

## Asst. Prof. MUHAMMED ERKAN KARABEKMEZ

### Personal Information

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### Education Information

Doctorate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 2010 - 2016

Post Graduate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 2004 - 2010

Under Graduate, Boğaziçi Üniversitesi, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1998 - 2004

### Dissertations

Doctorate, Network Topology and Dynamic Data Analysis in *Saccharomyces cerevisiae*, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2016

Post Graduate, Comparative analysis of teafs and NP analysis to integrate interactome and transcriptome data to reveal response to C-pulse in *Saccharomyces cerevisiae*, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2010

### Research Areas

Life Sciences, Bioinformatics, Biological Information, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, İstanbul Medeniyet University, Faculty of Engineering and Natural Sciences , Bioengineering Department , 2017 - Continues

Research Assistant, Bogazici University, Faculty Of Engineering, Department Of Chemistry Engineering, 2010 - 2016

### Courses

Akademik Sunum Becerileri, Under Graduate, 2018 - 2019

Mühendislik Tablo Uygulamaları, Post Graduate, 2018 - 2019

Mühendislik Tablo Uygulamaları, Post Graduate, 2018 - 2019

Bioinformatics, Under Graduate, 2019 - 2020

Biyoinformatik 1, Post Graduate, 2018 - 2019, 2019 - 2020

Metabolik Mühendislik, Post Graduate, 2018 - 2019

Biyoinformatik 1, Post Graduate, 2019 - 2020

Organik Kimya, Under Graduate, 2019 - 2020

Organik Kimya, Under Graduate, 2017 - 2018, 2018 - 2019

Protein Mühendisliği, Doctorate, 2017 - 2018

Organic Chemistry for Biologists, Under Graduate, 2017 - 2018

Biyoinformatiğe Giriş, Under Graduate, 2016 - 2017

Bilimsel Araştırma Yöntemleri, Post Graduate, 2017 - 2018

### Jury Memberships

Doctoral Examination, Doctoral Examination, Marmara Üniversitesi, October, 2019  
Doctoral Examination, Doctoral Examination, Marmara Üniversitesi, October, 2019  
Post Graduate, Post Graduate, Marmara Üniversitesi, August, 2018  
Doctoral Examination, Doctoral Examination, Marmara Üniversitesi, March, 2018

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Integrative genome-wide analysis of long-term effects of doxorubicin on yeast cells**  
Taymaz-Nikerel H., Karabekmez E., Eraslan S., Kirdar B.  
NEW BIOTECHNOLOGY, vol.44, 2018 (Journal Indexed in SCI)
- **Doxorubicin induces an extensive transcriptional and metabolic rewiring in yeast cells**  
Taymaz-Nikerel H., Karabekmez M. E. , Eraslan S., Kirdar B.  
SCIENTIFIC REPORTS, vol.8, 2018 (Journal Indexed in SCI)
- **A novel topological centrality measure capturing biologically important proteins**  
Karabekmez M. E. , Kirdar B.  
MOLECULAR BIOSYSTEMS, vol.12, pp.666-673, 2016 (Journal Indexed in SCI)
- **A Novel Strategy for Selection and Validation of Reference Genes in Dynamic Multidimensional Experimental Design in Yeast**  
Cankorur-Cetinkaya A., Dereli E., Eraslan S., Karabekmez E., Dikicioglu D., Kirdar B.  
PLOS ONE, vol.7, 2012 (Journal Indexed in SCI)
- **How yeast re-programmes its transcriptional profile in response to different nutrient impulses**  
Dikicioglu D., Karabekmez E., Rash B., Pir P., Kirdar B., Oliver S. G.  
BMC SYSTEMS BIOLOGY, vol.5, 2011 (Journal Indexed in SCI)

## Articles Published in Other Journals

- **A modified Soft-thresholding Approach in the Transcriptomic Analysis of Adaptation of E.coli to Alternating Substrate Conditions**  
Karabekmez M. E.  
Hittite Journal of Science and Engineering, vol.6, pp.315-318, 2019 (National Refereed University Journal)
- **Lumping Protein Complexes to Reduce the Complexity of Human Protein-Protein Interaction Network**  
Karabekmez M. E.  
Anadolu Kliniği Tıp Bilimleri Dergisi, vol.24, pp.231-236, 2019 (Other Refereed National Journals)

## Refereed Congress / Symposium Publications in Proceedings

- **Adaptation of E.coli and Alternating Substrate Conditions**  
Karabekmez M. E.  
2nd International Conference on Life and Engineering Sciences, İstanbul, Turkey, 27 - 29 June 2019, pp.1
- **An Attempt to Construct Context Specific Protein-protein Interaction Network of Yeast**  
Karabekmez M. E.  
2nd International Conference on Life and Engineering Science, İstanbul, Turkey, 27 - 29 June 2019, pp.1
- **Integrated Multi-organism Genome Scale Metabolic Modeling of Microbial Community of P.aeruginosa and M.barkeri**  
Karabekmez M. E.  
ECOMB 2019: Eurasian Congress on Molecular Biotechnology, Trabzon, Turkey, 19 - 21 September 2019, pp.163-171
- **A Novel Thresholding Procedure for Assessing Scale-Free Gene Co-Expression Networks**  
KARABEKMEZ M. E.  
International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), Ankara, Turkey, 26 April 2018, pp.45

- **An integrative approach to analyze dynamic transcriptional response of yeast cells to DNA damage**  
KARABEKMEZ M. E.  
FEBS Congress, Aydın, Turkey, 03 September 2016, pp.14-15
- **Dynamic response to DNA damage in *S. cerevisiae***  
Karabekmez M. E. , Kirdar B.  
22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.482

## Supported Projects

KARABEKMEZ M. E. , Project Supported by Higher Education Institutions, ASİMETRİK SİGMOİD FONKSİYONUN AĞIRLIKLILIK GEN EŞ ANLATIM AĞ ANALİZİ METODUNDA KULLANILMASI, 2018 - 2019

## Memberships / Tasks in Scientific Organizations

Türk Biyokimya Derneği, Member, 2011 - Continues

## Scientific Refereeing

Project Supported by Higher Education Institutions, BAP Research Project, Selcuk University, Turkey, October 2019

## Invited Congress and Symposium Activities

Bio Türkiye, Invited Speaker, İstanbul, Turkey, 2020

Sağlıkta Yapay Zeka Kongresi 2020, Invited Speaker, İzmir, Turkey, 2020

Euroasian Congress on Molecular Biotechnology, Working Group, Trabzon, Turkey, 2019

2nd International Conference on Life and Engineering Sciences, Working Group, İstanbul, Turkey, 2019

Uluslararası İslam Eğitimi Kongresi, Invited Speaker, İstanbul, Turkey, 2019

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), Attendee, Ankara, Turkey, 2018

## Citations

Total Citations (WOS):56

h-index (WOS):4

## Invited Talks

Gelenekten geleceğe bilim, Seminar, Kızılay Kadıköy Şubesi, Turkey, December 2019

Biyoinformatik Ve Sağlık Hizmetleri, Workshop, Marmara Üniversitesi, Turkey, May 2019