

## Asst. Prof. BURÇAK DEMİRBAKAN

### Personal Information

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### Education Information

Doctorate, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya / Biyokimya, Turkey 2015 - 2018

Post Graduate, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya/ Biyokimya, Turkey 2012 - 2015

Under Graduate, Tekirdağ Namik Kemal University, Fen-Edebiyat Fakültesi, Kimya, Turkey 2008 - 2012

### Dissertations

Doctorate, Bazı Kardiyovasküler Hastalıkların Biyosensör Sistemleri ile Belirlenmesi ve Gerçek Örneklerde Kullanım Potansiyellerinin Araştırılması, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya / Biyokimya, 2018

Post Graduate, HSP70 in Hassas ve Ekonomik Analizi için Fulleren C60 Temelli bir Biyosensör, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya / Biyokimya, 2015

### Research Areas

Chemistry, Biochemistry, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2018 - Continues

### Professional Experience

Head of Department, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2019 - Continues

Deputy Head of Department, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, 2018 - Continues

### Jury Memberships

Post Graduate, ELEKTROKİMYASAL HE4 İMMÜNOSENSÖRÜNÜN GELİŞTİRİLMESİ, ÇANKIRI KARATEKİN ÜNİVERSİTESİ, July, 2020

Post Graduate, ELEKTROKİMYASAL CA125 İMMÜNOSENSÖRÜNÜN GELİŞTİRİLMESİ, ÇANKIRI KARATEKİN ÜNİVERSİTESİ, July, 2020

Post Graduate, Prunus laurocerasus BİTKİSİNİN KİMYASAL İÇERİĞİNİN BELİRLENMESİ VE ANTİKANSER AKTİVİTE ÖZELLİKLERİNİN GERÇEK ZAMANLI HÜCRE ANALİZ SİSTEMİ İLE İNCELENMESİ, ÇANKIRI KARATEKİN ÜNİVERSİTESİ, June, 2019

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

- I. **A New Approach to Synthesis of Highly Dispersed Gold Nanoparticles via Glucose Oxidase-Immobilized Hydrogel and Usage in The Reduction of 4-Nitrophenol**  
ÖZAY H., Tarimeri N., Güngör Z., DEMİRBAKAN B., ÖZCAN B., SEZGİNTÜRK M. K. , ÖZAY Ö.  
CHEMISTRYSELECT, vol.5, no.29, pp.9143-9152, 2020 (Journal Indexed in SCI)
- II. **A novel ultrasensitive immunosensor based on disposable graphite paper electrodes for troponin T detection in cardiovascular disease**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
TALANTA, vol.213, 2020 (Journal Indexed in SCI)
- III. **A novel electrochemical immunosensor based on disposable ITO-PET electrodes for sensitive detection of PAK 2 antigen**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.848, 2019 (Journal Indexed in SCI)
- IV. **"A sensitive and disposable indium tin oxide based electrochemical immunosensor for label-free detection of MAGE-1"**, TALANTA, vol.169, pp.163-169, 2017  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
TALANTA, vol.169, pp.163-169, 2017 (Journal Indexed in SCI)
- V. **"A novel immunosensor based on fullerene C60 for electrochemical analysis of heat shock protein 70"**, JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.783, pp.201-207, 2016  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.783, pp.201-207, 2016 (Journal Indexed in SCI)
- VI. **Introducing a new method for evaluation of the interaction between an antigen and an antibody: Single frequency impedance analysis for biosensing systems**  
Ozcan B., Demirbakan B., Yesiller G., Sezginturk M. K.  
TALANTA, vol.125, pp.7-13, 2014 (Journal Indexed in SCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **A novel immunosensor system based on polyvinyl alcohol modified disposable graphite paper electrodes for sensitive detection of a cardiac biomarker**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.1
- II. **A novel immunosensor system based on polyvinyl alcohol modified disposable graphite paper electrodes for sensitive detection of a cardiac biomarker**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.1
- III. **A Biochip based on Microfluidic Technology: C1-Inhibitor analysis in human serum samples**  
SEZGİNTÜRK M. K. , ÖZCAN B., DEMİRBAKAN B., Dinçer C., Urban G., Bruch R.  
XX.Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.1-3
- IV. **Design of an electrochemical biosensor system for Suppression of Tumorigenicity 2 detection based on fullerene C60 modified disposable Graphite Paper electrode**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, vol.1, pp.1
- V. **Design of an electrochemical biosensor system for Suppression of Tumorigenicity 2 detection based on fullerene C60 modified disposable Graphite Paper electrode**  
SEZGİNTÜRK M. K. , DEMİRBAKAN B.  
Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, pp.1
- VI. **A Biochip based on Microfluidic Technology: C1-Inhibitor analysis in human serum samples**

