology	Istanbul University	2004
PhD	Molecular Biology-Genetics and Biotechnology	Istanbul Technical University	2008

5. Academic Titles:

Degree	Field	University	Year
Visiting Researcher	Department of Biological and Ecological Engineering	Oregon State University, USA	2006-2008
Postdoctoral Researcher (Marie Curie Fellow)	School of Chemistry-Microbiology	National University of Ireland, Galway	2008-2010
Assistant Professor	Molecular Biology and Genetics	Uskudar University	2012-2013
Associate Professor	Molecular Biology and Genetics	Uskudar University	2013-2018
Associate Professor	Bioengineering	Turkish Council of Higher Education (ÜAK)	2018
Professor	Molecular Biology and Genetics	Uskudar University	2018-present

6. Management and supported thesis of MS and PhD

6.1. PhD Thesis

Zhmurov, Ç.S., Istanbul Technical Uskudar, Graduate School of Science, Engineering and Technology, Advanced Technologies (Co-advisor, 2012-2016)

6.2. MSc Thesis

Ozakman, G., Uskudar University, Graduate School of Science (advisor, 2015-2018)

Akagunduz, D., Uskudar University, Graduate School of Science (2018-2020)

Cebecioglu, R., Uskudar University, Graduate School of Science (2018-2020)

*24 BSc Graduation Theses (22 of them, Experimental) (advisor)

7. Publications

Patents

1. F. Ozkok, Y.M. Sahin, V. Enisoglu-Atalay, K. Asgarova, N. Onul, T. Catal, A NOVEL REAGENT, CATAL'S REAGENT, AND KIT FOR USING IRON SULPHATE DETERMINATION BY COLORIMETRIC METHOD, Patent **application** (Turkish Patent and Trademark Office, PY2019-00552; PCT International Application, No: PCT/TR2020/050061– submitted).
2. **Catal, T.**, Enisoglu-Atalay, V., Atasever-Arslan, B., Cebecioglu, R., Yaman, Y., Kul, A., Ozilhan, S., Biological Quercetin Production. Turkish Patent and Trademark Office, 2018/00883.
3. Atasever-Arslan, B., Akdogan, E., Cakmak Cebeci, F., **Catal, T.** Electricity Generation Using Human Neuronal-like Cells in Fuel Cells to Power Light Emitting Diodes, European Patent Office, 2018 (PCT/TR20181050767).
4. Karakus, B.Z., Korkmaz, I., Demirci, K., Arslan, K.S., Unlu, O., **Catal, T.**, Bioinsecticide Compositions. Turkish Patent and Trademark Office, 2018/09310.

7.1. Published Articles in International Journals (SCI & SSCI & Arts and Humanities)

1. Atasever-Arslan, B., Akdogan, E., Cakmak Cebeci, F., **Catal, T.** Bioelectricity generation using human neuronal-like cells in single chamber biofuel cells, *Journal of Cleaner Production*, 2020 (accepted).
2. F. Ozkok, Y.M. Sahin, V. Enisoglu-Atalay, K. Asgarova, N. Onul, T. Catal, Sensitive Detection of Iron (II) Sulfate with a Novel Reagent using Spectrophotometry, *Spectrochimica Acta A*, 2020 (accepted).
3. Funda Ozkok, Yesim Muge Sahin, Vildan Enisoglu Atalay, Kamala Asgarova, Nihal Onul, Tunc Catal, Dataset on Catal's reagent: Sensitive detection of iron (II) sulfate using spectrophotometry, 2020, *Data in Brief* (accepted).
4. Sen, P., Akagunduz, D., Aghdam, A.S., Cebeci, F.Ç., Nyokong, T., **Catal, T.**, Synthesis of Novel Schiff Base Cobalt (II) and Iron (III) Complexes as Cathode Catalysts for Microbial Fuel Cell Applications. 2019, *Journal of Inorganic and Organometallic Polymers and Materials*, doi: 10.1007/s10904-019-01286-x.
5. **Catal, T.**, Kul, A., Enisoglu-Atalay, V., Bermek, H., Ozilhan, S., Tarhan, N., Efficacy of microbial fuel cells for sensing of cocaine metabolites in urine-based wastewater. 2019, *Journal of Power Sources* 414, 1-7.
6. Ozdemir, M., Enisoglu-Atalay, V., Bermek, H., Ozilhan, S., Tarhan, N., **Catal, T.**, Removal of cannabis metabolite from human urine in microbial fuel cells generating electricity. 2019, *Bioresource Technology Reports* 5, 121-126.
7. Atasever-Arslan, B., Ozen, F., **Catal, T.**, Akalin, E., Resin extract obtained from Cilician fir (*Abies*

