

## Res. Asst. PhD EYLEM TOPKAYA

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-6436-2498

Publons / Web Of Science ResearcherID: F-5520-2018

ScopusID: 56196231600

Yoksis Researcher ID: 199711

### Education Information

Doctorate, Kocaeli University, Fen Bilimleri Enstitüsü, Çevre Mühendisliği Bölümü, Turkey 2014 - 2021

Postgraduate, Gebze Technical University, Institute Of Science, Turkey 2011 - 2014

Undergraduate, Bursa Uludağ University, Faculty Of Engineering, Turkey 2004 - 2009

### Dissertations

Doctorate, TREATABILITY OF ENDOCRINE DISRUPTING CHEMICALS IN WATER AND WASTEWATER BY OZONE AND PHOTOCATALYTIC OXIDATION METHODS: KINETIC STUDIES AND COST EVALUATION OF PROCESS VARIABLES, Kocaeli University, Fen Bilimleri Enstitüsü, Çevre Mühendisliği Bölümü, 2021

Postgraduate, BOYAR MADDE, PESTİSİT ve ANTİBİYOTİK İÇEREN SULARIN FOTOKATALİTİK PROSESLERLE ARITIMINDA ZnO/TiO<sub>2</sub> KOMPOZİT PLAKALARIN KULLANIMI, Gebze Yüksek Teknoloji Enstitüsü, 2014

### Research Areas

Environmental Engineering, Environmental Sciences, Environmental Technology, Water Pollution and Control, Water Supply and Treatment

### Academic Titles / Tasks

Research Assistant, Kocaeli University, Mühendislik Fakültesi, Çevre Mühendisliği, 2018 - Continues

Research Assistant, Kocaeli University, Fen Bilimleri Enstitüsü, Çevre Mühendisliği Bölümü, 2013 - 2018

### Courses

Çevre Koruma, Undergraduate, 2023 - 2024

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

- I. **Removal of microplastics in food packaging industry wastewaters with electrocoagulation process: Optimization by Box-Behnken design**  
Sezer M., Isgoren M., Veli S., Topkaya E., Arslan A.  
Chemosphere, vol.352, 2024 (SCI-Expanded)
- II. **Treatment of Endocrine Disrupting Chemicals from Organized Industrial Zone Wastewater Treatment Plant Effluents by Ozone-Based AOPs: Cost and Toxicity Assessments**  
TOPKAYA E., ARSLAN A.  
Water, Air, and Soil Pollution, vol.234, no.12, 2023 (SCI-Expanded)
- III. **Deep purification of pretreated laundry wastewater through the adsorption by polymeric composites and optimisation of the process**  
VELİ S., ARSLAN A., TOPKAYA E., Gulumser C., Kurtkulak H., Belat B., Zeybek S., Zor S., Dimoglo A.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.103, no.9, pp.2107-2125, 2023 (SCI-Expanded)
- IV. **Experience in using a pilot plant for the treatment and reuse of laundries wastewater: electroflotocoagulation and adsorption**  
Dimoglo A., Veli S., Konukman A. E. S., Gunenc P., Seker M. G., Dinc O., ARSLAN A. S., Isgoren M., Belat B., Kurtkulak H., et al.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.20, no.5, pp.5427-5440, 2023 (SCI-Expanded)
- V. **Diclofenac Degradation by Ozone-Based Oxidation Processes: PROMETHEE Method, Kinetic and Cost-Effectiveness Study**  
TOPKAYA E., ARSLAN A., YATMAZ H. C.  
Ozone-Science & Engineering, vol.43, pp.136-146, 2021 (SCI-Expanded)
- VI. **Optimization of Ultrasonication Process for the Degradation of Linear Alkyl Benzene Sulfonic Acid by Response Surface Methodology**  
Arslan A., Topkaya E., Veli S., Bingöl D.  
CLEAN-SOIL AIR WATER, vol.46, 2018 (SCI-Expanded)
- VII. **Removal of anionic surfactant sodium dodecyl sulfate from aqueous solutions by O<sub>3</sub>/UV/H<sub>2</sub>O<sub>2</sub> advanced oxidation process: Process optimization with response surface methodology approach**  
Arslan A., Topkaya E., Bingöl D., Veli S.  
SUSTAINABLE ENVIRONMENT RESEARCH, vol.28, pp.65-71, 2018 (SCI-Expanded)
- VIII. **Application of O<sub>3</sub>/UV/ H<sub>2</sub>O<sub>2</sub> oxidation and process optimization for treatment of potato chips manufacturing wastewater**  
ARSLAN A., TOPKAYA E., ÖZBAY B., ÖZBAY İ., VELİ S.  
WATER AND ENVIRONMENT JOURNAL, vol.31, no.1, pp.64-71, 2017 (SCI-Expanded)
- IX. **Pure ZnO and composite ZnO/TiO<sub>2</sub> catalyst plates: A comparative study for the degradation of azo dye, pesticide and antibiotic in aqueous solutions**  
Topkaya E., Konyar M., Yatmaz H. C., Ozturk K.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.430, pp.6-11, 2014 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Water Recovery From The Secondary Treatment Effluent Of Urban Wastewater Treatment Plant Using Nanofiltration Process**  
DOĞAN E. C., NARCI A. O., YAŞAR A., Topkaya E., Arslan A., VELİ S.  
Journal of advanced research in natural and applied sciences (Online), vol.9, no.2, pp.355-374, 2023 (Peer-Reviewed Journal)
- II. **Advanced treatment of pre-treated commercial laundry wastewater by adsorption process: Experimental design and cost evaluation**  
Veli S., Arslan A., Gülümser Ç., Topkaya E., Kurtkulak H., Zeybek Ş., Dimoglo A.

