

## **Prof. MUSA SARIKAYA**

### **Personal Information**

**Email:** musa.sarikaya@inonu.edu.tr

**Web:** <https://avesis.inonu.edu.tr/musa.sarikaya>

### **Education Information**

Doctorate, Middle East Technical University, Faculty Of Engineering, Maden Mühendisliği, Turkey 1983 - 1988

Postgraduate, Middle East Technical University, Faculty Of Engineering, Maden Mühendisliği, Turkey 1981 - 1983

Undergraduate, Middle East Technical University, Faculty Of Engineering, Maden Mühendisliği, Turkey 1976 - 1981

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, DETERMINATION OF FLOTATION CHARACTERISTICS OF OXIDIZED COAL FROM ZONGULDAK COAL BASIN, Middle East Technical University, Mühendislik Fakültesi, Maden Mühendisliği, 1988

Postgraduate, DESULPHURIZATION OF ERZURUM-AŞKALE LIGNITE BY FLOTATION, Middle East Technical University, Faculty Of Engineering, Department Of Mining Engineering, 1983

### **Research Areas**

Mining Engineering and Technology, Ore-Dressing, Engineering and Technology

### **Academic Titles / Tasks**

Professor, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 1996 - Continues

Associate Professor, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 1991 - 1996

Associate Professor, Middle East Technical University, Faculty Of Engineering, Maden Mühendisliği, 1990 - 1991

Lecturer, Middle East Technical University, Faculty Of Engineering, Maden Mühendisliği, 1985 - 1990

Research Assistant, Middle East Technical University, Faculty Of Engineering, Maden Mühendisliği, 1981 - 1985

### **Academic and Administrative Experience**

Inonu University, 2003 - 2008

Inonu University, Mühendislik Fakültesi, 2000 - 2008

Inonu University, Maden Mühendisliği, Maden Mühendisliği, 1991 - 2008

Inonu University, Maden Mühendisliği, 1991 - 2008

Inonu University, Mühendislik Fakültesi, 1991 - 1992

## Advising Theses

- Sarikaya M., Düşük Kaliteli Elbistan Linyitinin Boya Giderimindeki Etkinliğinin İncelenmesi, Postgraduate, C.ÖZBEY(Student), 2022
- Sarikaya M., Kırmızı çamurun adsorpsiyon yöntemi ile boya gideriminde kullanılabilirliğinin araştırılması, Postgraduate, S.DUMAN(Student), 2022
- Sarikaya M., BOR CEVHER ATIKLARINDAN LİTYUM TİTAN OKSİT ÜRETİMİNİN ARAŞTIRILMASI, Doctorate, A.YÜCEL(Student), 2022
- Sarikaya M., Adiyaman bölgesine ait turbanın boya gideriminde kullanılması, Postgraduate, S.BEKDAŞ(Student), 2022
- Sarikaya M., Gazifikasyon tesisi odun atığı ile sivas kangal linyit kömürünün karakterizasyonu ve boya adsorpsiyonunda kullanım olanaklarının araştırılması, Postgraduate, R.KIRMA(Student), 2019
- Sarikaya M., Mekanokimyasal yöntem ile Malatya Hekimhan zeolitlerinin aktivasyonu ve ağır metal adsorpsiyonunda kullanılması, Postgraduate, Ş.UÇKUN(Student), 2019
- Sarikaya M., Sivas-Kangal-Çamözü krom zenginleştirme tesisi artıklarının değerlendirilme olanaklarının araştırılması, Postgraduate, E.BİLİCİ(Student), 2018
- Sarikaya M., Hekimhan – Deveci siderit cevherinin kalsinasyon sonrası peletleme özelliklerinin belirlenmesi, Postgraduate, M.ÇELİKDEMİR(Student), 2018
- SARIKAYA M., DIŞ MANYETİK ALANIN FLOTASYON SİSTEMİNE ENTEGRASYONU VE MANYETİK FLOTASYONDA DEMİR MİNERALLERİNİN BASTIRILMASI, Doctorate, M.BİRİNCİ(Student), 2011
- SARIKAYA M., Profilit cevherinin zenginleştirilme olanaklarının incelenmesi, Postgraduate, M.Birinci(Student), 2002