- cilicica) inhibits glucose dependent inflammation in vitro. 2019, J Exp Ther Oncol 13(1): 23-31.
8. Tunalı, S., **Catal, T.**, Bolkent, S., Yanardag, R. The effects of vitamins and selenium mixture against brain tissue induced by d-galactosamine. J Biochem Mol Toxicol. 2019, e22347. doi: 10.1002/jbt.22347.
 9. Cebecioglu, R., Yildirim, M., Akagunduz, D., Korkmaz, I., Tekin, H.O., Atasever-Arslan, B., **Catal, T.** Synergistic effects of quercetin and selenium on oxidative stress in endometrial adenocarcinoma cells, Bratislava Medical Journal, 2019, No. 317/2019 DOI 10.4149/BLL_2019_72.
 10. Kigili, F., Ozen, F., **Catal, T.**, Atasever-Arslan, B., Androgen receptor (NR3C4) regulator potential of Ceratonia siliqua extract and its signalling pathways. 2019, Pharmacognosy Magazine, 15 (62), 1-4.
 11. Enisoglu-Atalay, V., Atasever-Arslan, B., Yaman, B., Cebecioglu, R., Kul, A., Ozilhan, S., Ozen, F., **Catal, T.**, Chemical and molecular characterization of metabolites from *Flavobacterium* sp. isolate. 2018, Plos One 13(10):e0205817.
 12. **Catal, T.**, Yavaser, S., Atalay, V.E., Bermek, H., Monitoring of neomycin sulfate antibiotic in microbial fuel cells, Bioresource Technology 2018, 268:116-120.
 13. **Catal, T.**, Liu, H., Fan, Y., Bermek, H., A novel clean technology to convert sucrose and lignocellulose in microbial electrochemical cells into electricity and hydrogen, 2018 Bioresource Technology Reports (<https://doi.org/10.1016/j.biteb.2018.10.002>).
 14. Karakus, B.Z., Korkmaz, İ., Demirci, K., Arslan, K.S., Unlu, O., **Catal, T.**, A Combined Treatment Using Ethylmethane Sulfonate and Ultraviolet Light to Compare Amylase Production by Three *Bacillus* sp. Isolates, Preparative Biochemistry and Biotechnology, 2018 doi: 10.1080/10826068.2018.1509088.
 15. Ozakman, G., Yayman, S.G., Zhmurov, C.S., Kasikci, E.S., **Catal, T.**, The influence of selenium on expression levels of rbcL gene in *Chlorella vulgaris*, 3 Biotech, 2018(4):189. doi: 10.1007/s13205-018-1212-4.
 16. Atasever-Arslan, B., Isik, F.B., Gur, H., Ozen, F., **Catal, T.**, Apoptotic effect of *Nigella sativa* on human lymphoma U937 cells, Pharmacognosy Magazine, 2017, 13(Suppl 3):S628-S632. doi: 10.4103/pm.pm_93_17.
 17. **Catal, T.**, Gover, T., Yaman, B., Droguetti, J., Yilancioglu, K., Gas production profiles using furans in microbial electrolysis cells, 2016 World Journal of Microbiology and Biotechnology, 33(6), 115.
 18. Ulucan, K., Biyik, B., Kapici, S., Sercan, C., Yilmaz, O., **Catal, T.**, Alpha-actinin-3 R577X Polymorphism Profile of Turkish Professional Hip-Hop and Latin Dancers, Annals of Applied Sport Science, vol. 4, no. 4, pp. 01-06, Winter 2016.
 19. Zhmurov, C.S., Kahraman, O.T., Amadou, F.Z., Fazlıoğulları, O., Basaran, C., **Catal, T.**, Zeybek, U., Bermek, H., Expression of Egfl7 and miRNA-126-5p in symptomatic carotid artery disease, Genetic Testing and Molecular Biomarkers, 2016 DOI: 10.1089/gtmb.2015.0252.
 20. **Catal, T.**, Comparison of various carbohydrates for hydrogen production in microbial

