

# Prof. MELEK TİJEN BOZDEMİR

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 1985 - 1989

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 1981 - 1985

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1977 - 1981

## Foreign Languages

English, B2 Upper Intermediate

## Research Areas

Chemical Engineering and Technology, Biotechnology, Biotechnological Processes and Fermentation Technology, Engineering and Technology

## Academic Titles / Tasks

Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2000 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1995 - 2000

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1990 - 1995

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1982 - 1990

## Academic and Administrative Experience

Hacettepe Üniversitesi, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2007 - 2010

## Published journal articles indexed by SCI, SSCI, and AHCI

1. **Effects of different carbon and nitrogen sources on liamocin production kinetics of *Aureobasidium pullulans* NBRC 100716 strain**  
Pehlivan A. D., BOZDEMİR M. T., ÖZBAŞ Z. Y.

ARCHIVES OF MICROBIOLOGY, vol.206, no.8, 2024 (SCI-Expanded)

- II. **Experimental modeling and optimization of pullulan production by *Aureobasidium pullulans* AZ-6**  
Mujdeci G. N., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
Polymer Bulletin, 2024 (SCI-Expanded)
- III. **Optimization of hazelnut husk medium for pullulan production by a domestic *A. pullulans* strain**  
AKDENİZ OKTAY B., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.53, no.3, pp.317-330, 2023 (SCI-Expanded)
- IV. **Evaluation of Some Agro-Industrial Wastes as Fermentation Medium for Pullulan Production by *Aureobasidium pullulans* AZ-6**  
AKDENİZ OKTAY B., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
CURRENT MICROBIOLOGY, vol.79, no.3, 2022 (SCI-Expanded)
- V. **Effects of initial medium pH and temperature on growth and citric acid production kinetics of a novel domestic *Yarrowia lipolytica* strain**  
KARASU YALÇIN S., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- VI. **Effects of Different Fermentation Conditions on Growth and Citric Acid Production Kinetics of two *Yarrowia lipolytica* Strains**  
Karasu-Yalcin S., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
CHEMICAL AND BIOCHEMICAL ENGINEERING QUARTERLY, vol.24, no.3, pp.347-360, 2010 (SCI-Expanded)
- VII. **A comparative study of the effects of glycerol and mannitol on citric acid production by two *Yarrowia lipolytica* strains**  
KARASU YALÇIN S., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
ROMANIAN BIOTECHNOLOGICAL LETTERS, vol.14, no.6, pp.4870-4881, 2009 (SCI-Expanded)
- VIII. **A comparative study on citric acid production kinetics of two *Yarrowia lipolytica* strains in two different media**  
Yalcin S. K., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
INDIAN JOURNAL OF BIOTECHNOLOGY, vol.8, no.4, pp.408-417, 2009 (SCI-Expanded)
- IX. **Utilization of Whey and Grape Must for Citric Acid Production by Two *Yarrowia lipolytica* Strains**  
Yalcin S. K., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
FOOD BIOTECHNOLOGY, vol.23, no.3, pp.266-283, 2009 (SCI-Expanded)
- X. **Sulfur analysis of Bolu-Mengen lignite before and after microbiological treatment using reductive pyrolysis and gas chromatography/mass spectrometry**  
Mullens S., Yperman J., Carleer R., Bozdemir T., Durusoy T., Yurum Y.  
ENERGY & FUELS, vol.19, no.3, pp.1029-1036, 2005 (SCI-Expanded)
- XI. **Effects of heating rate and particle size on pyrolysis kinetics of Gediz lignite**  
Guldogan Y., Durusoy T., Bozdemir T.  
ENERGY SOURCES, vol.24, no.8, pp.753-760, 2002 (SCI-Expanded)
- XII. **Biodesulfurization of Mengen lignite with *Rhodococcus rhodochrous*: Effects of lignite concentration and retreatment**  
Bayram Z., Bozdemir T., Durusoy T., Yurum Y.  
ENERGY SOURCES, vol.24, no.7, pp.625-631, 2002 (SCI-Expanded)
- XIII. **Pyrolysis kinetics of blends of Gediz lignite with Denizli peat**  
Güldoğan Y., Bozdemir T., Durusoy T.  
Energy Sources, vol.23, no.4, pp.393-399, 2001 (SCI-Expanded)
- XIV. **Pyrolysis kinetics of blends of Mengen lignite with Denizli peat**  
Güldoğan Y., Durusoy T., Bozdemir T.  
Energy Sources, vol.23, no.7, pp.657-663, 2001 (SCI-Expanded)
- XV. **Effects of heating rate and particle size on pyrolysis kinetics of Mengen lignite**  
Güldoğan Y., Evren V., Durusoy T., Bozdemir T.  
Energy Sources, vol.23, no.4, pp.337-344, 2001 (SCI-Expanded)
- XVI. **Effect of heating rate on pyrolysis kinetics of Tuncbilek lignite**

