



## Prof. Orhan Özdemir



### Personal Information

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#### International Researcher IDs

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### Education Information

2008 - 2010	Post Doctorate, The University of Queensland, Engineering Faculty, Chemical Engineering, Australia
2002 - 2008	Doctorate, The University of Utah, Earth Science Faculty, Metallurgical Engineering, United States Of America
1998 - 2001	Postgraduate, İstanbul Technical University, Maden, Maden Mühendisliği, Turkey
1993 - 1998	Undergraduate, İstanbul Technical University, Maden, Maden Mühendisliği, Turkey

### Foreign Languages

English, C1 Advanced

### Dissertations

2008	Surface Chemistry in the Flotation of Trona and Other Soluble Salts, The University of Utah, Earth Sciences, Metallurgical Engineering, Doctorate
2001	Characterization and Recovery of Fly-ash by-products from Low-rank Coals, İstanbul Technical University, Maden, Maden Mühendisliği, Postgraduate

### Research Areas

Mining Engineering and Technology, Ore-Dressing, Benefication by Gravity, Dense-Medium, Magnetic and Electrostatic, Flotation and Flocculation, Dewatering, Agglomeration, Chemical-Biological Winning Techniques and Mineral Processing, Engineering and Technology

### Academic Titles / Tasks

2023 - Continues	Professor, İstanbul Technical University, Maden, Cevher Hazırlama Mühendisliği
2020 - 2023	Professor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Mining Engineering
2014 - 2020	Associate Professor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Mining Engineering

2010 - 2014	Assistant Professor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Mining Engineering
2008 - 2010	Researcher, The University of Queensland, Faculty of Engineering, Architecture and Information Technology, Chemical Engineering Department
2002 - 2008	Research Assistant, The University of Utah, Earth Science, Metallurgical Engineering Department

## Academic and Administrative Experience

2013 - 2013	Deputy Head of Department, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Mining Engineering
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## Advising Theses

Continues	Özdemir O., Kurşun Ünver İ., Doctorate, S.Mohamed(Student), Investigation of the Effects of Water Quality in Flotation on Froth Stability and Bubble-Particle Interaction
2022	Özdemir O., Çınar M., Doctorate, E.DURGUT(Student), INVESTIGATION of ENRICHMENT and INDUSTRIAL USES of HALLOYSITE ORE
2022	Özdemir O., Doctorate, K.BATJARGAL(Student), Contribution of bubble-bubble and bubble-particle interactions to flotation of fine minerals
2018	Özdemir O., Postgraduate, E.İŞLEK(Student), Investigation of Effect of Dissolved Ions in Plant Water on Flotation Behaviour of Minerals in Terms of Bubble Coalescence
2017	Özdemir O., Çelik M. S., Doctorate, D.ŞENOL(Student), EXPERIMENTAL AND THEORETICAL ANALYSIS OF MOLECULAR INTERACTIONS IN DIFFERENT ORIGINATED COLEMANITE SUSPENSIONS
2016	Özdemir O., Özkan Ş. G., Doctorate, C.GÜNGÖREN(Student), EFFECT OF ULTRASONIC ENERGY ON PARTICLE-BUBBLE INTERACTIONS DURING MINERAL FLOTATION
2014	Özdemir O., Postgraduate, Ö.Fehmi(Student), INVESTIGATION OF EFFECT OF HEAT TREATMENT ON THE FLOTATION OF TURKISH LIGNITES IN THE PRESENCE OF MONOVALENT AND BIVALENT SALTS
2014	Özdemir O., Postgraduate, R.Ihsan(Student), INVESTIGATION OF ALTERNATIVE RAW MATERIALS USED IN CERAMIC PRODUCTION AND COST REDUCTION STUDIES

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

- I. Effect of blunging process on purification of halloysite ore from ferrous impurities by dry magnetic separation  
Durgut E., Çınar M., Boylu F., Özdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.60, no.2, pp.1-14, 2024 (SCI-Expanded)
- II. Correlation of Flotation Recoveries and Bubble-Particle Attachment Time for Dodecyl Ammonium Hydrochloride/Frother/Quartz Flotation System  
Batjargal K., Güven O., Ozdemir O., Boylu F., Pural Y. E., Çelik M. S.  
Minerals, vol.13, no.10, 2023 (SCI-Expanded)
- III. Synergistic Effect of Frequently Found Ions in the Flotation of Pb-Zn Sulfide Ores on Air/Water Interface  
Güngören C., Muse S. M., Terzi M., Eskibalcı M. F., Kurşun Ünver İ., Özdemir O.  
MINERALS, vol.13, no.10, pp.1-19, 2023 (SCI-Expanded)
- IV. Surface Chemistry Tuning Solutions for Flotation of Fine Particles  
Karakashev S. I., Grozev N. A., Mircheva K., Ata S., Bournival G., Hristova S., Özdemir O.

- Minerals, vol.13, no.7, 2023 (SCI-Expanded)
- V. Surface chemistry and flotation properties of galena and pyrite particles in the presence of xanthate- monothiophosphatethiocarbamate collectors  
Erçelik G., Terzi M., Kurşun Ünver İ., Özdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.59, no.5-2, pp.1-16, 2023 (SCI-Expanded)
- VI. Frothing Performance of Frother-Collector Mixtures as Determined by Dynamic Foam Analyzer and Its Implications in Flotation  
Batjargal K., Guven O., ÖZDEMİR O., Karakashev S. I., Grozev N. A., Boylu F., Çelik M. S.  
MINERALS, vol.13, no.2, 2023 (SCI-Expanded)
- VII. Electrostatic Forces in Control of the Foamability of Nonionic Surfactant  
Karakashev S., Grozev N. A., Hristova ., Mircheva K., Özdemir O.  
COATINGS, vol.13, no.37, pp.1-9, 2023 (SCI-Expanded)
- VIII. Evaluation of Different Dispersants on the Dispersion/Sedimentation Behavior of Halloysite, Kaolinite, and Quartz Suspensions in the Enrichment of Halloysite Ore by Mechanical Dispersion  
Durgut E., Çınar M., Terzi M., Kurşun Ünver İ., Yıldırım Y., Özdemir O.  
MINERALS, vol.12, no.1426, pp.1-22, 2022 (SCI-Expanded)
- IX. Effect of Blunting/Dispersion Parameters on Separation of Halloysite Nanotubes from Gangue Minerals  
Durgut E., ÇINAR M., TERZİ M., KURŞUN ÜNVER İ., Yıldırım Y., Boylu F., ÖZDEMİR O.  
MINERALS, vol.12, no.6, 2022 (SCI-Expanded)
- X. Bubbling properties of frothers and collectors mix system  
Batjargal K., Guven O., ÖZDEMİR O., Karakashev S. I., Grozev N. A., Boylu F., Çelik M. S.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.58, no.5, 2022 (SCI-Expanded)
- XI. Physical restrictions of the flotation of fine particles and ways to overcome them  
Karakashev S., Grozev N. A., ÖZDEMİR O., Guven O., Ata S., Bournival G., Batjargal K., Boylu F., Hristova S., Çelik M. S.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.58, no.5, 2022 (SCI-Expanded)
- XII. Effect of crystallinity and surface silanol groups on rheological properties of different sepiolites  
ÇINAR M., Guelgoenue I., ÖZDEMİR O., Celik M. S.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.58, no.5, 2022 (SCI-Expanded)
- XIII. Effect of calcite and mica contents in nepheline syenite samples on the ceramic body sintering behaviours and surface roughness  
Durgut E., Cinar M., Ozdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.58, no.5, 2022 (SCI-Expanded)
- XIV. Analysis of flotation and aggregation characteristics of muscovite particles through the extended DLVO theory  
Tunç B., Guven O., ÖZDEMİR O., Çelik M. S.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.58, no.5, 2022 (SCI-Expanded)
- XV. On the frother's strength and its performance  
Karakashev S., Grozev N. A., ÖZDEMİR O., Batjargal K., Guven O., Ata S., Bournival G., Boylu F., Çelik M. S.  
MINERALS ENGINEERING, vol.171, 2021 (SCI-Expanded)
- XVI. Contribution of particle morphology on flotation and aggregation of sphalerite particles  
Uysal T., Guven O., Ozdemir O., Karaagaclioglu I. E., Tunc B., Celik M. S.  
MINERALS ENGINEERING, vol.165, 2021 (SCI-Expanded)
- XVII. Adsorption Kinetics of Various Frothers on Rising Bubbles of Different Sizes under Flotation Conditions  
Batjargal K., Guven O., ÖZDEMİR O., Karakashev S., Grozev N. A., Boylu F., Çelik M. S.  
MINERALS, vol.11, no.3, 2021 (SCI-Expanded)
- XVIII. Digital image processing (DIP) application on the evaluation of iron-rich heavy mineral concentrates produced from river sand using a sequential mineral processing approach  
Terzi M., Unver I. K., Cinar M., Ozdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.57, no.3, pp.21-35, 2021 (SCI-Expanded)

- XIX. **Experimental Procedure for the Determination of the Critical Coalescence Concentration (CCC) of Simple Frothers**  
Guven O., Batjargal K., ÖZDEMİR O., Karakashev S., Grozev N. A., Boylu F., Çelik M. S.  
MINERALS, vol.10, no.7, 2020 (SCI-Expanded)
- XX. **Correlations for Easy Calculation of the Critical Coalescence Concentration (CCC) of Simple Frothers**  
Karakashev S. I., Grozev N. A., Batjargal K., Guven O., ÖZDEMİR O., Boylu F., Çelik M. S.  
COATINGS, vol.10, no.7, 2020 (SCI-Expanded)
- XXI. **An investigation of the effect of clay type on coal flotation along with DLVO theoretical analyses**  
Gungoren C., Guven O., ÇINAR M., Ozdemir O.  
INTERNATIONAL JOURNAL OF COAL PREPARATION AND UTILIZATION, vol.40, no.3, 2020 (SCI-Expanded)
- XXII. **Investigation of flocculation properties and floc structure of coal processing plant tailings in the presence of monovalent and divalent ions**  
Gungoren C., Unver I. K., Ozdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.56, no.5, pp.747-758, 2020 (SCI-Expanded)
- XXIII. **Effect of particle shape properties on selective separation of chromite from serpentine by flotation**  
Guven O., Serdengeçti M. T., Tunç B., ÖZDEMİR O., Karaagaclioglu I. E., Celik M. S.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.56, no.5, pp.818-828, 2020 (SCI-Expanded)
- XXIV. **Coating Mechanism of AuNPs onto Sepiolite by Experimental Research and MD Simulation**  
Karatas D., Senol Arslan D., KURŞUN ÜNVER İ., ÖZDEMİR O.  
COATINGS, vol.9, no.12, 2019 (SCI-Expanded)
- XXV. **Estimation of Compressive Strength of Concrete Using Physico-Mechanical Properties of Aggregate Rock**  
Kilic A., Teymen A., Ozdemir O., Atis C. D.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, vol.43, pp.171-178, 2019 (SCI-Expanded)
- XXVI. **Effect of ultrasound on bubble-particle interaction in quartz-amine flotation system**  
Gungoren C., Ozdemir O., Wang X., Ozkan S. G., Miller J. D.  
ULTRASONICS SONOCHEMISTRY, vol.52, pp.446-454, 2019 (SCI-Expanded)
- XXVII. **Determination of surface chemistry and flotation properties of rare earth mineral allanite**  
Kurşun Ünver İ., Terzi M., Özdemir O.  
MINERALS ENGINEERING, vol.132, pp.113-120, 2019 (SCI-Expanded)
- XXVIII. **Difference in flotation behavior of galena by single and multi-step chronoamperometric oxidation**  
Ozdemir O., Hampton M. A., Nguyen T. A. H., Nguyen A. V.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.55, no.3, pp.812-821, 2019 (SCI-Expanded)
- XXIX. **EXPERIMENTAL AND ATOMIC MODELING OF THE ADSORPTION OF ACID AZO DYE 57 TO SEPIOLITE**  
Karatas D., Senol-Arslan D., Ozdemir O.  
CLAYS AND CLAY MINERALS, vol.66, no.5, pp.426-437, 2018 (SCI-Expanded)
- XXX. **A novel technique to investigate the bubble coalescence in the presence of surfactant (MIBC) and electrolytes (NaCl and CaCl<sub>2</sub>)**  
Güngören C., İşlek E., Bakтарhan Y., Kurşun Ünver İ., Özdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.54, no.4, pp.1215-1222, 2018 (SCI-Expanded)
- XXXI. **Improved flotation of heat treated lignite with saline solutions containing mono and multivalent ions**  
Ozdemir O., Ersoy O. F., Guven O., Turgut H., ÇINAR M., Celik M. S.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.54, no.4, pp.1070-1082, 2018 (SCI-Expanded)
- XXXII. **Evaluation of digital image processing (DIP) in analysis of magnetic separation fractions from Na-feldspar ore**  
Kursun I., Terzi M., Ozdemir O.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.11, no.16, 2018 (SCI-Expanded)
- XXXIII. **An investigation of crack formation in surface paste disposal method for pyritic Pb-Zn tailings**  
Başçetin A., TÜYLÜ S., ÖZDEMİR O., ADIGÜZEL D., Benzaazoua M.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.15, no.2, pp.281-288, 2018

(SCI-Expanded)

- XXXIV. **Heterocoagulation of hydrophobized particulates by ionic surfactants**  
Çelik M. S., OZDEMIR O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.54, no.1, pp.124-130, 2018 (SCI-Expanded)
- XXXV. **Separation of colemanite from tailings using the pilot scale flotation column**  
Sahbaz O., Ucar A., Oteyaka B., Tas O. O., Ozdemir O.  
POWDER TECHNOLOGY, vol.309, pp.31-36, 2017 (SCI-Expanded)
- XXXVI. **Effects of temperature during ultrasonic conditioning in quartz-amine flotation**  
Gungoren C., Ozdemir O., Ozkan S. G.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.53, no.2, pp.687-698, 2017 (SCI-Expanded)
- XXXVII. **Surface morphologies and floatability of sand-blasted quartz particles**  
Guven O., Özdemir Ö., KARAAGACLIOGLU I. E., Çelik M. S.  
MINERALS ENGINEERING, vol.70, pp.1-7, 2015 (SCI-Expanded)
- XXXVIII. **Fundamental aspects of bubble-particle attachment mechanism in flotation separation**  
Albijanic B., Ozdemir O., Hampton M. A., Nguyen P. T., Nguyen A. V., Bradshaw D.  
MINERALS ENGINEERING, vol.65, pp.187-195, 2014 (SCI-Expanded)
- XXXIX. **Flotation chemistry of soluble salt minerals: from ion hydration to colloid adsorption**  
Du H., Ozdemir O., Wang X., Cheng F., Celik M. S., Miller J. D.  
MINERALS & METALLURGICAL PROCESSING, vol.31, no.1, pp.1-20, 2014 (SCI-Expanded)
- XL. **Effect of ball mill grinding parameters of hydrated lime fine grinding on consumed energy**  
Sabah E., Ozdemir O., Koltka S.  
ADVANCED POWDER TECHNOLOGY, vol.24, no.3, pp.647-652, 2013 (SCI-Expanded)
- XLI. **Thermal and rheological effects of sepiolite in linear low-density polyethylene/starch blend**  
Mir S., Yasin T., Halley P. J., Siddiqi H. M., Ozdemir O., Nguyen A.  
Journal of Applied Polymer Science, vol.127, no.2, pp.1330-1337, 2013 (SCI-Expanded)
- XLII. **One-Dimensional (1D) ZnO Nanowires Dye Sensitized Solar Cell**  
Kilic B., Wang L., Ozdemir O., Lu M., Tuzemen S.  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, vol.13, no.1, pp.333-338, 2013 (SCI-Expanded)
- XLIII. **SPECIFIC ION EFFECT OF CHLORIDE SALTS ON COLLECTORLESS FLOTATION OF COAL**  
Ozdemir O.  
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.49, no.2, pp.511-524, 2013 (SCI-Expanded)
- XLIV. **The effect of zeolite treatment by acids on sodium adsorption ratio of coal seam gas water**  
Wang X., Ozdemir O., Hampton M. A., Nguyen A. V., Do D. D.  
WATER RESEARCH, vol.46, no.16, pp.5247-5254, 2012 (SCI-Expanded)
- XLV. **A relationship between the bubble-particle attachment time and the mineralogy of a copper-sulphide ore**  
Albijanic B., Amini E., Wightman E., Ozdemir O., Nguyen A. V., Bradshaw D. J.  
MINERALS ENGINEERING, vol.24, no.12, pp.1335-1339, 2011 (SCI-Expanded)
- XLVI. **Shear-induced floc structure changes for enhanced dewatering of coal preparation plant tailings**  
Ofori P., Nguyen A. V., Firth B., McNally C., Ozdemir O.  
CHEMICAL ENGINEERING JOURNAL, vol.172, no.2-3, pp.914-923, 2011 (SCI-Expanded)
- XLVII. **Formation and stability of foams stabilized by fine particles with similar size, contact angle and different shapes**  
Karakashev S. I., Ozdemir O., Hampton M. A., Nguyen A. V.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.382, no.1-3, pp.132-138, 2011 (SCI-Expanded)
- XLVIII. **Production of trona concentrates using high-intensity dry magnetic separation followed by flotation**  
Ozdemir O., Gupta V., Miller J. D., Cinar M., Celik M. S.  
MINERALS & METALLURGICAL PROCESSING, vol.28, no.2, pp.55-61, 2011 (SCI-Expanded)
- XLIX. **Understanding the role of ion interactions in soluble salt flotation with alkylammonium and alkylsulfate collectors**

- Ozdemir O., Du H., Karakashev S. I., Nguyen A. V., Celik M. S., Miller J. D.  
 ADVANCES IN COLLOID AND INTERFACE SCIENCE, vol.163, no.1, pp.1-22, 2011 (SCI-Expanded)
- L. **Flotation of coal particles in MgCl<sub>2</sub>, NaCl, and NaClO<sub>3</sub> solutions in the absence and presence of Dowfroth 250**  
 Kurniawan A., Ozdemir O., Nguyen A., Ofori P., Firth B.  
 International Journal of Mineral Processing, vol.98, no.3-4, pp.137-144, 2011 (SCI-Expanded)
- LI. **Ion-specific effect in separation of naturally hydrophobic particles by flotation in salt solutions**  
 Kurniawan A., Özdemir O., Nguyen A. V., Ofori P., Firth B.  
 INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.98, pp.137-144, 2011 (SCI-Expanded)
- LII. **Dewatering of coal plant tailings: Flocculation followed by filtration**  
 Alam N., Ozdemir O., Hampton M. A., Nguyen A. V.  
 Fuel, vol.90, no.1, pp.26-35, 2011 (SCI-Expanded)
- LIII. **A review of induction and attachment times of wetting thin films between air bubbles and particles and its relevance in the separation of particles by flotation**  
 Albijanic B., Ozdemir O., Nguyen A. V., Bradshaw D.  
 ADVANCES IN COLLOID AND INTERFACE SCIENCE, vol.159, no.1, pp.1-21, 2010 (SCI-Expanded)
- LIV. **Effect of mechanical and chemical clay removals by hydrocyclone and dispersants on coal flotation**  
 Oats W. J., Ozdemir O., Nguyen A. V.  
 MINERALS ENGINEERING, vol.23, no.5, pp.413-419, 2010 (SCI-Expanded)
- LV. **Determining the fiber size of nano structured sepiolite using Atomic Force Microscopy (AFM)**  
 Can M., Cinar M., Benli B., OZDEMIR O., Celik M. S.  
 APPLIED CLAY SCIENCE, vol.47, pp.217-222, 2010 (SCI-Expanded)
- LVI. **Evaluation of flotation technology for the trona industry**  
 Ozdemir O., Jain A., Gupta V., Wang X., Miller J. D.  
 MINERALS ENGINEERING, vol.23, no.1, pp.1-9, 2010 (SCI-Expanded)
- LVII. **Surface chemistry aspects of coal flotation in bore water**  
 Özdemir O., Taran E., Hampton M., Karakashev S., Nguyen A. V.  
 INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.92, pp.177-183, 2009 (SCI-Expanded)
- LVIII. **Adsorption and surface tension analysis of concentrated alkali halide brine solutions**  
 Ozdemir O., Karakashev S. I., Nguyen A. V., Miller J. D.  
 Minerals Engineering, vol.22, no.3, pp.263-271, 2009 (SCI-Expanded)
- LIX. **Contact angle and bubble attachment studies in the flotation of trona and other soluble carbonate salts**  
 Ozdemir O., Karaguzel C., Nguyen A. V., Celik M. S., Miller J. D.  
 MINERALS ENGINEERING, vol.22, no.2, pp.168-175, 2009 (SCI-Expanded)
- LX. **Molecular features of the air/carbonate solution interface**  
 Du H., Liu J., Ozdemir O., Nguyen A. V., Miller J. D.  
 Journal of Colloid and Interface Science, vol.318, no.2, pp.271-277, 2008 (SCI-Expanded)
- LXI. **Water structure and its influence on the flotation of carbonate and bicarbonate salts**  
 Ozdemir O., Celik M. S., Nickolov Z. S., Miller J. D.  
 JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.314, no.2, pp.545-551, 2007 (SCI-Expanded)
- LXII. **Adsorption of anionic surfactants onto sepiolite**  
 Oezdemir O., Cinar M., Sabah E., Arslan F., Cefik M. S.  
 JOURNAL OF HAZARDOUS MATERIALS, vol.147, pp.625-632, 2007 (SCI-Expanded)
- LXIII. **Adsorption of carbonate and bicarbonate salts at the air-brine interface**  
 Ozdemir O., Karakashev S. I., Nguyen A. V., Miller J. D.  
 International Journal of Mineral Processing, vol.81, no.3, pp.149-158, 2006 (SCI-Expanded)
- LXIV. **Comparison of the adsorption characteristics of azo-reactive dyes on mesoporous minerals**  
 Ozdemir O., ARMAGAN B., Turan M., CELIK M.  
 DYES AND PIGMENTS, vol.62, no.1, pp.49-60, 2004 (SCI-Expanded)
- LXV. **Color removal of reactive dyes from water by clinoptilolite**

- Armagan B., Turan M., OZDEMİR O., CELIK M.  
 JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.39, no.5, pp.1251-1261, 2004 (SCI-Expanded)
- LXVI. **Mesoporous mineral columns for color removal from aqueous solutions**  
 Turan M., ARMAGAN B., OZDEMİR O., CELIK M.  
 JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.39, no.8, pp.2221-2228, 2004 (SCI-Expanded)
- LXVII. **Adsorption of negatively charged azo dyes onto surfactant-modified sepiolite**  
 Armagan B., OZDEMİR O., Turan M., CELIK M.  
 JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE, vol.129, no.8, pp.709-715, 2003 (SCI-Expanded)
- LXVIII. **The removal of reactive azo dyes by natural and modified zeolites**  
 Armagan B., OZDEMİR O., Turan M., CELIK M.  
 JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.78, no.7, pp.725-732, 2003 (SCI-Expanded)
- LXIX. **Clay mineral batch process for color removal of textile wastewaters**  
 Armagan B., OZDEMİR O., Turan M., CELIK M.  
 JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.38, no.10, pp.2251-2258, 2003 (SCI-Expanded)
- LXX. **Characterization and recovery of lignitic fly ash byproducts from the Tuncbilek power station**  
 Ozdemir O., Celik M.  
 CANADIAN METALLURGICAL QUARTERLY, vol.41, no.2, pp.143-150, 2002 (SCI-Expanded)

## Articles Published in Other Journals

- I. **An Overview of Halloysite Mineral**  
 Durgut E., Çınar M., Özdemir O.  
 Scientific Mining Journal, vol.62, no.4, pp.175-182, 2023 (Peer-Reviewed Journal)
- II. **Effect of Chloride Salt Ions onto Coal Flotation based on Contact Angle and Bubble-Particle Attachment Time**  
 Güngören C., Baktarhan Y., Şahbaz O., Kursun İ., Özkan Ş. G., Özdemir O.  
 Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.24, no.71, pp.553-562, 2022 (Peer-Reviewed Journal)
- III. **Effects of Hydrochloric and Acetic Acid Modification on the HTAB and K+ Adsorption Characteristics of Natural Zeolites**  
 TERZİ M., ÖZDEMİR O.  
 Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.23, no.69, pp.1049-1056, 2021 (Peer-Reviewed Journal)
- IV. **Characterization of Flocs in Dewatering of Coal Plant Tailings**  
 GÜNGÖREN C., BAKTARHAN Y., KURŞUN İ., ÖZKAN Ş. G., ÖZDEMİR O.  
 Hittite Journal of Science and Engineering, vol.5, no.3, pp.215-218, 2018 (Peer-Reviewed Journal)
- V. **Ultrasonik İşlemlerinin Flotasyonda Kullanımında Farklı Yaklaşımlar**  
 Güngören C., Özkan Ş. G., Özdemir O.  
 Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.17, pp.727-735, 2017 (Peer-Reviewed Journal)
- VI. **Maden Proses Atıklarının Macun Teknolojisi Kullanılarak Yerüstünde Depolanması**  
 Başçetin A., Özdemir O., Tüylü S., Adıgüzel D., Akkaya U. G.  
 MT Bilimsel Yer Altı Kaynakları Dergisi, no.7, pp.33-49, 2015 (Peer-Reviewed Journal)
- VII. **Taşkömürü ve Linyit Kömürlerinin Tuzlu Su İçerisinde Flotasyon Davranışları**  
 Özdemir O., Çinku K., Uslu T., Kuluç E., Çelik M. S.  
 Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, no.13, pp.1-14, 2013 (Peer-Reviewed Journal)
- VIII. **Surface properties and flotation characteristics of boron minerals**

## Books & Book Chapters

- I. Use of Ultrasound in Physical and Chemical Mineral Processing Operations  
Güngören C., Özkan Ş. G., Özdemir O.  
in: Advances in Minerals Research and Technology, Shadia Jamil Ikhmayies, Editor, Springer, London/Berlin , Zürich, pp.25-54, 2024
- II. Introduction to Mineral Research  
Güngören C., Kurşun Ünver İ., Özdemir O.  
in: Advances in Minerals Research and Technology, Shadia Jamil Ikhmayies, Editor, Springer, London/Berlin , Zürich, pp.1-23, 2024
- III. Field Properties and Performance of Surface Paste Disposal  
Başçetin A., Tüylü S., Adıgüzel D., Özdemir O.  
in: Paste Tailings Management, F. Mamadou,E. Yilmaz, Editor, Springer, London/Berlin/Switzerland, Basel, pp.145-176, 2017
- IV. Molecular Dynamics Simulation Analysis of Solutions and Surfaces in Nonsulfide Flotation Systems  
Du H., Yin X., Özdemir O., Liu J., Wang X., Zheng S., Miller J.  
in: Modeling for the Design of Novel Performance Chemicals and Materials, B. Rai, Editor, CRC Press, Alabama, pp.107-156, 2012

## Supported Projects

2017 - Continues	Kritik Koagülasyon Konsantrasyonunun Flotasyon Verimlerine Etkisi, TUBITAK Project
2023 - 2023	Flotasyonda çeşitli tuzların sürfaktanların kritik birleşme konsantrasyonları (CCC) üzerine etkisinin araştırılması, Project Supported by Higher Education Institutions
2022 - 2023	The investigation of the effect of the water quality on air/water/mineral phase interactions and the beneficiation recovery in the flotation of galena, TUBITAK Project
2021 - 2022	Halloysit Cevherinin Zenginleştirilmesi ve Endüstriyel Kullanım Alanlarının Araştırılması, Project Supported by Higher Education Institutions
2020 - 2022	Kabarcık-kabarcık ve kabarcık-tane etkileşimlerinin ince boyutlu minerallerin flotasyonuna katkısı, Project Supported by Higher Education Institutions
2017 - 2019	Maden Proses Artıklarının Yerüstünde Depolanmasında Macun Teknolojisinin Kullanımının Araştırılması, TUBITAK Project
2017 - 2018	Manisa Gördes Yöresi Zeolitlerinin Asit Modifikasiyonu Sonrası Organik ve İnorganik Kirleticileri Adsorplama Yeteneğinin Araştırılması, Project Supported by Higher Education Institutions
2017 - 2018	Ultrasonik Enerjinin Galen Mineralinin Yüzey Özelliklerine ve Flotasyonuna Etkisi, Project Supported by Higher Education Institutions
2017 - 2018	Field Properties and Performance of Surface Paste Disposal, Project Supported by Higher Education Institutions
2017 - 2018	İsparta Çanaklı Yöresi Cevherindeki Titanyum Minerallerinden Titanyum Dioksit Pigmenti Üretimi Olanaklarının Araştırılması, Project Supported by Higher Education Institutions
2015 - 2017	Flow behavior of tailings paste in surface paste disposal technology, Project Supported by Higher Education Institutions
2015 - 2017	İnce Taneli Killi Tortul Materyallerin Epb-Tbm İle Kazısında Topaklanması, Yapışma Ve Tikanmaya Karşı Risk Ve Etki Analizi, TUBITAK Project
2014 - 2017	Fundamental aspects of bubble?particle attachment mechanism in flotation separation, Project Supported by Higher Education Institutions

2014 - 2017	Farklı Kökenli Kolemanit Süspansiyonlarında Moleküler Etkileşimlerin Deneyel ve Teorik Analizi, Project Supported by Higher Education Institutions
2013 - 2017	Effect of ball mill grinding parameters of hydrated lime fine grinding on consumed energy, Project Supported by Higher Education Institutions
2013 - 2017	One-Dimensional (1D) ZnO Nanowires Dye Sensitized Solar Cell, Project Supported by Higher Education Institutions
2013 - 2017	SPECIFIC ION EFFECT OF CHLORIDE SALTS ON COLLECTORLESS FLOTATION OF COAL, Project Supported by Higher Education Institutions
2015 - 2016	Tane Morfolojisinin Flotasyona Etkisi, TUBITAK Project
2014 - 2016	KÖMÜR YIKAMA TESİSİ ARTIKLARININ FLOKÜLASYONUNDA FLOK KARAKTERİSTİKLERİİN ARAŞTIRILMASI, Project Supported by Higher Education Institutions
2014 - 2016	Flotation chemistry of soluble salt minerals: from ion hydration to colloid adsorption, Project Supported by Higher Education Institutions
2014 - 2016	Emet Kolemanit Cevherinden Isıl İşlem ile As Uzaklaştırılması ve Zenginleştirilmiş Kalsine Toz Kolemanit Eldesi, BOREN, Ulusal Bor Araştırma Enstitüsü Projesi
2014 - 2016	TUZLU SULARDA TANE-HAVA KABARCIĞI ETKILEŞİMLERİNİN ARAŞTIRILMASI, Project Supported by Higher Education Institutions
2013 - 2014	DOĞAL VE MODİFİYE SEPIYOLİT YÜZEYLERİNÉ TEKSTİL BOYALARININ ADSORPSİYONUNUN MOLEKÜLER DİNAMİK SİMÜLASYONU, Project Supported by Higher Education Institutions
2013 - 2014	Isıl İşlemin Türk Linyitlerinin Tek ve Çift Değerlikli Tuzlar Varlığında Flotasyonuna Etkisinin Araştırılması, Project Supported by Higher Education Institutions
2013 - 2014	The effect of zeolite treatment by acids on sodium adsorption ratio of coal seam gas water, Project Supported by Higher Education Institutions
2013 - 2014	FLOTATION OF TURKISH COALS IN SALT SOLUTIONS, Project Supported by Higher Education Institutions
2012 - 2014	Modeling for the Design of Novel Performance Chemicals and Materials, Project Supported by Higher Education Institutions
2011 - 2013	Shear-induced floc structure changes for enhanced dewatering of coal preparation plant tailings, Project Supported by Higher Education Institutions
2011 - 2013	Formation and stability of foams stabilized by fine particles with similar size, contact angle and different shapes, Project Supported by Higher Education Institutions
2011 - 2013	Understanding the role of ion interactions in soluble salt flotation with alkylammonium and alkylsulfate collectors, Project Supported by Higher Education Institutions
2011 - 2012	Flotation of coal particles in MgCl <sub>2</sub> , NaCl, and NaClO <sub>3</sub> solutions in the absence and presence of Dowfroth 250, Project Supported by Higher Education Institutions
2011 - 2012	Türk kömürlerinin çeşitli tuzlu sular içerisinde kollektörsüz flotasyonu: İyon-spesifik etkisi, Project Supported by Higher Education Institutions

## Activities in Scientific Journals

2023 - Continues	FRONTIERS IN CHEMISTRY, Editor
2023 - Continues	FRONTIERS IN PHYSICS, Editor
2013 - Continues	PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, Editor