

Prof. HİKMET SİS

Personal Information

Office Phone: [+90 422 377 4722](tel:+904223774722)

Fax Phone: [+90 422 341 0046](tel:+904223410046)

Email: hikmet.sis@inonu.edu.tr

Web: <http://inonu.edu.tr/en/hikmet.sis>

Address: İnönü Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 44280 Malatya

Education Information

Post Doctorate, Lulea Tekniska Universitet (Lulea University of Technology), Sustainable Engineering, Mineral Processing, Sweden 2011 - 2011

Doctorate, Pennsylvania State University University College Park Campus, College Of Earth And Minerals Sciences, Mineral Processing, United States Of America 1995 - 2001

Post Graduate, Middle East Technical University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, Turkey 1993 - 1995

Under Graduate, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği, Turkey 1984 - 1990

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Foreign Language, Hazırlık sınıfı, Hacettepe Üniversitesi, 1984

Dissertations

Doctorate, Enhancing Flotation Recovery of Phosphate Ores Using Nonionic Surfactants, Pennsylvania State University University College Park Campus, Energy And Geo-Environmental Engineering , Mineral Processing, 2001

Post Graduate, Comparison of Ionizing and Non-ionizing Collectors for the Flotation of Zonguldak Coal Fines, Middle East Technical University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, 1995

Research Areas

Mining Engineering and Technology, Ore-Dressing, Communiton-Sizing-Classification, Benefication by Gravity, Dense-Medium, Magnetic and Electrostatic, Flotation and Flocculation, Dewatering, Coal Preparation, Process and Plant Design, Engineering and Technology

Academic Titles / Tasks

Professor, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 2015 - Continues

Associate Professor, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 2010 - 2015

Assistant Professor, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 2003 - 2010
Research Assistant PhD, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 2001 - 2003
Research Assistant, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 1991 - 2001

Professional Experience

Board Member, Inonu University, Mühendislik Fakültesi, 2015 - Continues
Mevlana Exchange Program Coordinator, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 2013 - Continues
BAP Scientific Commissioner, Inonu University, Fen Ve Mühendislik Alanları, 2008 - 2014
Deputy Head of Department, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2008 - 2014
Board Member, Inonu University, Hekimhan Meslek Yüksek Okulu, 2008 - 2011

Courses

Termodinamik, Under Graduate, 2016 - 2017
Flotasyon, Under Graduate, 2016 - 2017

Jury Memberships

Doctorate, Doctorate, İnönü Üniversitesi, April, 2020
Post Graduate, Post Graduate, İnönü Üniversitesi, June, 2019
Post Graduate, Post Graduate, İnönü Üniversitesi, June, 2019
Post Graduate, Post Graduate, İnönü Üniversitesi, June, 2019
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İnönü Üniversitesi, May, 2017
Associate Professor Exam, Doçentli sözlü sınavı, YÖK-ÜAK, February, 2017
Doctorate, Doktora tez savunması, İnönü Üniversitesi, January, 2017
Post Graduate, Post Graduate, İnönü Üniversitesi, December, 2016
Post Graduate, Yüksek lisans tezi savunması, Dokuz Eylül Üniversitesi, July, 2016
Doctoral Examination, Doktora yeterlilik sınavı, Cumhuriyet Üniversitesi, February, 2016
Doctorate, Doktora tezi savunması, İnönü Üniversitesi, December, 2015
Doctorate, Doktora tez savunması, İnönü Üniversitesi, June, 2015

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

- I. **Investigating dissolution of colemanite in sulfuric acid solutions by particle size measurements**
SİS H., Bentli I., DEMİRKIRAN N., Ekmekyapar A.
SEPARATION SCIENCE AND TECHNOLOGY, vol.54, pp.1353-1362, 2019 (Journal Indexed in SCI)
- II. **Dissolution kinetics of colemanite in HCl solutions by measuring particle size distributions**
SİS H., Bentli I., DEMİRKIRAN N., Ekmekyapar A.
SEPARATION SCIENCE AND TECHNOLOGY, vol.53, pp.198-205, 2018 (Journal Indexed in SCI)
- III. **Wetting and rheological characteristics of hydrophobic organic pigments in water in the presence of non-ionic surfactants**
SİS H., BİRİNCİ M.
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.455, pp.58-66, 2014 (Journal Indexed in SCI)
- IV. **Removal of heavy metal ions from aqueous medium using Kuluncak (Malatya) vermiculites and effect of precipitation on removal**
SİS H., UYSAL T.