electrolysis cells, *Biotechnology&Biotechnological Equipment*, 2016, DOI: 10.1080/13102818.2015.1081078.

21. **Catal, T.**, Lesnik, K.L., Liu, H., Suppression of methanogenesis for hydrogen production in single-chamber microbial electrolysis cells using various antibiotics, 2015 *Bioresource Technology*, 187:77-83.
22. Abourached, C., **Catal, T.**, Liu, H., Efficacy of single-chamber microbial fuel cells for removal of cadmium and zinc with simultaneous electricity production, 2014 *Water Research*, 51, pp. 228-233.
23. Bermek H., **Catal, T.**, Akan, S.S., Ulutaş, M.S., Kumru, M., Özgüven, M., Liu, H., Özçelik, B., Akarsubaşı, A.T., Olive mill wastewater treatment in microbial fuel cells, 2013 *World Journal of Microbiology and Biotechnology*, 30(4), pp. 1177-1185.
24. Kumru, M., Eren, H., **Catal, T.**, Akarsubaşı, A.T., Bermek, H., Study of azo dye decolorization and determination of cathode microorganism profile in air-cathode microbial fuel cells, 2012 *Environmental Technology*, 33(16-18), pp. 2167-2175.
25. **Catal, T.**, Fan, Y., Li, K., Bermek, H., Liu, H., Utilization of mixed monosaccharides for power generation in microbial fuel cells, 2011 *Journal of Chemical Technology and Biotechnology*, 86 (4), pp. 570-574.
26. **Catal, T.**, Kavanagh P, O'Flaherty V., Leech, D., Generation of electricity in microbial fuel cells at sub- ambient temperatures, 2010 *Journal of Power Sources*, 196 (5), pp. 2676-2681.
27. **Catal, T.**, Cysneiros D, O'Flaherty V., Leech, D., Electricity generation in single-chamber microbial fuel cells using a carbon source sampled from anaerobic reactors utilizing grass silage, 2011 *Bioresource Technology*, 102 (1), pp. 404-410.
28. **Catal, T.**, Bermek H., Liu, H., Removal of selenite from wastewater using microbial fuel cells, 2009 *Biotechnology Letters* 31 (8), pp. 1211-1216.
29. **Catal, T.**, Fan, Y., Li, K., Bermek, H., Liu, H., Effects of furan derivatives and phenolic compounds on electricity generation in microbial fuel cells, 2008 *Journal of Power Sources* 180 (1), pp. 162-166.
30. **Catal, T.**, Xu, S., Li, K., Bermek, H., Liu, H., Electricity generation from polyalcohols in single-chamber microbial fuel cells, 2008 *Biosensors and Bioelectronics* 24 (4), pp. 849-854.
31. **Catal, T.**, Li, K., Bermek, H., Liu, H., Electricity production from twelve monosaccharides using microbial fuel cells, 2008 *Journal of Power Sources* 175 (1), pp. 196-200.
32. **Catal, T.**, Sacan O, Yanardag R, Bolkent, S, Protective effects of antioxidant combination against D- galactosamine-induced kidney injury in rats, 2010 *Cell Biochemistry and Function*, 28 (2), pp. 107-113.
33. **Catal, T.**, Liu, H., Bermek, H., Selenium induces manganese-dependent peroxidase production by the white-rot fungus *Bjerkandera adusta* (Willdenow) P. Karsten, 2008 *Biological Trace Element Research* 123 (1- 3), pp. 211-217.