## Refereed Congress / Symposium Publications in Proceedings

- I. **Telon Red MGWN Tekstil Boyasının Sonokimyasal Arıtımının İncelenmesi (Investigation of Sonochemical Treatment of Telon Red MGWN Textile Dye)**  
TEKMAN E., TOPKAYA E., KURT M. A., ARSLAN A.  
4. International Cappadocia Scientific Research Congress, Nevşehir, Turkey, 17 April 2023
- II. **OZON BAZLI İLERİ OKSİDASYON PROSESLERİ İLE SULU ÇÖZELTİLERDEN TRİKLOSANIN ARITIMI (TREATMENT OF TRICLOSAN FROM AQUEOUS SOLUTIONS BY OZONE BASED ADVANCED OXIDATION PROCESSES)**  
ARSLAN A., TOPKAYA E.  
14. Ulusal 2. Uluslararası Çevre Mühendisliği Kongresi 2021, Kocaeli, Turkey, 09 December 2021
- III. **Metal Kaplama Endüstrisine Ait Atıksuların Fenton Prosesi ile Arıtımının İncelenmesi**  
ARSLAN A., CAN DOĞAN E., TOPKAYA E., NARCI A. O., BAŞTAR H., AÇIKGÖZ K., VELİ S.  
I. Uluslararası Çevre Mühendisliği Kongresi, Kocaeli, Turkey, 10 - 12 October 2019, pp.326-333
- IV. **Modeling of the Adsorption Process of Industrial Laundry Wastewaters with the Sunflower Seeds-Pyrrole-FeCl<sub>3</sub> Composite**  
VELİ S., İŞGÖREN M., ARSLAN A., TOPKAYA E., GÜLÜMSER Ç., KURTKULAK H., BELAT B., ZEYBEK Ş., ZOR S., DİMOGLO A.  
2nd International Conferences on Science and Technology (ICONST'xx19), Prizren, Serbia And Montenegro, 26 - 30 August 2019, pp.181-190
- V. **Metal Kaplama Endüstrisine Ait Atıksuların Fenton Prosesi İle Arıtımının İncelenmesi**  
ARSLAN A., CAN DOĞAN E., TOPKAYA E., NARCI A. O., Baştar H., Açıkğöz K., VELİ S.  
13.Ulusal, 1.Uluslararası Çevre Mühendisliği Kongresi, Kocaeli, Turkey, 10 - 12 October 2019, pp.1-8
- VI. **Synthesis of Waste Shells/Pyrrole-FeCl<sub>3</sub> Composite and Application in Treatment of Industrial Laundry Wastewater**  
VELİ S., ARSLAN A., İŞGÖREN M., TOPKAYA E., GÜLÜMSER Ç., KURTKULAK H., ZEYBEK Ş., ZOR S., DİMOGLO A.  
International Congress on Engineering and Architecture (ENAR-2018), Antalya, Turkey, 14 - 16 November 2018, vol.1, pp.833-842
- VII. **Evaluation of Reaction Variables in the Adsorption Process of Industrial Laundry Wastewaters with the Rice Husk Shell-PAn(K2S2O8) Composite by Response Surface Methodology**  
VELİ S., ARSLAN A., İŞGÖREN M., TOPKAYA E., GÜLÜMSER Ç., KURTKULAK H., ZEYBEK Ş., ZOR S., DİMOGLO A.  
International Congress on Engineering and Architecture (ENAR-2018), Antalya, Turkey, 14 - 16 November 2018, vol.1, pp.862-873
- VIII. **Synthesis of Waste Shells/Pyrrole-FeCl<sub>3</sub> Composites and Application in Treatment of Industrial Laundry Wastewater**  
VELİ S., ARSLAN A., İŞGÖREN M., TOPKAYA E., Gülümser Ç., Kurtkulak H., Zeybek Ş., ZOR S., DİMOGLO A.  
Congress on Engineering and Architecture (ENAR-2018), Alanya, Turkey, 14 - 16 November 2018, pp.804-813
- IX. **Investigation of Bisphenol A Solutions Treatability by Using Ozone Based Oxidation Processes**  
TOPKAYA E., ARSLAN A.  
4th International Conference on Environmental Science and Technology- ICOEST, Kiev, Ukraine, 19 - 23 September 2018, pp.164-171
- X. **Investigation of the Use of Adsorbents Derived from Waste Shells with Addition of PAn/K2S2O8 in Laundry Wastewater Treatment by Adsorption Methods,**  
VELİ S., ARSLAN A., TOPKAYA E., GÜLÜMSER Ç., KURTKULAK H., ZEYBEK Ş., DİMOGLO A.  
4th International Conference on Environmental Science and Technology- ICOEST, kiev, Ukraine, 19 - 23 September 2018, pp.158-163
- XI. **Investigation of Food Industry Wastewater Treatment with Aqua-Multalite/Polypyrrole Composite Adsorption**