- Guldogan Y., Bozdemir T., Durusoy T.  
ENERGY SOURCES, vol.22, no.4, pp.305-312, 2000 (SCI-Expanded)
- XVII. **Chemical desulfurization kinetics of Mengen lignite in aqueous sodium carbonate**  
Bozdemir T., Durusoy T.  
ENERGY SOURCES, vol.21, no.9, pp.811-820, 1999 (SCI-Expanded)
- XVIII. **Pyrolysis kinetics of blends of Tuncbilek lignite with Denizli peat**  
Guldogan Y., Durusoy T., Bozdemir T.  
THERMOCHIMICA ACTA, vol.332, no.1, pp.75-81, 1999 (SCI-Expanded)
- XIX. **Effect of Rhodococcus rhodochrous on the pyrolysis kinetics of Mengen lignite**  
Durusoy T., Bozdemir T., Yurum Y.  
FUEL, vol.78, no.3, pp.359-363, 1999 (SCI-Expanded)
- XX. **Biodesulphurization of Mengen lignite by Rhodococcus rhodochrous in a batch stirred and aerated tank fermenter**  
Bayram Z., Bozdemir T., Durusoy T., Yurum Y.  
ACTA BIOTECHNOLOGICA, vol.19, no.4, pp.307-318, 1999 (SCI-Expanded)
- XXI. **Biodesulphurization of Turkish lignites. 3. The effect of lignite type and particle size on microbial desulphurization by Rhodococcus rhodochrous**  
Erincin E., Durusoy T., Bozdemir T., Yurum Y.  
FUEL, vol.77, no.9-10, pp.1121-1124, 1998 (SCI-Expanded)
- XXII. **Optimization of the growth parameters of Aspergillus foetidus**  
Kara A., Bozdemir T.  
ACTA BIOTECHNOLOGICA, vol.18, no.4, pp.327-338, 1998 (SCI-Expanded)
- XXIII. **Biodesulfurization of Turkish lignites .2. Microbial desulfurization of Mengen lignite by the mesophilic microorganism Rhodococcus rhodochrous**  
Durusoy T., Bozdemir T., Erincin E., Yurum Y.  
FUEL, vol.76, no.4, pp.341-344, 1997 (SCI-Expanded)
- XXIV. **Biodesulfurization of Turkish lignites .1. Optimization of the growth parameters of Rhodococcus rhodochrous, a sulfur-removing bacterium**  
Bozdemir T., Durusoy T., Erincin E., Yurum Y.  
FUEL, vol.75, no.13, pp.1596-1600, 1996 (SCI-Expanded)
- XXV. **THE FACTORS AFFECTING THE GROWTH-KINETICS OF SULFOLOBUS-SOLFATARICUS, A SULFUR REMOVING BACTERIUM**  
OZBAS T., DURUSOY T., TANYOLAC A., YURUM Y.  
FUEL PROCESSING TECHNOLOGY, vol.33, no.1, pp.61-75, 1993 (SCI-Expanded)
- XXVI. **OXYGEN-TRANSFER KINETICS OF RIBOFLAVIN FERMENTATION BY ASHBYA-GOSSYPII IN AGITATED FERMENTERS**  
OZBAS T., KUTSAL T.  
ENZYME AND MICROBIAL TECHNOLOGY, vol.14, no.12, pp.984-990, 1992 (SCI-Expanded)
- XXVII. **BIODESULFURIZATION OF SOME TURKISH LIGNITES BY SULFOLOBUS-SOLFATARICUS**  
DURUSOY T., OZBAS T., TANYOLAC A., YURUM Y.  
ENERGY & FUELS, vol.6, no.6, pp.804-808, 1992 (SCI-Expanded)
- XXVIII. **EFFECTS OF GROWTH-FACTORS ON RIBOFLAVIN PRODUCTION BY ASHBYA-GOSSYPII**  
OZBAS T., KUTSAL T.  
ENZYME AND MICROBIAL TECHNOLOGY, vol.13, no.7, pp.594-596, 1991 (SCI-Expanded)
- XXIX. **COMPARATIVE-STUDY OF RIBOFLAVIN PRODUCTION FROM 2 MICROORGANISMS - EREMOTHECIUM-ASHBYII AND ASHBYA-GOSSYPII**  
OZBAS T., KUTSAL T.  
ENZYME AND MICROBIAL TECHNOLOGY, vol.8, no.10, pp.593-596, 1986 (SCI-Expanded)
- XXX. **RIBOFLAVIN PRODUCTION BY EREMOTHECIUM-ASHBYII IN A BATCH STIRRED TANK FERMENTER**  
OZBAS T., KUTSAL T.  
BIOTECHNOLOGY LETTERS, vol.8, no.6, pp.441-444, 1986 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Effects of agitation and aeration rates on riboflavin fermentation by *Ashbya gossypii***  
Ozbas T., KUTSAL T.  
Biotechnology and Applied Biochemistry, vol.13, no.1, pp.97-105, 1991 (Scopus)