34. Şeker, U.Ö.Ş., **Catal, T.**, Taptık, Y., Tamerler, C., Bermek, H., Enhanced production of manganese-peroxidase by the white-rot fungus *Bjerkandera adusta* using media engineering, 2008 Biotechnology and Biotechnological Equipment 22 (3), pp. 844-848.
35. **Catal, T.**, Bolkent, S, Combination of selenium and three naturally occurring antioxidants administration protects D-galactosamine-induced liver injury in rats, 2008 Biological Trace Element Research, 122, pp. 127- 136.

7.2. Published Articles in Other International Journals

7.3.1. Presented Articles at International Conference (Oral Presentation)

1. Akagunduz, D., Murat Ozdemir, M., Ozen, F., Ozilhan, S., Tarhan, N., **Catal, T.**, Effects of Selective Serotonin Reuptake Inhibitors on Electricity Generation in Microbial Fuel Cells, the 8th International, Molecular Biology and Biotechnology Congress, 2019, December, Afyon, Turkey, Abs. No.10.
2. Ozdemir, M., Enisoglu-Atalay, V., Bermek, H., Ozilhan, S., Tarhan, N., **Catal, T.**, Removal of cannabis metabolite from human urine in microbial fuel cells generating electricity. 2019, 4th International Congress on Biomaterials & Biosensors (BIOMATSEN 2019), Mugla, Turkey, May 2019, p.6.
3. **Catal, T.**, Yavaser, S., Atalay, V.E., Bermek, H., Effects of Neomycin Sulfate on Power Generation in Electroactive Biofilm-Based Microbial Fuel Cells, The 17th International Conference on Electroanalysis (ESEAC 2018), Rhodes Island, June 2018, Abs page 29.
4. Bermek, H., **Catal, T.**, Trabzon, L., Applications of Microbial Fuel Cells, World Congress On Virology, November 19-20, 2018 | Orlando, USA.
5. **Catal, T.**, **Yilancioglu K.**, Evaluation of anode biofilms of microbial electrolysis cells producing hydrogen, XXIII International Symposium on Bioelectrochemistry and Bioenergetics, June 2015, Malmö, Sweden, Abstract (P-79).
6. **Catal, T.**, Liu H., Extracellular Polymeric Substances in Anode Biofilms of Microbial Fuel Cells, 15th International Conference on Electroanalysis, 2014, Malmö, Sweden (Abs. 15).

7.3.2. Presented Articles at International Conference (Poster Presentation)

1. Cebecioglu, R., Akagunduz, D., Korkmaz, I., Capanoglu, Y., Turan, A., Istanbulu, H.B., Alnahhal, A., Kul, A., **Catal, T.**, Effects of Ferula assafoetida, Rosa canina and a microalgae isolate on ECV 304 and Ishikawa Cell Lines. the 8th International, Molecular Biology and Biotechnology Congress, 2019, December, Afyon, Turkey, Abs. No.16.
2. Cebecioglu, R., Akagunduz, D., Korkmaz, I., Aricioglu, A., Kul, A., **Catal, T.**, Effects of *Helichrysum arenarium* (Immortelle) on ECV 304 and Ishikawa Cell Lines. 2019, 7th International Congress of the