- SEZGİNTÜRK M. K. , ÖZCAN B., DEMİRBAKAN B., Dinçer C., Urban G., Bruch R.  
Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, pp.1
- VII. **A Biochip based on Microfluidic Technology: C1-Inhibitor analysis in human serum samples**  
ÖZCAN B., SEZGİNTÜRK M. K. , Dinçer C., Urban G., Bruch R., DEMİRBAKAN B.  
XX.Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.1
- VIII. **A novel single-use graphite paper electrode based electrochemical immunosensor for highly sensitive and repeatable detection of Troponin T**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, vol.1, pp.1
- IX. **A novel single-use graphite paper electrode based electrochemical immunosensor for highly sensitive and repeatable detection of Troponin T**  
SEZGİNTÜRK M. K. , DEMİRBAKAN B.  
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, pp.1
- X. **A sensitive novel electrochemical biosensor based on a silane agent modified disposable electrodes for cardiovascular disease biomarker**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.1
- XI. **sensitive novel electrochemical biosensor based on a silane agent modified disposable electrodes for cardiovascular disease biomarker**  
SEZGİNTÜRK M. K. , DEMİRBAKAN B.  
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.44-46
- XII. **A novel silanization agent based biosensor system: Analytical studies of a regenerative Melanoma Antigen-1 immunosensor by disposable indium tin oxide electrodes**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.1
- XIII. **A novel silanization agent based biosensor system: Analytical studies of a regenerative Melanoma Antigen-1 immunosensor by disposable indium tin oxide electrodes**  
SEZGİNTÜRK M. K. , DEMİRBAKAN B.  
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.185
- XIV. **A novel electrochemical biosensor based on screen printed gold electrode modified with organo-silane for the tumor necrosis factor receptor-associated protein 1 detection**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
12th BBMEC Workshop on International Biosensor Conference, Roma, Italy, 25 - 29 September 2017, pp.1
- XV. **Label-free electrochemical immunosensor for detection of tumor necrosis factor- $\alpha$  based on indium tin oxide**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
3rd International Congress On Biosensors, Ankara, Turkey, 5 - 07 October 2016, pp.1
- XVI. **A novel high reproducible, regenerative, sensitive and cheap biosensor developed by using 3-cyanopropyl trimethoxysilane for PAK2 detection**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016, pp.1
- XVII. **HSP70 tayini için Fulleren C60 temelli bir biyosensör ve karakterizasyon çalışmaları**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
27.Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015, pp.1
- XVIII. **A high sensitive and reproducible immunosensor based on indium tin oxide and silane chemistry**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
2nd INTERNATIONAL BIOSENSOR CONGRESS, İzmir, Turkey, 10 - 12 June 2015, pp.1
- XIX. **A novel immunosensor based on fullerene C60 for elektrochemical analysis of heat shock protein**  
DEMİRBAKAN B., SEZGİNTÜRK M. K.  
4th International Conference on Bio-Sensing Technology, Lizbon, Portugal, 10 - 13 May 2015, pp.1

**XX. Design of an Ultrasensitive Impedimetric Biosensor Using Anti-PTH for Quantification of Parathyroid Hormone**

DEMİRBAKAN B., Özcan B., SEZGİNTÜRK M. K. , Yeşiller Ş. G. , Karaboğa M. N.

BIOMED 2013, Aydın, Turkey, 12 - 15 November 2013, pp.1

**XXI. Design of an ultrasensitive impedimetric biosensor using anti-PTH for quantification of Parathyroid hormone**

ÖZCAN B., DEMİRBAKAN B., Yeşiller G., SEZGİNTÜRK M. K. , Sonuç Karaboğa M. N.

BIOMED 2013, Aydın, Turkey, 12 - 15 November 2013, pp.1

## **Activities in Scientific Journals**

Frontiers , Assistant Editor, 2020 - Continues

## **Citations**

Total Citations (WOS):36

h-index (WOS):2