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

- I. **Removal of Heavy Metals from Wastewater Solution Using a Mechanically Activated Novel Zeolitic Material**  
Uckun S., SARIKAYA M., TOP S., Timur I.  
JOURNAL OF MINING SCIENCE, vol.56, no.6, pp.1010-1023, 2020 (Peer-Reviewed Journal)
- II. **Comparison of iron ores upgraded with Falcon concentrator and magnetic separators assisted by coal reduction-conversion process**  
VAPUR H., TOP S., ALTINER M., Uckun S., SARIKAYA M.  
PARTICULATE SCIENCE AND TECHNOLOGY, vol.38, no.4, pp.409-418, 2020 (Peer-Reviewed Journal)
- III. **The effect of an external magnetic field on cationic flotation of quartz from magnetite**  
BİRİNCİ M., MILLER J. D. , SARIKAYA M., WANG X.  
MINERALS ENGINEERING, vol.23, no.10, pp.813-818, 2010 (Peer-Reviewed Journal)
- IV. **Effects of heavy metals and oxalate on the zeta potential of magnetite**  
Erdemoglu M., Sarikaya M.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.300, no.2, pp.795-804, 2006 (Peer-Reviewed Journal)
- V. **Leaching of celestite with sodium sulfide**  
ERDEMOGLU M., Sarkaya M., CANBAZOGLU M.  
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.27, no.4, pp.439-442, 2006 (Peer-Reviewed Journal)
- VI. **Some aspects of magnetic filtration theory for removal of fine particles from aqueous suspensions**  
Sarikaya M., ABBASOV T., ERDEMOGLU M.  
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.27, no.2, pp.193-198, 2006 (Peer-Reviewed Journal)
- VII. **Utilization of fine coal tailings by flotation using ionic reagents**  
Sis H., OZBAYOGLU G., SARIKAYA M.  
ENERGY SOURCES, vol.26, no.10, pp.941-949, 2004 (Peer-Reviewed Journal)
- VIII. **Comparison of non-ionic and ionic collectors in the flotation of coal fines**  
Sis H., OZBAYOGLU G., SARIKAYA M.  
MINERALS ENGINEERING, vol.16, no.4, pp.399-401, 2003 (Peer-Reviewed Journal)
- IX. **The effect of grinding on pyrophyllite flotation**

- Erdemoglu M., SARIKAYA M.  
MINERALS ENGINEERING, vol.15, no.10, pp.723-725, 2002 (Peer-Reviewed Journal)
- X. **FLOTATION TEST AS A METHOD FOR STUDYING COAL WEATHERING**  
SARIKAYA M.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.43, pp.31-35, 1995 (Peer-Reviewed Journal)
- XI. **FLOTATION CHARACTERISTICS OF OXIDIZED COAL**  
SARIKAYA M., OZBAYOGLU G.  
FUEL, vol.74, no.2, pp.291-294, 1995 (Peer-Reviewed Journal)
- XII. **ELECTROKINETICS OF OXIDIZED COAL**  
SARIKAYA M., OZBAYOGLU G.  
FUEL PROCESSING TECHNOLOGY, vol.24, pp.459-466, 1990 (Peer-Reviewed Journal)

