

## Asst. Prof. BAHDİŞEN GEZER

### Personal Information

**Email:** bahdisen.gezer@usak.edu.tr

**Web:** <https://avesis.usak.edu.tr/bahdisen.gezer>

### International Researcher IDs

ORCID: 0000-0002-2096-7185

Yoksis Researcher ID: 148394

### Education Information

Doctorate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2011 - 2015

Postgraduate, Afyon Kocatepe University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 2004 - 2005

Undergraduate, Ege University, Fen Fakültesi, Astronomi Ve Uzay Bilimleri Bölümü, Turkey 1988 - 1992

### Dissertations

Doctorate, Haşhaş kapsülünden morfinin ekstraksiyonu için çevre dostu pratik bir yöntem geliştirilmesi, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2015

Postgraduate, Organik polimerlerin teknolojide kullanım alanları ve mukavemet spektrum düzeylerinin araştırılması, Afyon Kocatepe University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2005

### Academic Titles / Tasks

Lecturer PhD, Usak University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1994 - Continues

Lecturer, Usak University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1994 - Continues

### Courses

Fizik, Associate Degree, 2019 - 2020, 2017 - 2018, 2016 - 2017

Matematik, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018

Fizik II, Undergraduate, 2019 - 2020

İş Sağlığı ve Güvenliği, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Termodinamik, Undergraduate, 2019 - 2020

Fizikokimya, Associate Degree, 2019 - 2020, 2018 - 2019

Analitik Kimya, Associate Degree, 2019 - 2020, 2017 - 2018

Statik ve Dinamik, Undergraduate, 2019 - 2020, 2017 - 2018, 2016 - 2017

Fizik I, Undergraduate, 2018 - 2019

Fizik, Undergraduate, 2018 - 2019, 2017 - 2018

Bilg. prog., Undergraduate, 2018 - 2019

Mekanik ve Statik, Associate Degree, 2018 - 2019

Su Teknolojisi, Associate Degree, 2017 - 2018

İlk Yardım, Associate Degree, 2017 - 2018

Meslek Etiği, Associate Degree, 2017 - 2018

FİZİK-I, Undergraduate, 2017 - 2018  
İSTATİKSEL DEĞERLENDİRME, Associate Degree, 2017 - 2018  
FİZİKO-KİMYA, Associate Degree, 2017 - 2018  
BİLGİSAYAR PROGLAMA, Undergraduate, 2017 - 2018  
STATİK VE DİNAMİK, Associate Degree, 2017 - 2018  
TEKNİK RESİM, Associate Degree, 2016 - 2017  
FİZİK-II, Undergraduate, 2016 - 2017  
TEKNOLOJİNİN BİLİMSEL İLKELERİ, Associate Degree, 2016 - 2017

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

- I. **Determining optimum carob powder adsorption for cleaning wastewater: intelligent optimization with electro-search algorithm**  
GEZER B., KÖSE U., Zubov D., Deperlioglu O., Vasant P.  
Wireless Networks, vol.26, no.8, pp.5665-5679, 2020 (SCI-Expanded)
- II. **Ultrasonic-assisted extraction and swarm intelligence for calculating optimum values of obtaining boric acid from tincal mineral**  
GEZER B., KÖSE U.  
Processes, vol.7, no.1, 2019 (SCI-Expanded)
- III. **Studies on an Ultrasonic Synthesis, Characterization, and Thermodynamic Analysis of New Metal Nanocatalysts Applied Directly to Alcohol Fuel Cells**  
GEZER B.  
Arabian Journal for Science and Engineering, vol.43, no.11, pp.6203-6209, 2018 (SCI-Expanded)
- IV. **Highly Monodisperse Pt/Rh Nanoparticles Confined in the Graphene Oxide for Highly Efficient and Reusable Sorbents for Methylene Blue Removal from Aqueous Solutions**  
Yildiz Y., Okyay T. O., Sen B., Gezer B., Kuzu S., Savk A., Demir E., Dasdelen Z., Sert H., Sen F.  
ChemistrySelect, vol.2, no.2, pp.697-701, 2017 (SCI-Expanded)
- V. **Activated carbon furnished monodisperse Pt nanocomposites as a superior adsorbent for methylene blue removal from aqueous solutions**  
SERT H., Yıldız Y., Okyay T. O., Sen B., GEZER B., Bozkurt S., Başkaya G., Sen F.  
Journal of Nanoscience and Nanotechnology, vol.17, no.7, pp.4799-4804, 2017 (SCI-Expanded)
- VI. **Reduced graphene oxide (rGO) as highly effective material for the ultrasound assisted boric acid extraction from ulexite ore**  
GEZER B., SERT H., ÖNAL OKYAY T., Bozkurt S., Başkaya G., Şahin B., Ulutürk C., Sen F.  
Chemical Engineering Research and Design, vol.117, pp.542-548, 2017 (SCI-Expanded)
- VII. **Monodisperse Mw-Pt NPs@VC as Highly Efficient and Reusable Adsorbents for Methylene Blue Removal**  
SERT H., Yıldız Y., Okyay T. O., Gezer B., Dasdelen Z., Sen B., Sen F.  
Journal of Cluster Science, vol.27, no.6, pp.1953-1962, 2016 (SCI-Expanded)
- VIII. **Optimization of ultrasound-assisted extraction of morphine from capsules of Papaver Somniferum by response surface methodology**  
Bulduk I., GEZER B., Cengiz M.  
International Journal of Analytical Chemistry, vol.2015, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Removal of Reactive Black 5 Dye from Waste Water by Photocatalytic Method Using TiO<sub>2</sub> Catalyst**  
GEZER B., Gezer R., Gezer C.  
İleri Mühendislik Çalışmaları ve Teknolojileri Dergisi, vol.2, no.2, pp.98-105, 2021 (Peer-Reviewed Journal)

