

## Assoc. Prof. Ayşenur TUNCUK

### Personal Information

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### Education Information

Doctorate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, Turkey 2006 - 2012

Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2003 - 2006

Undergraduate, Hacettepe University, Fen Fakültesi, Kimya, Turkey Continues

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Kuvars cevherinin kimyasal yöntemlerle saflaştırılması, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, 2012

Postgraduate, Ham Petrol Fraksiyonların Biyolojik Bozunma Sonrası Fizikokimyasal Özelliklerinin Değişimi, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Kimya, 2006

### Research Areas

Mining Engineering and Technology, Ore-Dressing, Chemical-Biological Winning Techniques and Mineral Processing, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Suleyman Demirel University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2020 - Continues

Lecturer PhD, Suleyman Demirel University, Mühendislik Fakültesi, Maden Mühendisliği, 2006 - Continues

### Courses

MÜHENDİSLİKTE FİZİKOKİMYA, Undergraduate, 2017 - 2018

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

1. A novel approach based on solvent displacement crystallisation for iron removal and copper

**recovery from solutions of semi-pilot scale bioleaching of WPCBs**

Erust C., Akcil A., TUNCUK A., DEVECİ H., YAZICI E. Y. , PANDA S.

JOURNAL OF CLEANER PRODUCTION, vol.294, 2021 (Journal Indexed in SCI)

- II. **Intensified acidophilic bioleaching of multi-metals from waste printed circuit boards (WPCBs) of spent mobile phones**  
Erust C., Akcil A. U. , TUNCUK A., PANDA S.  
Journal of Chemical Technology and Biotechnology, vol.95, no.8, pp.2272-2285, 2020 (Journal Indexed in SCI Expanded)
- III. **A Multi-stage Process for Recovery of Neodymium (Nd) and Dysprosium (Dy) from Spent Hard Disc Drives (HDDs)**  
Erust C., Akcil A. U. , Tuncuk A., Deveci H., Yazici E. Y.  
MINERAL PROCESSING AND EXTRACTIVE METALLURGY REVIEW, 2019 (Journal Indexed in SCI)
- IV. **Lab scale optimization and two-step sequential bench scale reactor leaching tests for the chemical dissolution of Cu, Au & Ag from waste electrical and electronic equipment (WEEE)**  
TUNCUK A.  
WASTE MANAGEMENT, vol.95, pp.636-643, 2019 (Journal Indexed in SCI)
- V. **Effect of Span-80 and ultrasonication on biodesulphurization of lignite by Rhodococcus erythropolis: Lab to semi-pilot scale tests**  
MISHRA S., Akcil A. U. , PANDA S., TUNCUK A.  
MINERALS ENGINEERING, vol.119, pp.183-190, 2018 (Journal Indexed in SCI)
- VI. **Iron removal in production of purified quartz by hydrometallurgical process**  
TUNCUK A., Akcil A.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.153, pp.44-50, 2016 (Journal Indexed in SCI)
- VII. **Recovery of vanadium from spent catalysts of sulfuric acid plant by using inorganic and organic acids: Laboratory and semi-pilot tests**  
ERUST C., Akcil A. U. , BEDELOVA Z., ANARBEKOV K., BAIKONUROVA A., TUNCUK A.  
WASTE MANAGEMENT, vol.49, pp.455-461, 2016 (Journal Indexed in SCI)
- VIII. **Recovery of Gallium and Aluminum from Electrofilter Dust of Alumina Calcination Plant in Bayer Process**  
Okudan M. D. , Akcil A., TUNCUK A., DEVECİ H.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.50, no.16, pp.2596-2605, 2015 (Journal Indexed in SCI)
- IX. **A Potential Alternative for Precious Metal Recovery from E-waste: Iodine Leaching**  
Sahin M., Akcil A., Erust C., Altynbek S., Gahan C. S. , TUNCUK A.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.50, no.16, pp.2587-2595, 2015 (Journal Indexed in SCI)
- X. **Precious metal recovery from waste printed circuit boards using cyanide and non-cyanide lixiviants - A review**  
Akcil A., Erust C., Gahan C. S. , Ozgun M., Sahin M., TUNCUK A.  
WASTE MANAGEMENT, vol.45, pp.258-271, 2015 (Journal Indexed in SCI)
- XI. **A review of metal recovery from spent petroleum catalysts and ash**  
Akcil A., Veglio F., Ferella F., Okudan M. D. , TUNCUK A.  
WASTE MANAGEMENT, vol.45, pp.420-433, 2015 (Journal Indexed in SCI)
- XII. **Effect of parameters on vanadium recovery from by-products of the Bayer process**  
Okudan M. D. , Akcil A., TUNCUK A., DEVECİ H.  
HYDROMETALLURGY, vol.152, pp.76-83, 2015 (Journal Indexed in SCI)
- XIII. **REMOVAL OF IRON FROM QUARTZ ORE USING DIFFERENT ACIDS: A LABORATORY-SCALE REACTOR STUDY**  
TUNCUK A., AKÇİL A. U.  
MINERAL PROCESSING AND EXTRACTIVE METALLURGY REVIEW, vol.35, no.4, pp.217-228, 2014 (Journal Indexed in SCI)
- XIV. **Biohydrometallurgy of secondary metal resources: a potential alternative approach for metal recovery**

Erust C., Akcil A., Gahan C. S. , TUNCUK A., DEVECİ H.

JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.88, no.12, pp.2115-2132, 2013 (Journal Indexed in SCI)

- XV. **Factorial experiments for iron removal from kaolin by using single and two-step leaching with sulfuric acid**  
TUNCUK A., CIFTLIK S., AKÇİL A. U.  
HYDROMETALLURGY, vol.134, pp.80-86, 2013 (Journal Indexed in SCI)
- XVI. **Aqueous metal recovery techniques from e-scrap: Hydrometallurgy in recycling**  
TUNCUK A., Stazi V., AKÇİL A. U. , YAZICI E. Y. , DEVECİ H.  
MINERALS ENGINEERING, vol.25, no.1, pp.28-37, 2012 (Journal Indexed in SCI)
- XVII. **Experimental design and process analysis for acidic leaching of metal-rich glass wastes**  
TUNCUK A., ÇİFTÇİ H., AKÇİL A. U. , OGNANOVA A., Veglio F.  
WASTE MANAGEMENT & RESEARCH, vol.28, no.5, pp.445-454, 2010 (Journal Indexed in SCI)

### Articles Published in Other Journals

- I. **E-Atıklardan Metal Kazanımında Çözücülerin ve Oksitleyicilerin Etkileri**  
TUNCUK A.  
Bilimsel Madencilik Dergisi, vol.57, no.4, pp.233-246, 2018 (Other Refereed National Journals)
- II. **Asidik ve Bazik Ortamda Bayer Prosesi Yan Ürününden Galyum Kazanımı**  
OKUDAN M. D. , AKÇİL A. U. , TUNCUK A., DEVECİ H.  
Madencilik Dergisi, vol.53, pp.3-12, 2014 (Other Refereed National Journals)
- III. **Asidik ve Bazik Ortamda Bayer Prosesi Yan Ürününden Ga Kazanımı**  
OKUDAN M. D. , AKÇİL A. U. , TUNCUK A., DEVECİ H.  
MADENCİLİK DERGİSİ, no.53, pp.1-12, 2014 (Other Refereed National Journals)
- IV. **Asit Liçi Uygulamasıyla Yüksek Kalitede Kuvars Üretiminde Çözücü (H<sub>2</sub>SO<sub>4</sub> ve C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>) ve İndirgeyici (H<sub>2</sub>O<sub>2</sub>) Etkisi**  
TUNCUK A., AKÇİL A. U.  
MADENCİLİK DERGİSİ, no.52, pp.9-20, 2013 (Other Refereed National Journals)
- V. **İkincil kaynaklardan metal geri kazanımında çevresel bir yaklaşım: Biyoliç**  
ERÜST C., TUNCUK A., AKÇİL A. U.  
Recycling Dergisi, vol.1, no.60, pp.74-78, 2012 (National Non-Refereed Journal)
- VI. **Günümüz Kentsel Madencilğinde E Atıklar**  
ŞAHİN M., ERÜST C., TUNCUK A., AKÇİL A. U.  
TSE Standard Teknik ve Ekonomik Dergi, vol.1, no.605, pp.65-69, 2012 (National Non-Refereed Journal)
- VII. **Farklı Organik Asitlerin Kaolen Cevherinden Demirin Uzaklaştırılmasındaki Etkileri**  
TUNCUK A., CIFTLIK S., Güneş N., Handırı İ., ÇİFTÇİ H., AKÇİL A. U.  
MADENCİLİK DERGİSİ, no.49, pp.3-16, 2010 (Other Refereed National Journals)
- VIII. **Borik Asit Üretiminde Amonyum Tuzları, İnorganik ve Organik Asit Liç Sistemlerinin İncelenmesi**  
AKÇİL A. U. , TUNCUK A., DEVECİ H.  
MADENCİLİK DERGİSİ, no.48, pp.3-16, 2009 (Other Refereed National Journals)
- IX. **Kuvarsın Saflaştırılmasında Kullanılan Kimyasal Yöntemlerin İncelenmesi**  
AKÇİL A. U. , TUNCUK A., DEVECİ H.  
MADENCİLİK DERGİSİ, no.46, pp.3-10, 2007 (Other Refereed National Journals)
- X. **Kaolenlerin safsızlaştırılmasında kimyasal ve biyolojik yöntemlerin incelenmesi**  
AKÇİL A. U. , TUNCUK A.  
Kil Bilimi ve Teknolojisi, vol.1, no.2, pp.59-69, 2006 (Other Refereed National Journals)