## Articles Published in Other Journals

- I. **INVESTIGATION ON USAGE POSSIBILITIES OF GASIFICATION PLANT WOOD WASTE AND SIVAS KANGAL LIGNITE COAL IN DYE ADSORPTION**  
Kırma R., Sarıkaya M., Top S., Uçkun Ş., Timur İ.  
Scientific Mining Journal, vol.59, no.4, pp.235-245, 2020 (Peer-Reviewed Journal)
- II. **Recovery of Chromite From Plant Tailings By Falcon Concentrator**  
BİLİCİ E., SARIKAYA M., KIZILKAYA N., Aydoğmuş R., Çelikdemir M.  
American Journal of Engineering Research (AJER), vol.7, no.10, pp.168-172, 2018 (Peer-Reviewed Journal)
- III. **Characterization of Moganite Obtained From Natural Zeolite By Ball Milling**  
SARIKAYA M., Yücel A., Sezer S., Uçkun Ş., DEPCİ T.  
American Journal of Engineering Research (AJER), vol.7, no.1, pp.230-234, 2018 (Peer-Reviewed Journal)
- IV. **Investigating and Optimization of Copper Extraction from Chalcopyrite Concentrate with Hydrogen Peroxide in Presence of Acetic Acid**  
Turan M. D. , Sarıkaya M., Sarı Z. A. , Haxhiaj A., Depci T., Demiraslan A., Nizamoğlu H.  
Current Physical Chemistry, vol.7, no.4, pp.267-272, 2017 (Peer-Reviewed Journal)
- V. **Extraction of Meso-pores Amorphous SiO<sub>2</sub> from Van Pumice**  
SARIKAYA M., Turan M. D. , Aydoğmuş R., Yücel A., KIZILKAYA N., DEPCİ T.  
Current Physical Chemistry, vol.7, no.4, pp.301-304, 2017 (Peer-Reviewed Journal)
- VI. **Extraction of Meso-pores Amorphous SiO<sub>2</sub> from Van Pumice**  
Sarıkaya M., Turan M. D. , Aydoğmuş R., Yücel A., Kızılkaya N., Depci T.  
Current Physical Chemistry, no.7, pp.1-3, 2017 (Peer-Reviewed Journal)
- VII. **Extraction of Meso-pores Amorphous SiO<sub>2</sub> from Van Pumice**  
SARIKAYA M., TURAN M. D. , aydoğmuş r., yücel a., KIZILKAYA N., DEPCİ T.  
Current Physical Chemistry, 2017 (Peer-Reviewed Journal)
- VIII. **Adsorption of Crystal Violet on Activated Carbon Prepared from Coal Flotation Concentrate,**  
Aydoğmuş R., Depci T., Sarıkaya M., Kul A. R. , Önal Y.  
IOP Conf. Series: Earth and Environmental Science, vol.44, pp.1-5, 2016 (Peer-Reviewed Journal)
- IX. **Influence of Microwave Heating and Thermal Auxiliary on Decomposition of Siderite**  
Çelikdemir M., Sarıkaya M., Depci T., Aydoğmuş R.  
IOP Conf. Series: Earth and Environmental Science, vol.44, pp.1-5, 2016 (Peer-Reviewed Journal)
- X. **Production of Nano Amorphous SiO<sub>2</sub> from Malatya Pyrophyllite**  
Sarıkaya M., Depci T., Aydoğmuş R., Yücel A., Kızılkaya N.  
IOP Conf. Series: Earth and Environmental Science, vol.44, pp.1-5, 2016 (Peer-Reviewed Journal)
- XI. **Bacterial leaching versus bacterial conditioning and flotation in desulfurization three different coals**  
Dogan M., ÖZBAYOĞLU G., Hiçyılmaz C., SARIKAYA M., ÖZCENGİZ G.  
Fundamental and Applied Biohydrometallurgy, pp.165-170, 1986 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Calcination and Pelletizing of Siderite Ore**  
Çelikdemir M., Sarıkaya M., Depci T., Aydoğmuş R., Yücel A.  
in: Iron Ores and Iron Oxide Materials, Volodymyr Shatokha, Editor, Intechopen, London, pp.81-103, 2018
- II. **Magnetic Column Flotation for Magnetite from a Brazilian Phosphate Ore**  
Marino S., Birinci M., Sarıkaya M., Wang X., Lin C., Miller J.  
in: BENEFICIATION OF PHOSPHATES : NEW THOUGHT, NEW TECHNOLOGY, NEW DEVELOPMENT , Zhang P., Miller j., El-Shall h., Editor, SME, Colorado, pp.71-79, 2012