- Molecular Biology Association of Turkey (MolBioKon'19), Istanbul, Turkey, September 2019, p.006.
3. Yildirim, M., Cebecioglu, R., Akagunduz, D., Karakadioglu, G., Korkmaz, I., Atasever-Arslan, B., **Catal, T.**, Effects of Combination of Quercetin and Selenium on Ishikawa Cell Line, 6th International Congress of the Molecular Biology Association of Turkey, September 2018, Izmir, Turkey, PT107.
 4. Ozakman, G., Yayman, S.G., Sezer-Zhmurov, Ç., Serdaroglu-Kasikci, E., **Catal, T.**, The Influence of Selenium on Expression Levels of *rbcl*, *psaB* and *psbC* Genes in *Chlorella vulgaris*, 5th International Congress of the Molecular Biology Association of Turkey, September 2017, Istanbul, Turkey, PT122.
 5. Sezer-Zhmurov C., Kahraman, O.T., Zeybek, U., Fazlıoğulları, O., **Catal, T.**, Tunoğlu, S., Işıkören, E.G., Bermek, H., An angiogenic cooperation: Epidermal growth factor like domain 7 (EGFL7) and microRNA-126, 5th International Congress of Molecular Medicine, May 2015, Izmir, Turkey Abs. PP101.
 6. **Catal, T.**, Tunalı, S., Yanardag, R., Bolkent, S., Protective effects of selenium and antioxidant combination against liver injury induced by D-galactosamine, 5th International Congress of Molecular Medicine, May 2015, Izmir, Turkey Abs. PP107.
 7. **Catal, T.**, Abourached, C., Xu, S., Bermek, H., Liu, H., Effects of heavy metals from wastewater on electricity generation in microbial fuel cells, International ISE Bioelectrochemistry Conference, March 2013, Bochum, Germany (p ID.302394).
 8. Bolkent, S., Bayrak, B.B., Öztay, F., **Catal, T.**, Yanardağ, R., Efficacy of antioxidant vitamins (vitamin C, vitamin E, beta-carotene) and selenium supplement on D-galactosamine-induced lung injury in rats, 2013 Federation of European Biochemical Societies Congress, Russia, Abs. SW04.
 9. Bermek, H., Eren, H., Kumru, M., **Catal, T.**, Akarsubasi, A.T., Azo dye decolorization and its effect on electricity generation in single chamber air cathode microbial fuel cells, Pacificchem, 2010, Honolulu, USA. Abs. ID30.
 10. Kumru, M., Eren, H., **Catal, T.**, Akarsubasi, A.T., Bermek, H., Characterization of microbial community of cathode biofilm in single chamber air cathode microbial fuel cells degrading textile dyes, 13th International Society of Microbial Ecology Symposium, Seattle, USA, 2010, Abs. no: PS.06.044.
 11. **Catal, T.**, Boland, S., Katuri, K., Leech, D., Electrochemical characterization of *Geobacter sulfurreducens* grown on carbon electrodes, 239th ACS National Meeting, San Francisco, California, USA, 2010, Abs. no: 301.
 12. **Catal, T.**, Kavanagh, P., Liu, H., Katuri, K., O'Flaherty, V., Leech, D., Electricity production in single-chamber microbial fuel cells using carbon source mixtures and evaluation of anodic biofilms. 239th ACS National Meeting, San Francisco, California, USA, 2010, Abs. no: 453.
 13. Leech, D. Katuri, K., **Catal, T.**, Boland, S., Kavanagh, P., Electrochemical-induced growth of biofilms in microbial fuel cells. 217th ECS Meeting, Vancouver, Canada, 2010, Abs. 427.
 14. **Catal, T.**, Bermek, H., Liu, H., Simultaneous electricity generation and selenium removal from

wastewater using mediator-less microbial fuel cells, The 2nd Microbial Fuel Cell Conference, Gwangju, Korea, 2009, Abs. no: P-D-3.

15. **Catal, T.**, Cysneiros, D., O'Flaherty, V., Leech, D., Electricity generation in microbial fuel cells from leachate produced during anaerobic digestion of grass silage, The 2nd Microbial Fuel Cell Conference, Gwangju, Korea, 2009, Abs. no: P-D-6.