## Books & Book Chapters

### I. Influence of chloride in Biohydrometallurgy: A review

AKÇİL A. U., GAHAN C. S., ERÜST C., TUNCUK A.

in: Industrial and Environmental Biotechnology, Pramanik Krishna, Patra Jayanta Kumar, Editor, STUDIUM PRESS (INDIA) PVT.LTD, pp.45-69, 2014

### II. Influence of chloride on the Chemolithotrophic acidophiles in Biohydrometallurgy

AKÇİL A. U., GAHAN C. S., ERUST C., TUNCUK A.

in: A review In: Industrial and Environmental Biotechnology, Pramanik K., Patra J.K., Editor, Studium Press (India) Pvt. Ltd. New Delhi, India, New Delhi, pp.45-69, 2013

## Refereed Congress / Symposium Publications in Proceedings

### I. Aqueous Metal Recovery from Waste Central Processing Unit (WCPU)

TUNCUK A., AKÇİL A. U.

16th International Mineral Processing Symposium (IMPS 2018), Antalya, Turkey, 23 - 25 October 2018, pp.286-291

### II. BIODESULPHURIZATION ABILITIES OF ACIDOPHILIC STRAIN TOWARDS SULPHUR REMOVAL FROM TURKISH LIGNITE IN THE PRESENCE OF CHEMICAL SURFACTANT

MISHRA S., AKÇİL A. U., PANDA S., TUNCUK A., ERUST C., AĞCASULU İ.

15th International Mineral Processing Symposium, İstanbul, Turkey, 19 - 21 October 2016, pp.916-924

### III. Bio-dissolution of Arsenic from Industrial Pyritic Ash Waste

PANDA S., AKÇİL A. U., MISHRA S., TUNCUK A., ERUST C., Agacasulu I.

16th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP) / International Symposium on Computer Applications (CAMI), İstanbul, Turkey, 5 - 07 October 2016

### IV. Waste to Resource Evaluation of Electrofiltration Dust in Bayer Process

AKÇİL A. U., TUNCUK A., OKUDAN M. D., DEVECİ H.

World Resources Forum 2013, Davos, Switzerland, 6 - 09 October 2013

### V. Determination of the Optimum Conditions for the Leaching of Colemanite in Ammonium Chloride Solutions

ÇİFTÇİ H., İSMAİL H., TUNCUK A., AKÇİL A. U.

11th International Multidisciplinary Scientific GeoConference - SGEM 2011, 20 - 25 June 2011, pp.1117-1124

### VI. Effects of Leaching Parameters on Boric Acid Production from Colemanite in Acetic Acid Solutions

ÇİFTÇİ H., HANDIRI İ., TUNCUK A., AKÇİL A. U.

12th International Mineral Processing Symposium, 6 - 08 October 2010, pp.599-607

### VII. Recovery of Lithium from Portable Li ion Spent Batteries A Review

KÜKRER T., TUNCUK A., KARAKAYA E., VEGLIO F., BEOLCHINI F., AKÇİL A. U., KİTİŞ M.

VARIREI 2007 Conference, L'Aquila, Italy, 27 - 29 June 2007

### VIII. Recovery of Lithium from Spent Portable Li ion Batteries: A Review

Kükreker T., TUNCUK A., SAYILGAN E., Veglio F., Beolchini F., AKÇİL A. U., KİTİŞ M.

VI. International Congress Valorisation and Recycling of Industrial Waste, 27 - 29 June 2007

## Supported Projects

TUNCUK A., AKÇİL A. U., TUBITAK Project, Siyanüre Alternatif Çözücüler ile E-Atıklardan Metallerin Kazanımı, 2016 - 2018

TUNCUK A., Other Supported Projects, Elektronik Atıklardan Nadir Toprak Elementleri Ve Değerli Metallerin Geri Kazanımı İçin Biyoteknolojik Yaklaşım, 2014 - 2018

AKÇİL A. U., ÇİFTÇİ H., TUNCUK A., DEVECİ H., Project Supported by Higher Education Institutions, Organik Asit ve

Amonyum Tuzu ile Borik Asit Üretiminde AR-GE Çalışması, 2011 - 2013

ÇİFTÇİ H., AKÇİL A. U. , TUNCUK A., Project Supported by Higher Education Institutions, Kuvarsın Saflaştırılmasında Asitlerin Etkisi, 2011 - 2012

AKÇİL A. U. , ÇİFTÇİ H., TUNCUK A., Project Supported by Higher Education Institutions, Kaolenden Metal Uzaklaştırmada İnorganik Asitlerin ve İndirgeyici Reaktiflerin Önemi, 2011 - 2012

## **Citations**

Total Citations (WOS):722

h-index (WOS):8