- II. Usage Areas Of Biomaterials In Medical Applications**  
Gezer R., GEZER B., Gezer C.  
International Academic Journal of Applied Bio-Medical Sciences, vol.2, no.1, pp.5-10, 2021 (Peer-Reviewed Journal)
- III. Ag/Aniline blue/n-Si Type Schottky Diode with Organic Dye Interlayers Investigation of Electrical and Photovoltaic Properties**  
GEZER B., gezer C.  
İleri Mühendislik Çalışmaları ve Teknolojileri Dergisi, vol.1, no.1, pp.55-62, 2020 (Peer-Reviewed Journal)
- IV. Cu (II) ADSORPTION WITH ACTIVATED CARBON OBTAINED FROM SEA URCHIN PREPARED BY ULTRASOUND-ASSISTED METHOD**  
GEZER B.  
ENGINEERING SCIENCES, vol.9, no.2, pp.770-780, 2020 (Peer-Reviewed Journal)
- V. Obtaining activated carbon from grape pulp and removing of reactive blue 19 from the aqueous solution**  
GEZER B.  
International Journal of Agriculture Forestry and Life Sciences, vol.4, no.1, pp.62-70, 2020 (Peer-Reviewed Journal)
- VI. Optimization by response surface methodology and obtaining of boric acid from colemanite with AuPdNi powders synthesized by Ultrasound-Assisted**  
GEZER B.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.8, no.1, pp.1173-1184, 2020 (Peer-Reviewed Journal)
- VII. Removal of Pb (II) from aqueous solution with Reactive Red 198 and carbonization of sugar beet pulp with citric acid**  
GEZER B.  
International Journal of Agriculture, Environment and Food Sciences, vol.3, no.4, pp.250-256, 2019 (Peer-Reviewed Journal)
- VIII. Adsorption Behavior Of Methylene Blue Dye Using Carob Powder as Eco-Friendly New Adsorbent For Cleaning Wastewater: Optimization By Response Surface Methodology**  
GEZER B., ERSOY Y.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.2, pp.306-320, 2018 (Peer-Reviewed Journal)
- IX. Optimum condition for obtaining boric acid from tincal with ultrasound-assisted extraction and swarm intelligence based optimization**  
GEZER B., KÖSE U.  
Uluslararası Hakemli Mühendislik ve Fen Bilimleri Dergisi, vol.5, no.12, pp.47-70, 2018 (Peer-Reviewed Journal)
- X. ADSORPTION CAPACITY FOR THE REMOVAL OF ORGANIC DYE POLLUTANTS FROM WASTEWATER USING CAROB POWDER**  
GEZER B.  
International Journal of Agriculture, Forestry and Life Science, vol.2, no.1, pp.1-14, 2018 (Peer-Reviewed Journal)
- XI. Optimization and Investigation of the Design Parameters for Boric Acid Production from Colemanite Using the Ultrasound Assisted Extraction Process**  
GEZER B.  
Journal of Multidisciplinary Developments, 2017 (Peer-Reviewed Journal)
- XII. Methylene blue sheet material Pd/Cu@CNT catalyst and recycling distribution from waste by using the produced non-contact surface material**  
GEZER B., PINARLIK G.  
Journal of Multidisciplinary Developments, vol.23, pp.29-38, 2017 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. New Trends in Engineering Sciences**  
GEZER B., ATALAN M., Gezer R., GEZER C.

in: Platanus Kitap , Prof. Birol KILIÇ, Ph.D. Prof. Gülden BAŞYİĞİT KILIÇ Ph. D., Editor, Duvar Publishing, pp.67-78, 2022

II. Bahdisen

GEZER B.

in: Gece Kitaplığı, GEZER, Editor, Gece kitaplığı, pp.108-124, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **OBTAINING BORON OXIDE (B<sub>2</sub>O<sub>3</sub>) DOCUMENTED TUNGSTEN OXIDE (WO<sub>3</sub>) THIN FILM BY RADIO FREQUENCY (RF) MAGNETRON BREAKING METHOD AND INVESTIGATION OF THEIR STRUCTURAL PROPERTIES**  
GEZER B., ATALAN M., GEZER C., GEZER R.  
INTERNATIONAL CONFERENCE ON ENGINEERING SCIENCES held on November 11-12, 2022 / Baku, Azerbaijan Technical University, Baku, Azerbaijan, 11 November 2022
- II. **INVESTIGATION OF SYNTHESIS AND ELECTROCHEMICAL EFFICIENCY OF CARBON SUPPORTED Pd-OS/WO<sub>3</sub>-C ANODE CATALYSTS BY THE POLYOL METHOD FOR DIRECT METHANOL FUEL CELLS**  
GEZER B., Gezer C., Dinç S.  
II. International Agricultural, Biological Life Science Conference, Edirne, Turkey, 2020, Edirne, Turkey, 1 - 03 September 2020, pp.579
- III. **PRODUCTION OF K<sub>2</sub>NiO<sub>4</sub>-TYPE MATERIALS AS NEW CATHODE MATERIALS FOR SOLID OXIDE FUEL CELLS FUEL CELL FOR UNMANNED AERIAL VEHICLES**  
GEZER B., Gezer C., Dinç S.  
II. International Agricultural, Biological Life Science Conference, 1 - 03 September 2020
- IV. **Synthesis Of PdCoRu Nanostructures With Highly Developed Electrocatalytic Activity By an Easy And Effective A Sonochemical Method For A Direct Methanol Fuel Cell**  
GEZER B.  
1. International Conference on "Agriculture, Forestry Life Sciences", 6 - 08 September 2018
- V. **REMOVAL OF PAINTS BY APPLYING PTRUNI CATALYST TO THE NONWOVEN SURFACE OBTAINED BY USING TEXTILE WASTES**  
GEZER B., URHAN B., ERSOY Y.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- VI. **463 KIRIKKALE BILMES CONGRESS 2018 UNIVERSITY PAINT REMOVAL OF METHYLENE ORANGE (MO) WITH KINOPTILOLITE ZEOLITE USING BOX-BEHNKEN DESIGN PROGRAM**  
GEZER B., URHAN B., ERSOY Y.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- VII. **ACTIVATED CARBON PRODUCTION FROM BEET PULP AND REMOVAL OF METHYLENE BLUE FROM WASTE WATER**  
GEZER B., URHAN B., ERSOY Y.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- VIII. **CARBOTHERMAL TECHNIQUE AND APPLICATION OF BORON CARBIDE TO NON-WOVEN SURFACES OBTAINED FROM TEXTILE WASTES**  
GEZER B., URHAN B., ERSOY Y.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- IX. **SYNTHESIS OF MONODISPERSE Pd/AL<sub>2</sub>O<sub>3</sub> NANOCOMPOSITES FOR DIRECT METHANOL FUEL CELLS AND DEVELOPMENT OF ELECTROCATALYTIC ACTIVITIES**  
GEZER B., URHAN B., ERSOY Y.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- X. **"SYNTHESIS! OF PTCO ANODE NANOCATALYSTS FOR DIRECT ALCOHOL FUEL CELLS AND DIRECT ALCOHOL FUEL CELL APPLICATION**  
GEZER B., URHAN B., ERSOY Y.

3. ULUSLARARASI MÜHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, 4 - 05 May 2018

- XI. **ADSORPTION OF CHROMIUM (VI) FROM WASTE WATER OF LEATHER INDUSTRY BY USING PDA UNICATALYST: OPTIMIZATION WITH RESPONSE SURFACE METHODOLOGY**  
GEZER B., URHAN B., ERSOY Y.  
3. ULUSLARARASI MÜHENDİSLİK VE MİMARLIK KONGRESİ, 4 - 05 May 2018
- XII. **Filtration with methylene blue Pd/Cu@CNT catalyst of impurity in waste water by produced nonwovens in recycling fibers**  
PINARLIK G., GEZER B.  
ICOMUS International Conference on Multidisciplinary Sciences, 25 - 26 November 2017
- XIII. **Optimization of Design Parameters for Producing Boric Acid from Colemanite with UAE and Artificial Intelligence**  
GEZER B., KÖSE U.  
1st International Scientific and Vocational Studies Congress, 5 - 08 October 2017
- XIV. **Optimization of Experimental Design of Adsorption of Methylene Blue from Aqueous Solutions Using Carob Powder by Ultrasound**  
GEZER B., ÖNAL OKYAY T.  
1st International Scientific and Vocational Studies Congress, 5 - 08 October 2017
- XV. **Unmanned Aerial Vehicle Design for a Long Time in the Air**  
GEZER B., SARAÇ R.  
1st International Scientific and Vocational Studies Congress, 5 - 08 October 2017
- XVI. **Optimum Conditions for Obtaining Boric Acid from Tincal with UAE and Swarm Intelligence Based Optimization**  
GEZER B., KÖSE U.  
1st International Scientific and Vocational Studies Congress, 5 - 08 October 2017
- XVII. **Unmanned Aerial Vehicle (UAV) Development of Na-Compatible Pt Base Nanocatalyst Alcohol Fuel Cells**  
GEZER B., AYHAN U., SARAÇ R.  
8th International Advanced Technologies Symposium, 19 - 22 October 2017
- XVIII. **Synthesis, Characterization and Thermodynamic Analysis of New Metal Nanocatalysts for Applicability to Direct Alcohol Fuel Cells**  
GEZER B., SARAÇ R., AYHAN U.  
8th International Advanced Technologies Symposium, 19 - 22 October 2017
- XIX. **Dehydrogenation of dimethyl ammonia borane catalysed by graphene oxide supported monodisperse palladium nickel nanoparticles**  
ŞEN F., SEN B., KUZU S., GEZER B., SERT H., ÖNAL OKYAY T., ERKEN E.  
1st International Mediterranean Science and Engineering Congress, 26 - 28 October 2016
- XX. **Highly monodisperse trimetallic PdRuNi nanoparticles supported on chemically derived graphene**  
GEZER B., ÖNAL OKYAY T., ŞEN F., SERT H.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), 26 - 28 October 2016
- XXI. **Highly monodisperse PVP-stabilized PdNi nanocluster catalyst in hydrogen generation from the dehydrogenation of dimethyl ammonia-borane**  
GEZER B., ÖNAL OKYAY T., ŞEN F., SERT H.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), 26 - 28 October 2016
- XXII. **Novel Alcohol Sensor Based On NiPt100-X@Ppy Ternary Alloy Nanoparticles Coated Electrode**  
GEZER B., ŞEN F.  
3rd International BAU Drug Design Congress Novel Methods and Emerging Targets in Drug Discovery Patented Drug Development, 1 - 03 October 2015
- XXIII. **İlaqəyə Kapsülündən Nospənin Ekstraksiyonunun Response Surface Metodolojisi Kullanarak**

### **Optimizasyonu**

BULDUK İ., GEZER B., CENGİZ M.

7. Ulusal Analitik Kimya Kongresi-Kahramanmaraş, Turkey, 1 - 05 September 2014, pp.22

XXIV. **Respose Surface Metodolojisi ile haşhaş kapsülünden ultrasonik destekli tebain ekstraksiyonu**

BULDUK İ., GEZER B., CENGİZ M.

14. Ulusal kromotografi kongresi, Turkey, 12 - 15 May 2014, pp.34

XXV. **Optimized of Ultrasonid-Assisted Extraction Codeine in poppy capsules by Box-Behnken Design Method**

GEZER B., CENGİZ M., BULDUK İ.

Workshop on Plant Products Chemistry International Symposium on Medicinal – Aromatic Plants, 4 - 07 June 2013

XXVI. **Optimized of Ultrasonid-Assisted Extraction Morphine in poppy capsules by Box-Behnken Design Method**

GEZER B., CENGİZ M., BULDUK İ.

Workshop on Plant Products Chemistry International Symposium on Medicinal – Aromatic Plants, 4 - 07 June 2013

XXVII. **katı oksit yakıt pillerinde (Ba<sub>0.5</sub>Sr<sub>0.5</sub>)<sub>1-x</sub>Sm<sub>x</sub>Co<sub>0.8</sub>Fe<sub>0.2</sub>O<sub>3-D</sub>!in katot olarak incelenmesi**

GEZER B.

1. Ulusal Geri Kazanım Kongresi ve sergisi, Turkey, 2 - 04 May 2012, pp.316-319

XXVIII. **K<sub>2</sub>NiO<sub>4</sub>-type materials new cathode materials for solid oxide fuel cells**

GEZER B.

Energy Challenges for Advanced Materiels and Processes Conference, 25 - 29 May 2011

### **Metrics**

Publication: 50

Citation (Scopus): 174

H-Index (Scopus): 5

### **Non Academic Experience**

EGE ÜNİVERSİTESİ

Hacettepe Üniversitesi