16. Katuri, K, Kavanagh, P., **Catal, T.**, O'Flaherty, V., Leech, D., Electrochemical characterization of electro- active bacteria grown at different physiological conditions, The 2nd Microbial Fuel Cell Conference, Gwangju, Korea, 2009, Abs. no: P-B-5.

17. Katuri, K., Kavanagh, P., O'Flaherty, V., **Catal, T.**, Leech, D., Electrochemical characterization of electroactive bacteria grown at different physiological conditions, 238th ACS National Meeting, Washington D.C., San Francisco, California, USA, 2009, Abs. FUEL-238.

18. **Catal, T.**, Xu, S., Li, K., Bermek, H., Fan, Y., Liu, H., Generation of electricity from lignocellulosic biomass using microbial fuel cells, Microbial fuel cell 1st International Symposium, Pennsylvania, USA, 2008, Abs. no: 37.

19. **Catal, T.**, Tamerler, C., Bermek, H., Evaluation of oxidative stress caused by selenium based on lipid peroxidation by the white-rot fungus LSK-27. International Symposium on Environmental Biocatalysis: From remediation with enzymes to novel green processes, Cordoba – Spain, 2006, Abs. no: P-57.

20. Bermek, H., **Catal, T.**, Tamerler, C., Efficient immobilization of & increased manganese peroxidase production by the white-rot fungus LSK-27. 8th International Mycological Congress, Cairns, Australia, 2006, Abs. no: PS7-610-0409.

21. **Catal, T.**, Tamerler C., Bermek, H., Selenium induces manganese peroxidase production by the white-rot fungus LSK-27. 8th International Mycological Congress, Cairns, Australia, 2006, Abs. no: PS4-415-0404.

22. Yanardag, R., **Catal, T.**, Sacan, O., Bolkent, S., The Effects of antioxidant combination on D-galactosamine- induced kidney damage of rats: a morphological and biochemical Study. 40th IUPAC Congress, Beijing-China, 2005, Abs. no: 336.

23. **Catal, T.**, Bolkent, S., The role of ascorbic acid, beta-carotene, alpha-tocopherol and selenium on D- galactosamine-induced liver injury of rats, 2nd Training Course on Concepts and Methods of Programmed Cell Death & 13th ECDO conference on Apoptosis, Budapest, Hungary, 2005, Abs. no: P-31.

24. Yanardag, R., Bayrak, B.B., **Catal, T.**, Bolkent, S., Combined effects of Beta-carotene, vitamin C, Vitamin E and selenium on galactosamine-induced lung damage of rats, International Congress of Toxicology, Montreal, Canada, 2007 Abs. no: PT2.049.

7.4. Published Books

1. **Catal, T.**, Kavakli, H. IV.17. Hydrogen production by algae. Book: Green Energy to Sustainability:

Strategies for Global Industries. Publisher: John Wiley & Sons, 2020.
<https://doi.org/10.1002/9781119152057.ch17>

2. Cebecioglu, R., Yaman, B., Karakus, B.Z., Demirci, K., Karakadioglu, G., Korkmaz, I., Bermek, H., **Catal, T.** Microbial Biotechnology: From Energy to Enzymes, Researches on Science and Art in 21st Century Turkey, Publisher: Gece Kitapligi, 2017, Vol 2. 2267.

7.5. Published Articles in National Journals

1. **Çatal, T.**, Tunalı, S., Bolkent, Ş., Yanardağ, R., An antioxidant combination improves histopathological alterations and biochemical parameters in D-galactosamine-induced hepatotoxicity in rats, 2017, European Journal of Biology, 76(1), 14-19.
2. Bayrak, B.B., **Çatal, T.**, Bolkent, S., Yanardag, R., Efficacy of antioxidant vitamins (vitamin C, vitamin E, Beta- carotene) and selenium supplement on D-galactosamine-induced lung injury in rats, Istanbul University Journal of Biology IUFS J Biol 2016, 75(1): 11-18.
3. **Çatal, T.**, Bermek, H., Li, K., Liu, H., Mikrobiyal yakıt hücrelerinde disakkaritlerden elektrik üretimi, 2009 ITU Journal/c, 7(1) 123-131.

