



Res. Asst. Tuğçe MUTAF KILIÇ

CONTACT INFORMATION

Address	Manisa Celal Bayar University, Faculty of Engineering C block, Bioengineering Department, Room 207, Muradiye, Manisa, 45140, Turkey		
Work Phone	+90 (0236 201 2464) (Extension: 2464)		
Fax	+90 (0236) 201 2020		
E-mail	tugce.mutaf@cbu.edu.tr	Alternate:	tucemutaf@gmail.com

EDUCATION

Degree	University	Department/Program	Years
Ph. D.	Ege University	Department of Bioengineering	2020-
Master	Ege University	Department of Bioengineering	2017 - 2020
Double Major Program	Ege University	Department of Food Engineering	2013 - 2017
B.Sc.	Ege University	Department of Bioengineering	2011 - 2016

RESEARCH INTERESTS

1	Cultivation of microalgae and downstream processes of microalgae metabolites
2	Investigation of microalgae fatty acids as a source for biodiesel
3	Green synthesis of metal nanoparticles
4	Characterization techniques of nanoparticles
5	Natural textile colorants
6	Microalgae pigments as a natural textile dye

THESIS	
Ph. D.	Potential Use of Microalgal Pigments as Natural Dyes in Textile
Master	Investigation of Biogenic Nanoparticles Synthesis from <i>Porphyridium cruentum</i> Microalgae
B.Sc.	Microalgae Biodiesel Production and Optimization from <i>Stichococcus bacillaris</i>

EXPERIENCE			
Title	University	Position/Research Topics	Years
Research Assistant	Manisa Celal Bayar University	Bioengineering	2019 – ...

PROFESSIONAL DEVELOPMENT	
1	IV. International Ege Composite Materials Symposium, Technical Committee Member, Turkey, 2018
2	Research Experience Certificate, Ege University Faculty of Engineering, Department of Bioengineering
3	GMP, GLP, ISO / IEC 17025: 2017, ISO 9001: 2015 Certificates, TSC Management Systems Academy
4	Medicinal and Aromatic Plants Breeding Training, Eskişehir Osmangazi University

PROJECTS	
1	Optimization of Synthesis of Biogenic Nanoparticles by Microalgae and Potential Use in Biotechnology, TUBITAK 1001, Scholarship, 2017-2019.
2	Optimization of biogenic synthesis and determination of antioxidant activity of silver nanoparticles (AgNPs) by aqueous extract of <i>Saponaria officinalis</i> L. (Gypsophila), BAP Hızlı Proje, Araştırmacı, 2022-2023.
3	Mikroalglerin Kozmetik Amaçlı Skualen Üretim Potansiyelinin İncelenmesi, TUBITAK 1005, Scholarship, 2022-

PUBLICATIONS (SCI & SCI-EXPANDED)

1	Mutaf, T. , Oz, Y., Kose, A., Elibol, M., Oncel, S. S., 2019. The effect of medium and light wavelength towards <i>Stichococcus bacillaris</i> fatty acid production and composition, <i>Bioresource Technology</i> , 289:121732.
2	Caliskan, G., Mutaf, T. , Agba, H., Elibol, M., 2022, Green Synthesis and Characterization of Titanium Nanoparticles Using Microalga, <i>Phaeodactylum tricornutum</i> , <i>Geomicrobiology Journal</i> , 39: 1, 83–96.
3	Mutaf, T. , Oncel, S.S., 2023, Bubble column and airlift bioreactor systems for animal cell culture applications, <i>Asia-Pacific Journal of Chemical Engineering</i> , 18(1), e2872.

PUBLICATIONS (TR DİZİN)

1	Mutaf, T. , Çalışkan Bilgin, G., Öncel, S., Elibol, M., 2023, Metal nanopartiküllerin mikroalgler aracılığı ile yeşil sentezi, <i>Ege Journal of Fisheries and Aquatic Sciences</i> , 40(1): 81-89.
---	--

BOOK CHAPTERS

1	Inam A., Mutaf T. , Deniz I., Sustainable biorefineries for circular bioeconomy, In: <i>Circular Bioeconomy: Integrated Approaches for Sustainability</i> , Editors: Sunita Varjani, Ashok Pandey, Rajeshwar Dayal Tyagi and Mohammad Taherzadeh, Elsevier, In press
2	Yarkent, Ç., Mutaf, T. , Temel, S., Vardar Sukan, F., Oncel, S.S., 2023, University-Industry Collaboration: A Way to New Technologies, <i>A Sustainable Green Future</i> , Editor: Suphi S. Oncel, Springer Cham, 53-68.

PRESENTATIONS PRESENTED AT NATIONAL MEETINGS

1	Mikroalgal Mimari ve Estetik, II. Symposium of Algal Technology, May 2016, Izmir, Turkey, (Poster Presentation).
2	Ağba, H.C., Mkouboi, M.C., Çalışkan, G., Mutaf, T. , Akağaç, G., Filiz, K.D., Sarıkahya, N., Nalbantsoy, A., Elibol, M., 2020, Yeşil Kimya Yaklaşımı ile Biyo-Nanopartikül Sentezi ve Bazı Kansere Hücreleri Üzerine Potansiyel Sitotoksik Etkileri, Ege Üniversitesi Tıp Fakültesi 22. Ege Onkoloji Günleri, (Poster Presentation).

PRESENTATIONS PRESENTED AT INTERNATIONAL MEETINGS

1	IV. International Ege Composite Materials Symposium, Preparation of Biocomposite Material Using Chitosan-Aloe Vera-Silver Nanoparticles Synthesized In Centaury Plant Extract And Their Synergistic Activites On Textile Industry, September 2018, Izmir, Turkey (Poster Presentation).
2	International Conference on Medical and Biological Engineering (CMBEBIH 2019), Biogenic Nanoparticle Synthesis Using Marine Alga <i>Schizochytrium</i> sp., May 2019, Banja Luka, Bosnia and Herzegovina (Oral Presentation).
3	XV th International Izmir Textile and Apparel Symposium (IITAS 2021), Microalgae Pigments As An Alternative For Natural Textile Dyeing, October 2021, Izmir, Turkey (Oral Presentation).

DIGEST & PROCEEDINGS

1	Caliskan, G., Mutaf, T. , Turemen, M., Demir, A., Elibol, M., 2018, Preparation Of Biocomposite Material Using Chitosan- Aloe Vera-Silver Nanoparticles Synthesized In Centaury Plant Extract And Their Synergistic Activites On Textile Industry, ISBN 978-605-338-254-6.
2	Mutaf, T. , Caliskan, G., Meydan, C., Oncel, S. S., Elibol, M., 2019, Biogenic Nanoparticle Synthesis Using Marine Alga <i>Schizochytrium</i> sp., International Conference on Medical and Biological Engineering, ISBN 978-3-030-17971-7.
3	Caliskan, G., Mutaf, T. , Oncel, S. S., Elibol, M., 2019, Green Synthesis of Metal Nanoparticles Using Microalga <i>Galdieria</i> sp., International Conference on Medical and Biological Engineering, ISBN 978-3-030-17971-7.
4	Mutaf Kılıç, T. , Elibol, M., Öncel, S.Ş., 2021, Microalgae Pigments As An Alternative For Natural Textile Dyeing, XV th International Izmir Textile and Apparel Symposium (IITAS 2021), ISBN 978-605-338-329-1.

UPDATED

04.2023