APPLIED CLAY SCIENCE, vol.95, pp.1-8, 2014 (Journal Indexed in SCI)

- V. **Recycling process water in sulfide flotation, Part Effect of H₂O₂ and process water components on sphalerite flotation from complex sulfide**
Ikumapayi F., SİS H., JOHANSSON B., Rao K. H.
MINERALS & METALLURGICAL PROCESSING, vol.29, pp.192-198, 2012 (Journal Indexed in SCI)
- VI. **Adsorption characteristics of ionic and nonionic surfactants on hydrophobic pigment in aqueous medium**
SİS H., BİRİNCİ M.
COLORATION TECHNOLOGY, vol.128, pp.244-249, 2012 (Journal Indexed in SCI)
- VII. **Effect of nonionic and ionic surfactants on zeta potential and dispersion properties of carbon black powders**
SİS H., BİRİNCİ M.
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.341, pp.60-67, 2009 (Journal Indexed in SCI)
- VIII. **Application of Model-free Methods for Analysis of Combustion Kinetics of Coals with Different Ranks**
Sis H.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.31, pp.1016-1027, 2009 (Journal Indexed in SCI)
- IX. **Evaluation of combustion characteristics of different size elbistan lignite by using TG/DTG and DTA**
Sis H.
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, vol.88, pp.863-870, 2007 (Journal Indexed in SCI)
- X. **Kinetics of drop breakage in stirred vessels under turbulent conditions**
Sis H., KELBALIYEV G., CHANDER S.
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.26, pp.565-573, 2005 (Journal Indexed in SCI)
- XI. **Synergism in sodium oleate/ethoxylated nonylphenol mixtures**
Sis H., CHANDER G., CHANDER S.
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.26, pp.605-614, 2005 (Journal Indexed in SCI)
- XII. **Utilization of fine coal tailings by flotation using ionic reagents**
Sis H., OZBAYOGLU G., SARIKAYA M.
ENERGY SOURCES, vol.26, pp.941-949, 2004 (Journal Indexed in SCI)
- XIII. **Kinetics of emulsification of dodecane in the absence and presence of nonionic surfactants**
Sis H., CHANDER S.
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.235, pp.113-120, 2004 (Journal Indexed in SCI)
- XIV. **Adsorption and contact angle of single and binary mixtures of surfactants on apatite**
Sis H., CHANDER S.
MINERALS ENGINEERING, vol.16, pp.839-848, 2003 (Journal Indexed in SCI)
- XV. **Improving froth characteristics and flotation recovery of phosphate ores with nonionic surfactants**
Sis H., CHANDER S.
MINERALS ENGINEERING, vol.16, pp.587-595, 2003 (Journal Indexed in SCI)
- XVI. **Reagents used in the flotation of phosphate ores: a critical review**
Sis H., CHANDER S.
MINERALS ENGINEERING, vol.16, pp.577-585, 2003 (Journal Indexed in SCI)
- XVII. **Comparison of non-ionic and ionic collectors in the flotation of coal fines**
Sis H., OZBAYOGLU G., SARIKAYA M.
MINERALS ENGINEERING, vol.16, pp.399-401, 2003 (Journal Indexed in SCI)
- XVIII. **Pressure filtration of dispersed and flocculated alumina slurries**
Sis H., CHANDER S.
MINERALS & METALLURGICAL PROCESSING, vol.17, pp.41-48, 2000 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **DISSOLUTION KINETICS AND VARIATION OF PARTICLE SIZE OF KIRKA (TURKEY) ULEXITE IN HCL SOLUTIONS**
SİS H., BENTLİ İ., Ekmekyapar A., DEMİRKIRAN N.
The Journal of Ore Dressing, vol.17, pp.27-37, 2015 (Other Refereed National Journals)
- II. **Dissolution kinetics and variation of particle size of Kirka Turkey ulexite in HCl solutions**
SİS H., BENTLİ İ., EKMEKYAPAR A., DEMİRKIRAN N.
Journal of Ore Dressing, vol.17, pp.27-37, 2015 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **UÇUCU KÜL VE MERMER TOZUNUN BETONUN MEKANİK ÖZELLİKLERİNE ETKİSİNİN İNCELENMESİ**
GENÇ M., FENERLİ C., SİS H., KIYAK T.
MAS 8. Uluslararası Avrupa Fen- Matematik- Mühendislik ve Sağlık Bilimleri Kongresi, Diyarbakır, Turkey, 11 - 13 October 2019, vol.1, no.1, pp.1-2
- II. **UÇUCU KÜL VE MERMER TOZUNUN DOLGU HARÇLARININ AKIŞKANLIK ÖZELLİKLERİNE VE BASMA DAYANIMA ETKİLERİ**
SİS H., KIYAK T., FENERLİ C., GENÇ M.
Türkiye 26. Uluslararası Madencilik Kongre ve Sergisi, Antalya, Turkey, 16 - 19 April 2019, vol.1, no.1, pp.1649-1657
- III. **Recovering marble dust from marble processing plants using fly ash**
SİS H., Kiyak T.
III. International Porous and Powder Materials Symposium and Exhibition, Aydın, Turkey, 12 - 15 September 2017, vol.1, pp.69
- IV. **The Amenability of Parçikan Malatya Lignites to Binderless Briquetting**
BİRİNCİ M., SİS H.
XV. INTERNATIONAL MINERAL PROCESSING SYMPOSIUM, İstanbul, Turkey, 19 - 21 November 2016, vol.1, pp.93
- V. **Amenability of Parçikan (Malatya) lignite coals to binderless briquetting**
BİRİNCİ M., SİS H.
XV. International Mineral processing Symposium, İstanbul, Turkey, 19 - 21 October 2016, vol.1, pp.972-984
- VI. **Beneficiation of Malatya (Turkey) Feldspar ores by magnetic separation and flotation**
SİS H.
XV. International Mineral processing Symposium, İstanbul, Turkey, 19 - 21 October 2016, vol.1, no.1, pp.1166-1172
- VII. **Dispersion and stability of carbon black powders in water in the presence of non ionic surfactants**
SİS H., BİRİNCİ M.
II. International Porous and Powder Materials Symposium and Exhibition, İzmir, Turkey, 15 - 18 September 2015, vol.1, pp.6
- VIII. **Selimoğlu Divriği Sivas linyitlerinin yıkanabilirliği**
BİRİNCİ M., SİS H.
XXIV. INTERNATIONAL MINING CONGRESS AND EXHIBITION, Antalya, Turkey, 14 - 16 April 2015, vol.1, pp.682-688
- IX. **Selimoğlu Divriği Sivas Linyitlerinin Yıkanabilirliği**
BİRİNCİ M., SİS H.
Türkiye 24. Uluslararası Madencilik Kongresi ve Sergisi, Antalya, Turkey, 14 - 17 April 2015, pp.682-688
- X. **Malatya-Arguvan linyitlerinin gravite yöntemleriyle zenginleştirilmesi**
AKSOĞAN KORKMAZ A., BENTLİ İ., SİS H.
XXIV. International Mining Congress and Exhibition, Antalya, Turkey, 14 - 17 April 2015, vol.1, pp.676-681
- XI. **Malatya arguvan linyitlerinin gravite yöntemleriyle zenginleştirilmesi**
AKSOĞAN KORKMAZ A., Bentli İ., Sis H.