7.6. Published Articles in National Conference (Proceedings).

1. Zhmurov, Ç.S., Kahraman, Ö.T., Zeybek, Ü., Fazlıoğulları, O., **Çatal, T.**, Tunoğlu, S., Işıkören, E.G., Bermek, H., İnsan karotis arter aterosklerotik plaklarında mikroRNA 126-3p, Spred1 ve Pik3r2 gen anlatım seviyelerinin araştırılması, Ulusal Moleküler Tıp Sempozyumu, Istanbul, Turkey, June 2016, Abs. no.: PS01.
2. Saçan, O., Yanardağ, R., **Çatal, T.**, Bolkent, T., D-galaktozamin ile oluşturulan böbrek hasarına karşı β - karoten, C vitamini, E vitamini ve selenyumun kombine etkileri, XXII. Ulusal Kimya Kongresi, Mağusa, KKTC, 2008, Abs. no.: BKP-39.
3. Tunalı, S., Yanardağ, R., **Çatal, T.**, Bolkent, S., Sıçanlarda D-galaktozamin ile oluşturulan beyin dokusu hasarına karşı β -karoten, askorbik asid, α -tokoferol ve selenyumun etkileri, XX. Ulusal Kimya Kongresi, Kayseri, 2006, Turkey, Abs no.: BKP-23.

7.7 Other Publications

8. Projects

8.1. International Projects

Completed

- European Union, Marie Curie Program, Transfer of Knowledge Activity (MicroGen) MTKD-CT-2006- 042802. Ireland, 2008-2010
- Sun Grant Western Regional Center, Oregon State University: Bio-electrolysis Novel

8.2. National Projects

- KOSGEB, Turkish Ministry of Industry and Technology, (Small and Medium Enterprises Development and Support Administration), Development of Colorimetric Iron (II) Sulfate Determination Kits for Different Uses of a Newly Discovered Reagent, Project No. 17229477 (Sep. 2019-Sep. 2020)
- TÜBİTAK, Production of yoghurt with pine cone and investigation of its effect on thyroid cancer, TÜBİTAK 2209-A (undergraduate student, Sila Arslan) (advisor), 2020

Completed

- Istanbul Development Agency (İSTKA), Republic of Turkey Ministry of Development, Coordinator, Project No. TR10/16/YNY/0167, Istanbul Protein Research-Development and Innovation Center (PROMER) (892.786,80 TRY) (Jan 2017-Jan 2018)
- Scientific and Technological Research Council of Turkey (TÜBİTAK) 3001, Principal investigator, Suppression of methanogens for hydrogen production using hazelnut leaves in microbial electrolysis cells, (Project No. 113Z589) (59,917.91 TRY) (Feb 2014-Feb 2015)
- İTÜ BAP, PhD thesis project (Co-advisor, 2013-present)
- İTÜ BAP, MSc thesis project (Co-advisor, 2013-present)
- Istanbul University Research Foundation: Project no: T-290/180062003, 2004
- Istanbul University Research Foundation: Project no: UDP-502/03062005, 2006