ARSLAN A., VELİ S., TOPKAYA E.

4th International Turkic World Conference on Chemical Sciences and Technologies, Kiev, Ukraine, 7 - 10 September 2018

- XII. **Investigation of Greywater Treatment by Adsorption Process Using Polymeric Composites Supported with Activated Carbon**  
VELİ S., ARSLAN A., TOPKAYA E., KURTKULAK H., ZEYBEK Ş., GÜLÜMSER Ç., DİMOĞLO A.  
3.International Conference on Civil and Environmental Engineering, İzmir, Turkey, 24 - 27 April 2018, pp.628-634
- XIII. **Treatability of Bisphenol A Aqueous Solutions with Advanced Oxidation processes by Based on Ozonation**  
TOPKAYA E., ARSLAN A.  
3.International Conference on Civil and Environmental Engineering, İzmir, Turkey, 24 - 27 April 2018, pp.601-607
- XIV. **Activated Carbon Production from Walnut Shell by Application of Different Activating Agents**  
VELİ S., ARSLAN A., ZEYBEK Ş., KURTKULAK H., TOPKAYA E., GÜLÜMSER Ç., DİMOĞLO A.  
3.International Conference on Civil and Environmental Engineering, İzmir, Turkey, 24 - 27 April 2018
- XV. **Removal of linear alkyl benzen sulphonic acid by sonication process**  
ARSLAN A., TOPKAYA E., VELİ S., BİNGÖL D.  
3RD INTERNATIONAL CONFERENCE ON ENVIRONMENTAL SCIENCE AND TECHNOLOGY, Budapest, Hungary, 19 - 23 October 2017, pp.15-21
- XVI. **Removal of Linear Alkyl Benzene Sulphonic Acid bySonication Process**  
ARSLAN A., TOPKAYA E., VELİ S., BİNGÖL D.  
III International Conference on Environmental Science and Technology, Budapest, Hungary, 19 - 23 October 2017, pp.15-21
- XVII. **Cost Evaluation of Aqueous Solutions Containing ofAnionic Surfactant by US Process Treatability**  
TOPKAYA E., ARSLAN A., VELİ S.  
III International Conference on Environmental Science and Technology, Budapest, Hungary, 19 - 23 October 2017, pp.1-6
- XVIII. **Removal of Linear Alkyl Benzene Sulphonic Acid in Aqueous Solution by Ozone and Photocatalytic Ozone Processes**  
ARSLAN A., VELİ S., TOPKAYA E., ZOR S.  
2nd International Conference on Civil and Environmental Engineering (ICOCEE-2017), Nevşehir, Turkey, 8 - 10 May 2017, vol.1, pp.3565-3576
- XIX. **Removal of Linear Alkyl Benzene Sulphonic Acid in aqueous solution by ozone and photocatalytic ozone processes**  
Arslan A., Veli S., Topkaya E., Zor S.  
The International Conference on Civil and Environmental Engineering, Nevşehir, Turkey, 8 - 10 May 2017, pp.3565-3574
- XX. **Treatability of Wastewaters Containing Methylene Blue with Ultrasonic Processes**  
ARSLAN A., VELİ S., TOPKAYA E.  
ICOCEE,2017- 2nd International Conference on Civil and Environmental Engineering, 8 - 10 May 2017
- XXI. **An Investigation of Malathion Treatability by O<sub>3</sub> and O<sub>3</sub> UV Processes from Aqueous Solutions**  
İŞGÖREN M., ARSLAN A., TOPKAYA E., VELİ S.  
International Science and Technology Conference, Viyana, Austria, 13 - 15 July 2016
- XXII. **Treatability of Food Industry Wastewater by O<sub>3</sub> UV H<sub>2</sub>O<sub>2</sub> Advanced Oxidation Processes**  
TOPKAYA E., ARSLAN A., ÖZBAY B., ÖZBAY İ., VELİ S.  
International Science and Technology conference, viyana, Austria, 13 - 15 July 2016