- IMCET 2015 Türkiye 24. Uluslararası Madencilik Kongresi, Antalya, Turkey, 14 - 17 April 2015, pp.1
- XII. **Selimođlu (Divriđi-Sivas) linyitlerinin yıkama olanakları**
BİRİNCİ M., SİS H.
XXIV. International Mining Congress and Exhibition, Antalya, Turkey, 14 - 17 April 2015, vol.1, pp.682-688
- XIII. **Beneficiation of Görgü (Malatya) complex lead-zinc ores by flotation**
SİS H., Coşkun M., Tenekeciđil E., BİRİNCİ M.
XIV. International Mineral Processing Symposium, Aydın, Turkey, 15 - 17 October 2014, vol.1, pp.247-254
- XIV. **Evaluation of combustion characteristics of Elbistan (Turkey) lignite by applying model-fitting and model-free methods**
SİS H.
XVII. International Coal Preparation Congress and Exhibition, İstanbul, Turkey, 1 - 06 October 2013, vol.1, pp.711-716
- XV. **Düşük tenörlü demir yataklarının zenginleştirilmesi**
SİS H., BİRİNCİ M.
Malatya ve Çevre İllerinin Maden Sempozyumu, Malatya, Turkey, 27 - 29 April 2013, vol.1, pp.86-95
- XVI. **Adsorption of chromium ions in water on Kuluncak (Malatya) vermiculites**
SİS H., UYSAL T.
XIII. International Mineral Processing Symposium, Aydın, Turkey, 10 - 12 October 2012, vol.1, pp.947-954
- XVII. **Selective flocculation of fine phosphate materials**
Summers C., Dahlin D., SİS H., Chander S.
SME Annual Meeting 2002, Arizona, United States Of America, 25 - 27 February 2002
- XVIII. **Comparison of non ionic and ionic collectors in the flotation of Zonguldak coal fines**
SİS H., ÖZBAYOđLU G., SARIKAYA M.
IX. International Mineral Processing Symposium, Nevşehir, Turkey, 18 - 21 September 2002, vol.1, pp.197
- XIX. **Flotation of phosphate ores with sodium oleate and nonionic surfactant mixtures**
SİS H., Chander S.
Beneficiation of phosphates III, Florida, United States Of America, 2 - 07 December 2001, vol.1, pp.33-43
- XX. **Enhancing flotation recovery of phosphate ore by nonionic surfactant**
SİS H., Chander S.
XXI. International Mineral Processing Congress, Roma, Italy, 23 - 27 June 2000, vol.2, pp.124-130
- XXI. **Pressure filtration of dispersed and flocculated alumina slurries**
SİS H., Chander S.
Society of Mining Engineers Annual Meeting, Florida, United States Of America, 9 - 11 March 1998
- XXII. **Effect of surface modification on flow properties and pressure filtration of alumina slurries**
SİS H., Chander S.
Fine powder processing Conference, United States Of America, 3 - 05 March 1997, vol.1, pp.369-376

Supported Projects

- SİS H., BAŞARAN B., Project Supported by Higher Education Institutions, