

**ACADEMIC  
CURRICULUM VITAE**

**1. Name - Surname:** Melis Sumengen Ozdenefe

**2. Title:** Assoc. Prof. Dr.

**3. Educational Background:** PhD

<b>Degree</b>	<b>Department/Program</b>	<b>University</b>	<b>Year</b>
Bachelor's	Biology	Cukurova University	2005-2009
Master's	Biology	Cukurova University	2009-2011
PhD	Biology	Cukurova University	2011-2014

**4. Master's / PhD Thesis**

**4.1. Master's Thesis Title and Thesis Advisor(s):**

- Feryal Tanođlu, 2019. Investigation of Antioxidant and Antimicrobial Activity of *Ficus sycomorus* Leaf and Fruit Extracts. Advisor: Assist. Prof. Dr. Melis Sumengen Ozdenefe
- Abdulkabiru Muhammed, 2018. Determination of Antimicrobial Activity of *Corchorus olitorius* Leaf Extracts. Advisor: Assist. Prof. Dr. Melis Sumengen Ozdenefe

**4.2. PhD Thesis /Medical Specialty Thesis Title and Advisor(s):**

**5. Academic Titles:**

Date of Assistant Professorship: 08.08.2016

Date of Associate Proferssorship: 10.02.2022

Date of Professorship:

**6. Supervised Master's and PhD Theses:**

**6.1. Master's Theses**

- Harvest Ndubisi Onwordi. Characterization of Uda, Uziza And Ehuru Seeds on the Extension of Shelf-Life of Pepper Soup. Advisor: Assoc. Prof. Dr. Melis Sumengen Ozdenefe

## 6.2. PhD Theses

## 7. Publications

### 7.1. Articles Published in International Peer-Reviewed Journals (SCI,SSCI, AHCI, ESCI, Scopus)

- 1) TAKCI D.K., **SUMENGEN OZDENEF M.**, GENÇ S., **2023**. Green synthesis of silver nanoparticles with an antibacterial activity using *Salvia officinalis* aqueous extract. Journal of Crystal Growth. 614, 15 July 2023, 127239, <https://doi.org/10.1016/j.jcrysgro.2023.127239>.
- 2) **SUMENGEN OZDENEF M.**, MERCİMEK TAKCI H.A., BUYUKKAYA KAYIS F., **2022**. Chemical Composition and Functional Properties of *Cynara cornigera* Lindley Shoot System Extract. Journal of Food Processing and Preservation. 46(6), June 2022, 1-8, (J Food Process Preserv. 2022;46:e15867) <https://doi.org/10.1111/jfpp.15867>.
- 3) MERCİMEK TAKCI H.A., **SUMENGEN OZDENEF M.**, BUYUKKAYA KAYIS F., CEVIK N., **2020**. *In vitro* phytochemical and antibacterial activity of traditional hemorrhoid herbal medicine. Banat's Journal of Biotechnology, 2020, XI(22), Jul-Dec., DOI: 10-7904/2068-4738-XI(22)-5.
- 4) **SUMENGEN OZDENEF M.**, TANOGLU F., SUER K., GULER, E., MERCİMEK TAKCI H.A., **2020**. Antioxidant and antimicrobial activity of *Ficus sycomorus* fruit and leaf extracts. Marmara Medical Journal, 33(3): 133-140, <https://doi.org/10.5472/marumj.816301>.
- 5) MERCİMEK TAKCI H.A., KARAYILAN R., UCAN TURKMEN, F., **SUMENGEN OZDENEF M.**, BUYUKKAYA KAYIS F., ARKUT OZYAPICI A., CAKTU GULER K., **2019**. Biochemical characterization of the crude chitin deacetylase supernatant from *Bacillus cereus*. Fresenius Environmental Bulletin, 28(9), 6661-6667.
- 6) **SUMENGEN OZDENEF M.**, DINCER S., UNAL M.U., MERCİMEK TAKCI, H.A., ARKUT OZYAPICI A., BUYUKKAYA KAYIS F., **2019**. Alkaline protease purified from wild type *Bacillus* sp.: Characterization and application in detergent industry. Fresenius Environmental Bulletin, 28 (7), 5356-5366.
- 7) **SUMENGEN OZDENEF M.**, MUHAMMED A., SUER K., GULER, E., MERCİMEK TAKCI H.A., **2018**. Determination of antimicrobial activity of *Corchorus olitorius* leaf extracts. Cyprus Journal of Medical Sciences, 3(3): 159-163, DOI: 10.5152/cjms.2018.623.
- 8) ARKUT A., DINCER S., MERCİMEK TAKCI H.A., **SUMENGEN OZDENEF M.**, BUYUKKAYA KAYIS F., **2018**. Characterization and purification of the intracellular phytase from *Ochrobactrum anthropi*. Fresenius Environmental Bulletin, 27(5A), 3469-3475.
- 9) **SUMENGEN OZDENEF M.**, DINCER S., UNAL M.U., ARKUT A., MERCİMEK TAKCI, H.A., BUYUKKAYA KAYIS F., **2017**. Production and characterization of biosurfactant from *Bacillus*

*subtilis* using waste breads. Fresenius Environmental Bulletin, 26 (5), 3439-3447, ISSN 1018-4619.

- 10) **SUMENGEN ÖZDENEFİ M.**, DINCER S., UNAL M.U., BUYUKKAYA KAYIS F., MERCİMEK TAKCI H.A., ARKUT A., **2017**. Optimization of culture conditions for alkaline protease production from waste breads using *Bacillus subtilis*. Romanian Biotechnological Letters, Vol.22, No.3, 12597-12610.
- 11) MERCİMEK, H.A., DINCER, S., GUZELDAG, G., OZSAVLI, A., MATYAR, F., ARKUT, A., KAYIS, F., **ÖZDENEFİ SUMENGEN, M., 2015**. Degradation of 2,4,6-trinitrotoluene by *P. aeruginosa* and characterization of some metabolites. Brazilian Journal of Microbiology, 46, 1, 103-111, ISSN 1678-4405, DOI: <http://dx.doi.org/10.1590/S1517-838246120140026>.
- 12) MATYAR, F., GULNAZ, O., GUZELDAG, G., MERCİMEK, H.A., AKTURK, S., ARKUT, A., **SUMENGEN, M., 2014**. 'Antibiotic and heavy metal resistance in Gram-negative bacteria isolated from the Seyhan Dam Lake and Seyhan River in Turkey'. Annals of Microbiology, 64 (3): 1033-1040.
- 13) **SUMENGEN, M.**, DINCER, S., KAYA, A., **2013**. 'Production and characterization of phytase from *Lactobacillus plantarum*'. Food Biotechnology, 27: 105-118.
- 14) **SUMENGEN, M.**, DINCER, S., KAYA, A., **2012**. 'Phytase production from *Lactobacillus brevis*'. Turkish Journal of Biology, 36, 533-541.

## 7.2. Articles Published in Other International Peer-Reviewed Journals

- 1) **SUMENGEN ÖZDENEFİ, M.**, MERCİMEK TAKCI, H.A., BUYUKKAYA KAYIS, F. **2023**. Antibacterial, Antioxidant, Antidiabetic Potentials and Chemical Composition of *Nicotiana glauca* Graham Leaf Extract. Journal of Anatolian Environmental and Animal Sciences, 8(4), 700-706, DOI: <https://doi.org/10.35229/jaes.1325678>.
- 2) MERCİMEK TAKCI H.A., TOPLAR S., **SUMENGEN ÖZDENEFİ M., 2021**. Antibiotic and heavy metal resistance of *Escherichia coli* strains isolated from the Seve Dam and Konak Pond, Kilis, Turkey. Acta Aquatica Turcica, E-ISSN: 2651-5474, 17(2), 290-297, DOI: <https://doi.org/10.22392/actaquatr.801564>.
- 3) MERCİMEK TAKCI H.A., CAKTU GULER K., **SUMENGEN ÖZDENEFİ M.**, OZSAVLI A., GUZELDAG G., **2019**. Laktik Asit Bakterilerinden Kısmi Saflaştırılmış Bakteriyosinlerin Aktivitesi Üzerine pH, Sıcaklık, Kimyasal Maddelerin Etkisi. Journal of Anatolian Environmental and Animal Sciences, Year: 4, No:1, 16-21.
- 4) BUYUKKAYA KAYIS F., DINCER S., MATYAR F., MERCİMEK TAKCI H.A., **SUMENGEN ÖZDENEFİ M.**, ARKUT A., **2017**. Gölbaşı ve Azaplı Göllerinden (Adıyaman) İzole Edilen Bakterilerin

Tiplendirilmesi ve Çoklu Antibiyotik Dirençliliklerinin Araştırılması. Turkish Journal of Agriculture-Food Science and Technology, International peer-reviewed journal, 5(1), 43-47.

### 7.3. Papers Presented at International Scientific Conferences and Published in Conference Proceedings

- 1) **SUMENGEN OZDENEFİ, M.**, MERCİMEK TAKCI, H.A., BUYUKKAYA KAYIS, F. 'Chemical Composition and Functional Properties of *Cynara cornigera* Lindley Shoot System Extract'. 3-4 June 2021, 2. International Conference on Raw Materials to Processed Foods 2021, Online, Conference Proceedings, 166-175, ISBN: 978-625-00-9702-1.
- 2) MERCİMEK TAKCI, H.A., CEVIK, N., **SUMENGEN OZDENEFİ, M.**, BUYUKKAYA KAYIS, F., ARKUT OZYAPICI, A. 'Phytochemical and *In vitro* Antibacterial Activity of Traditional Herbal Mixture Used in Hemorrhoid Treatment'. 24-27 May 2018, Second International Biomedical Engineering Congress 2018, Nicosia, TRNC. Abstract Book. P: 106.
- 3) MUHAMMED, A., **SUMENGEN OZDENEFİ, M.**, SUER, K., GULER, E., MERCİMEK TAKCI, H.A. 'Antimicrobial Activity of *Corchorus olitorius* Leaf Extracts'. 24-27 May 2018, Second International Biomedical Engineering Congress 2018, Nicosia, TRNC. Abstract Book. P: 111.
- 4) **SUMENGEN OZDENEFİ, M.**, DINCER, S., UNAL, M.U., MERCİMEK TAKCI, H.A., ARKUT, A., BUYUKKAYA KAYIS, F., 2017. 'Characterization of biosurfactant produced by *Bacillus subtilis* MS'. 2<sup>nd</sup> International Mediterranean Science and Engineering Congress (IMSEC 2017), October 25-27, 2017, Adana, Turkey, Pages: 432.
- 5) ARKUT OZYAPICI, A., DINCER, S., **SUMENGEN OZDENEFİ, M.**, BUYUKKAYA KAYIS, F., MERCİMEK TAKCI, H.A., 2017. 'Optimization of Medium Components for Phytase Production from *Enterobacter* sp. International Congress of Health and Environment, October 23-25, 2017, S295, Adana-TURKEY.
- 6) **SUMENGEN OZDENEFİ, M.**, DINCER, S., UNAL, M.U., MERCİMEK TAKCI, H.A., BUYUKKAYA KAYIS, F., ARKUT, A., 2017. 'Characterization of alkaline protease produced by *Bacillus megaterium*'. European Biotechnology Congress 2017, May-25-27, 2017, Dubrovnik, Croatia. Journal of Biotechnology, 256S, S44-S116, S63.
- 7) ARKUT, A., DINCER, S., MERCİMEK TAKCI, H.A., **SUMENGEN OZDENEFİ, M.**, BUYUKKAYA KAYIS, F., 2016. 'Purification of intracellular phytase from *Enterobacter* sp.'. 1<sup>st</sup> International Mediterranean Science and Engineering Congress (IMSEC 2016), October 26-28, 2016, Adana, Turkey, Pages: 1991-1991, Paper ID: 556.

- 8) ADALI, T., SUER, K., NWEKWO, C. W., GULER, E., **SUMENGEN ÖZDENEFE, M.**, 2015. 'Antimicrobial Activity of Silk Fibroin Microparticles'. 12-14 March 2015, International Biomedical Engineering Congress 2015, Nicosia, TRNC, Abstract Book. P: 92.
- 9) MERCİMEK, H. A., DINCER S., GUZELDAG G., OZSAVLI A., MATYAR F., ARKUT A., KAYIS F., **SUMENGEN ÖZDENEFE M.**, CAKTU GULER K., 2014. 'Biodegradation of 2,4,6-Trinitrotoluene (TNT)' 02-06 June 2014, 3rd International Molecular Biology and Biotechnology Congress, Sarajevo, Bosnia Herzegovina. Abstracts Book. P: 176.
- 10) DİNÇER, S., **SÜMENGEN ÖZDENEFE, M.**, ÜNAL, M.Ü., KAYIŞ, F., ARKUT, A., MERCİMEK, H.A., 2014. 'Optimization of medium components for alkaline protease production by *Bacillus megaterium* from waste breads' European Biotechnology Congress 2014, Lecce, Italy, 15-18 May 2014. Journal of Biotechnology, 2014, 185, Supplement, S69.
- 11) ARKUT A., **SUMENGEN M.**, DINCER S., 2013. "Optimization of Medium Components for Phytase Production from *Ochrobactrum anthropi*" European Biotechnology Congress 2013, Bratislava, Slovakia, 16-18 May 2013. Poster Presentations / Current Opinion in Biotechnology, Poster Presentations/Current Opinion in Biotechnology, S72.
- 12) AKTURK, S., DINCER, S., TOROGLU, S., ARKUT, A., **SUMENGEN, M.**, KAMISLI, S., GHOLAMI, H., 2012. "Determination of Microbial Quality and Multidrug Resistant Bacteria in Children's Playgrounds Soils /Sands (in Public Parks) in Adana (Turkey)" International Congress: Urban Environmental Pollution 2012 Creating Healthy, liveable Cities, Amsterdam, The Netherlands, 17-20 June 2012.