## Supported Projects

CAN DOĞAN E., TOPKAYA E., Project Supported by Higher Education Institutions, Çeşme Sularında Trihalometan Seviyelerinin Tespiti ve Sebep Olacağı Sağlık Riskleri, 2023 - Continues

ARSLAN A., Kuru S., Salihoğlu E. Z., TOPKAYA E., SEZER M., AKSAN S., VELİ S., Project Supported by Higher Education Institutions, Evsel Atıksu Arıtma Tesisi Çıkış Sularında Mikroplastiklerin Tespiti ve Kontrol Yöntemleri, 2022 - 2023

ARSLAN A., TOPKAYA E., Project Supported by Higher Education Institutions, SU VE ATIKSU ORTAMINDA ENDOKRİN BOZUCU KİMYASALLARIN OZON VE FOTOKATALİTİK OKSİDASYON YÖNTEMLERİ İLE ARITILABİLİRLİĞİ: KİNETİK ÇALIŞMALARI VE PROSES DEĞİŞKENLERİNİN MALİYET DEĞERLENDİRMESİ, 2017 - 2021

Topkaya E., Project Supported by Higher Education Institutions, SU VE ATIKSU ORTAMINDA ENDOKRİN BOZUCU KİMYASALLARIN OZON VE FOTOKATALİTİK OKSİDASYON YÖNTEMLERİ İLE ARITILABİLİRLİĞİ: KİNETİK ÇALIŞMALARI VE PROSES DEĞİŞKENLERİNİN MALİYET DEĞERLENDİRMESİ, 2017 - 2021

Veli S., Arslan A., Demirel S., Gül Şeker M., TUBITAK Project, Endüstriyel Çamaşırhanelerde Atıksuyun Geri Kazanımına Yönelik Arıtım Süreçlerinin Geliştirilmesi, 2017 - 2019

Topkaya E., Project Supported by Higher Education Institutions, Lineer alkil benzen sülfonat içeren atıksuların sonikasyon prosesi ve ozonlamaya dayalı ileri oksidasyon Polimerik nano kompozit destekli prosesleri ile arıtılabilirliğinin incelenmesi, 2016 - 2018

## Scientific Refereeing

Journal of advanced research in natural and applied sciences (Online), National Scientific Refreed Journal, December 2021

## Metrics

Publication: 33

Citation (WoS): 197

Citation (Scopus): 217

H-Index (WoS): 6

H-Index (Scopus): 6