## Books

- I. **Sitrik asit üretimi**  
KARASU YALÇIN S., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
in: FERMENTE ÜRÜNLER TEKNOLOJİSİ VE MİKROBİYOLOJİSİ, Erkmen Osman, Erten Hüseyin, Sağlam Hidayet, Editor, Nobel Akademik Yayıncılık Eğitim Danışmanlık Ticaret LTD. ŞTİ, Ankara, pp.679-699, 2020
- II. **Citric Acid Production by Yeasts: Fermentation Conditions, Process Optimization and Strain Improvement**  
Seda K. Y., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
in: Current Research Technology and Education Topics in Applied Microbiology and Microbial Biotechnology, Mendez-Vilas A, Editor, Formatex Research Center, Madrid, pp.1374-1382, 2010

## Papers Published in Refereed Scientific Meetings

- I. **Potential use of hazelnut husk for pullulan production by *Aureobasidium pullulans* AZ-6**  
AKDENİZ OKTAY B., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
FEMS Online Conference on Microbiology, Belgrade, Serbia, 28 - 31 October 2020
- II. **Effects of various nitrogen source combinations on growth and pullulan production characteristics of *Aureobasidium pullulans* AZ-6.**  
MÜJDECİ G. N., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
FEMS Online Conference on Microbiology, Belgrade, Serbia, 28 - 31 October 2020
- III. **Effects of various substrates on growth and pullulan production characteristics of *Aureobasidium pullulans* AZ-6**  
MÜJDECİ G. N., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
10th Balkan Congress of Microbiology, Microbiologia Balkanica, 2017, Sofya, Bulgaria, 16 - 18 November 2017
- IV. **A comparative study on  $\beta$ -carotene production of some *Rhodotorula* strains.**  
MIDIK F., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
10th Balkan Congress of Microbiology. Microbiologia Balkanica' 2017, Sofia, Bulgaria, Sofya, Bulgaria, 16 - 18 November 2017
- V. **A comparative study on beta karoten production of some *Rhodotorula* strains**  
Mıdık F., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
10th Balkan Congress of Microbiology, Microbiologia Balkanica 2017, Sofya, Bulgaria, 16 - 18 November 2017
- VI. **Mikrobiyel bir polisakkarit: Pullulan ve uygulama alanları**  
MÜJDECİ G. N., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
10. Gıda Mühendisliği Kongresi, Antalya, Turkey, 9 - 11 November 2017
- VII. **A comparative study on pullulan production by various *Aureobasidium pullulans* strains.**  
MÜJDECİ G. N., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
FEMS 2017-7th Congress of European Microbiologists, Valencia, Spain, Valensiya, Spain, 9 - 13 July 2017
- VIII. **A comparative study on pullulan production by various *Aureobasidium pullulans***  
MÜJDECİ G. N., BOZDEMİR M. T., ÖZBAŞ Z. Y.  
FEMS 2017-7th Congress of European Microbiologists, Valensiya, 9 - 13 July 2017
- IX. **Influences of different minerals on the growth and citric acid production of *Yarrowia lipolytica***  
Karasu Yalçın S., BOZDEMİR M. T., ÖZBAŞ Z. Y.

## Supported Projects

ÖZBAŞ Z. Y., KARASU-YALÇIN S., ERYAŞAR K., BOZDEMİR M. T., MIDİK F., Project Supported by Higher Education Institutions, Rhodotorula cinsine ait bazı maya türlerinin beta-karoten üretimlerinin incelenmesi, 2016 - 2018

ÖZBAŞ Z. Y., KARA G. N., BOZDEMİR M. T., Project Supported by Higher Education Institutions, Aureobasidium pullulans ile pullulan üretimine etki eden çeşitli parametrelerin incelenmesi, 2015 - 2017

## Metrics

Publication: 42

Citation (WoS): 262

Citation (Scopus): 316

H-Index (WoS): 11

H-Index (Scopus): 12