## Refereed Congress / Symposium Publications in Proceedings

- I. **Purification of Wastewater from Heavy Metals by Using Natural Zeolite**  
Uçkun Ş., SARIKAYA M., Timür İ., Depci T.  
16th International Mineral Processing Symposium (IMPS 2018), Antalya, Turkey, 23 - 25 October 2018, pp.474-477
- II. **Magnetic separation of iron ores after hematite-magnetite conversion**  
Top S., Uçkun Ş., Vapur H., Altner M., Sarıkaya M.  
5th International conference on materials science and nanotechnology for next generation (MSNG2018), Niğde, Turkey, 4 - 06 October 2018, pp.266
- III. **Lead Removal by Using Natural Zeolites as Adsorbent**  
Uçkun Ş., Sarıkaya M., Timur İ.  
International Conference on Physical Chemistry and Functional Materials, Elazığ, Turkey, 19 - 21 June 2018, pp.188
- IV. **Production of Nano Amorphous SiO<sub>2</sub> from Malatya Pyrophyllite**  
SARIKAYA M., Depci T., AYDOGMUS R., YUCEL A., Kizilkaya N.  
World Multidisciplinary Earth Sciences symposium (WMESS), Prague, Czech Republic, 5 - 09 September 2016, vol.44
- V. **Adsorption of Crystal Violet on Activated Carbon Prepared from Coal Flotation Concentrate**  
AYDOGMUS R., Depci T., SARIKAYA M., Kul A. R., ÖNAL Y.  
World Multidisciplinary Earth Sciences symposium (WMESS), Prague, Czech Republic, 5 - 09 September 2016, vol.44
- VI. **Influence of Microwave Heating and Thermal Auxiliary on Decomposition of Siderite**  
CELIKDEMIR M., SARIKAYA M., Depci T., AYDOGMUS R.  
World Multidisciplinary Earth Sciences symposium (WMESS), Prague, Czech Republic, 5 - 09 September 2016, vol.44
- VII. **Computational Chemistry Approach to Interpret the Crystal Violet Adsorption on Golbasi Lignite Activated Carbon**  
Depci T., SARIKAYA M., Prsbrey K. A., Yucel A.  
World Multidisciplinary Earth Sciences symposium (WMESS), Prague, Czech Republic, 5 - 09 September 2016, vol.44
- VIII. **Ağır Metallerle Kirlenmiş Toprak ve Suların İyileştirilmesinde Adsorban Olarak Kullanılan Doğal Manyetit'in Elektrokinetik Davranışı**  
ERDEMOĞLU M., SARIKAYA M.  
V. Madencilik ve Çevre Sempozyumu, Turkey, 26 - 27 November 2015, pp.343
- IX. **Magnetic Column Flotation for Magnetite Removal from a Brazilian Phosphate Ore**  
MARİNO S., BİRİNCİ M., SARIKAYA M., WANG X., LİN C., MİLLER J. D.  
6th International Conference on Phosphate Beneficiation, Kunming, China, 6 - 11 March 2011, pp.71-79
- X. **ELBİSTAN LİNYİTİNİN BİRLİKTE SİVİLİSTİRİLMESİ DENEYLERİ ÜZERİNE DEĞİŞİK PROSES PARAMETRELERİNİN ETKİSİ**  
Karaca H., Sarıkaya M., Koyunoğlu C.

21. ULUSAL KIMYA KONGRESİ, Malatya, Turkey, 10 September 2010, pp.1-5
- XI. **Kuvarlı Profilit Cevherinin Boyut Küçültme Sonrası Sınıflandırma İle Zenginleştirilmesi 14 Ulusal Kil Sempozyumu Bildiriler Kitabı s 248 258 Trabzon 2009**  
BİRİNCİ M., SARIKAYA M.  
14. Ulusal Kil Sempozyumu, Turkey, 1 - 03 October 2009, pp.248-258
- XII. **Determination of Operation Parameters of a Mineral Processing Study Incorporating Multiple Regression Analysis and Multiobjective Genetic Algorithms**  
BİRİNCİ M., KUMRAL M., SARIKAYA M.  
21st International Mining Congress and Exhibition of Turkey (IMCET 2009), 6 - 08 May 2009, pp.383-390
- XIII. **Co-liquefaction of Elbistan lignite and biomass**  
Karaca H., Sarıkaya M., Koyunoğlu C.  
The International Conference on Coal Science and Technology, Nottingham, England, 28 August 2007, pp.1-22
- XIV. **CO-LIQUEFACTION OF LIGNITE AND BIOMASS FOR ALTERNATIVE FUELS**  
Karaca H., Sarıkaya M., Koyunoğlu C.  
GET UNIVATION! GERMAN-TURKISH UNIVERSITY CONFERENCE AND PROJECT MARKETPLACE ON APPLIED RESEARCH AND INNOVATION, Braunschweig, Germany, 26 February 2007, pp.1-5
- XV. **Profilit Cevherinin Aşındırılmalı Yıkama Yöntemi ile Zenginleştirilme Olanakları**  
BİRİNCİ M., SARIKAYA M.  
5. Endüstriyel Hammaddeler Sempozyumu, Turkey, 13 - 14 May 2004, pp.69-75
- XVI. **Comparison of non ionic and ionic collectors in the flotation of Zonguldak coal fines**  
SİS H., ÖZBAYOĞLU G., SARIKAYA M.  
IX. International Mineral Processing Symposium, Nevşehir, Turkey, 18 - 21 September 2002, vol.1, pp.197
- XVII. **Malatya-Pütürge Profilit Cevherinin Flotasyonla Zenginleştirilmesi**  
Sarıkaya M.  
3. Endüstriyel Hammaddeler Sempozyumu, İzmir, Turkey, 14 - 15 October 1999, pp.1-5
- XVIII. **Electrokinetics of Oxidized Coal**  
Sarıkaya M., Özbayoğlu G.  
Coal Characterisation for Conversion Processes 1989, Amsterdam, Netherlands, 22 - 25 May 1989, pp.459-465