#### 7.4. National/international Books or Book Chapters

- 1) International Book Chapter. IntechOpen-Book-Molecular Cloning, Edited by Sadik Dincer, Hatice Aysun Mercimek Takci and **Melis Sumengen Ozdenefe**. Chapter- Nonribosomal Peptide Synthesis, Written by Sadik Dincer, Hatice Aysun Mercimek Takci, **Melis Sumengen Ozdenefe**. Published: 30.04.2022, DOI: 10.5772/intechopen.104722. (Publisher: IntechOpen: Web of Science-Book Citation Index).
- 2) International Book Chapter. IntechOpen-Book-Water Quality-New Perspectives, Edited by Sadik Dincer, Hatice Aysun Mercimek Takci, **Melis Sumengen Ozdenefe**. Chapter- Bacteriological Perspective of Water Quality, Written by Hatice Aysun Mercimek Takci, **Melis Sumengen Ozdenefe**, Fikret Buyukkaya Kayis and Sadik Dincer. Published: 06.09.2023, DOI: 10.5772/intechopen.112874. (Publisher: IntechOpen: Web of Science-Book Citation Index).

#### 7.5. Articles Published in National Peer-Reviewed Journals

## 8. Art and Design Activities

## 9. Projects

- 1) TÜBİTAK 1512 Girişimcilik Projesi 2013-2014. S. Aktürk, **M. Sümengen**. Tarımsal Atıklardan Kanatlı ve Monogastrik Hayvan Beslenmesinde Kullanılan Fungal Fitaz Üretimi. **Researcher**, Çukurova Üniversitesi.
- 2) FEF2013BAP13, 2013-2015. S. Dinçer, **M. Sümengen**. Atık Ekmeklerden *Bacillus megaterium* Kullanarak Alkali Proteaz ve Biyosüpfektan Üretimi. **Researcher**, Çukurova Üniversitesi BAP Projesi.
- 3) FEF2013D10, 2013-2014. S. Dinçer, **M. Sümengen**. *Bacillus subtilis* kullanılarak atık ekmeklerden alkali proteaz ve biyosüpfektan üretimi. **Researcher**, Çukurova Üniversitesi Doktora Projesi.
- 4) 2012/1/MAP 02. H.A. Mercimek, G. Güzeldağ, A. Özşavlı, K. Çaktı Güler, **M. Sümengen**. Fermente gıdalardan izole edilen laktik asit bakterileri (LAB) tarafından üretilen bakteriyosinlerin karakterizasyonu. **Assistant Researcher**, Kilis 7 Aralık Üniversitesi BAP projesi.
- 5) FEF2010YL44, 2010-2011. S. Dinçer, **M. Sümengen**. Laktik asit bakterilerinden fitaz üretimi ve endüstriyel kullanım olanakları. **Researcher**, Çukurova Üniversitesi Yüksek Lisans Projesi.

## 10. Administrative Responsibilities

- Biomedical Engineering Turkish Department Internship (BMM200-Internship I and BMM300-Internship II) Coordinator – 2015 - 2021
- Faculty Exam Coordinator - 2017-2018 Spring Semester
- Member of the Disciplinary Committee (Reporter) - 2019-2020 Fall Term-Present

## 11. Memberships in Scientific and Professional Organizations

- Türk Mikrobiyoloji Cemiyeti / TMC-KKTC Mikrobiyoloji Platformu

## 12. Awards

**13. Undergraduate and Graduate Courses Taught in the Last Two Years**

Academic Year	Semester	Course Name	Weekly Hours		Number of Students
			Theoretical	Practical	
2021 - 2022	Fall	FBI101/ Biology I	2	0	12
	Fall	FBI102 /Biology II	2	0	4
	Fall	MOD107 /Biyoloji	2	0	11
	Fall	ECC107/ Biology	2	0	2
	Fall	ECC217 /Microbiology	3	0	9
	Fall	MOD217/Mikrobiyoloji	3	0	5
	Spring	FBI101 / Biology I	2	0	7
	Spring	FBI102 /Biology II	2	0	12
	Spring	ECC107/Biology	2	0	3
	Spring	ECC217 /Microbiology	3	0	7
	Spring	MOD107 / Biyoloji	2	0	5
	Spring	MOD217 / Mikrobiyoloji	3	0	5
	Summer	FBI101 / Biology I	2	0	2
	Summer	FBI102 /Biology II	2	0	3
2022 - 2023	Fall	FBI101/ Biology I	2	0	30
	Fall	FBI102 /Biology II	2	0	5
	Fall	MOD107 /Biyoloji	2	0	4
	Fall	ECC107/ Biology	2	0	7
	Fall	ECC217 /Microbiology	3	0	8
	Fall	MOD217/Mikrobiyoloji	3	0	7
	Spring	FBI101/ Biology I	2	0	26
	Spring	FBI102 /Biology II	2	0	25
	Spring	MOD107 /Biyoloji	2	0	4
	Spring	ECC107/ Biology	2	0	3
	Spring	ECC217 /Microbiology	3	0	7
	Spring	MOD217/Mikrobiyoloji	3	0	3