9. Administrative Experience

- Erasmus Coordinator, Molecular Biology and Genetics (2012-2017)
- Biotechnology Research and Application Center, Administrative Board Member (2014-2017)
- Director, Biotechnology Research and Application Center (2014-2017)
- Faculty Administrative Board Member, Engineering and Natural Sciences (2013-2018)
- Faculty Administrative Board Member, Humanities and Social Sciences (2013-2016)
- General Coordinator of Faculty Laboratories (2014-2018)
- Faculty Administrative Board Member, Health Sciences (2013-2016)
- Institute of Addiction and Forensic Sciences, Board Member (2016-2017)
- Coordinator of Molecular Biology Graduate Program (2013-present)
- Faculty Board Member, Engineering and Natural Sciences (2013-present)
- Vice dean, Graduate School of Natural and Applied Sciences (2014-present)
- Faculty Administrative Board Member, Faculty of Communication (2013-present)
- Faculty Erasmus Coordinator (2017-present)
- Director, Istanbul Protein Research-Application and Innovation Center (2017-present)
- Head of Biotechnology Program (2018-present)

10. Membership

- Molecular Biology Society

11. List of Awards/Certificates

- BSc graduation degree, 2001.
- VII. National Student Conference of Biology, Istanbul University, October 2000.
- 13th ECDO Euroconference on Apoptosis, 2nd Training Course on Concepts and Methods in Programmed Cell Death, Certificate of Attendance Budapest, Hungary, October 2005.
- 13th ECDO Euroconference on Apoptosis, Certificate of Attendance, Budapest, Hungary, October 2005.
- Environmental Biocatalysis from remediation with enzymes to novel green processes, Certificate of Attendance, Cordoba, Spain, April 2006.
- Bath Electrochemistry Winter School, University of Bath, Certificate of Completion, Bath, January 2010.
- Rectorate of Istanbul University, Research Foundation, "Certificate of Success in Research", 2011.
- Certificate of Animal Use for Researchers, Marmara University, Istanbul, June 2012.
- The Scientific and Technological Research Council of Turkey, Marmara Research Center, Hands on Education for Molecular Biology Methods, September 2014.
- Istanbul University, Proteomistanbul, Proteomics Summer School, July 2013.
- Swiss National Science Foundation, International short visiting grant, 2014 (not used).
- The Scientific and Technological Research Council of Turkey, International Publication Award, 2012, 2015, 2016, 2018, 2019.

12. Courses given for BSc&MSc for the last two years

Academic Year	Semester	Course		
			Theoretical	Practical
2018-2019	Fall	Microbiology (ENG)	(3+0+2)	
		Recent Advances in Biotechnology (MSc.)	(3+0+0)	
		Graduation Project	(0+0+6)	
		Biotechnology	(3+0+0)	
	Spring	Molecular Cell Biology (ENG)	(3+0+2)	
		Molecular Genetics of Bacteria (TR) (MSc)	(3+0+0)	
		Graduation Thesis	(0+0+6)	
		Industrial Microbiology	(3+0+0)	
		Special Topics in	(3+0+0)	

2019-2020	Fall	Microbiology (ENG)	(3+0+2)
		Recent Advances in Biotechnology (MSc)	(3+0+0)
		Graduation Project	(0+0+6)
		Biotechnology	(3+0+0)
	Spring	Molecular Cell Biology (ENG)	(3+0+2)
		Molecular Genetics of	(3+0+0)
		Graduation Thesis	(0+0+6)
		Industrial Microbiology	(3+0+0)

13. Referee

- Bioresource Technology
- International Journal of Hydrogen Energy
- Electrochemistry Communications
- International Journal of Hydrogen Energy
- Biological Trace Element Research
- Journal of Environmental Management
- Chemical Engineering Journal
- Chemical Engineering Communications
- Ecotoxicology and Environmental Safety
- Environmental Chemistry Letters
- Biomass and Bioenergy
- Chemosphere
- Environmental Technology
- Fuel
- Journal of Power Sources

14. Contact Information

Address: Üsküdar Üniversitesi, Haluk Türksoy sok. No: 14 Altunizade Üsküdar İstanbul Turkey; **E-mail:** tunc.catal@uskudar.edu.tr; **Tel:** + 90 216 400 2222 (ext. 2417)