## Supported Projects

- SARIKAYA M., YÜCEL A., Project Supported by Higher Education Institutions, Doğal Gözenekli Malzemeler Kullanarak Bor Atık/Cevherlerinden Lityum Kazanımı, 2020 - Continues
- SARIKAYA M., KIRMA R., Project Supported by Higher Education Institutions, Gazifikasyon Tesisi Odun Atığı ile Sivas Kangal Linyit Kömürünün Karakterizasyonu ve Boya Adsorpsiyonunda Kullanım Olanaklarının Araştırılması, 2018 - 2019
- SARIKAYA M., UÇKUN Ş., Project Supported by Higher Education Institutions, Mekanokimyasal Yöntem İle Malatya Hekimhan Zeolitlerin Aktivasyonu Ve Ağır Metal Adsorpsiyonunda Kullanılması, 2017 - 2019
- SARIKAYA M., Project Supported by Higher Education Institutions, HEKİMHAN-DEVECİ SİDERİT CEVHERİNİN KALSİNASYON SONRASI PELETLEME ÖZELLİKLERİNİN TESPİT EDİLMESİ, 2016 - 2018
- SARIKAYA M., Project Supported by Higher Education Institutions, NANO BOYUTLU BOR TABANLI DOZİMETRİK MALZEME ÜRETİLMESİ VE GELİŞTİRİLMESİ, 2015 - 2017
- Sis H., Sarıkaya M., Project Supported by Higher Education Institutions, Bingöl Bitlis Fosfatlı Demir Cevherlerinin Zenginleştirme Olanaklarının Araştırılması, 2002 - 2005
- Sarıkaya M., Project Supported by Higher Education Institutions, Profilit cevherinin çeşitli yöntemlerle zenginleştirilmesi, 1999 - 2000
- Sarıkaya M., Project Supported by Higher Education Institutions, Çift bozuşturma yöntemiyle selestitten stronsiyum karbonat üretimi, 1998 - 1999
- Sarıkaya M., Project Supported by Higher Education Institutions, Malatya Pütürge profilit cevherinin flotasyon yöntemiyle zenginleştirilmesi, 1997 - 1998
- Sarıkaya M., Project Supported by Higher Education Institutions, Türkiye de üretilen selestit cevheri konsantresinden

indirgeyici kavurma yöntemiyle SrCO<sub>3</sub> üretimi, 1993 - 1996

Sis H., Sarıkaya M., Project Supported by Higher Education Institutions, Zonguldak Taskömürlerinin İyonik Toplayıcılar Kullanılarak Flotasyon Özelliklerinin Araştırılması, 1994 - 1995

Sarıkaya M., Project Supported by Higher Education Institutions, Elazığ Maden bölgesi maden çayı boyunca indikatör bitkilerin saptanması İnönü Üniversitesi Araştırma Fonu Projesi, 1992 - 1993

Sarıkaya M., Project Supported by Higher Education Institutions, Polat Beğre Doğanşehir Malatya Yöresi magmatitlerinin minerolojik petrografik incelenmesi, 1991 - 1992

## **Metrics**

Publication: 43

Citation (WoS): 266

Citation (Scopus): 260

H-Index (WoS): 9

H-Index (Scopus): 9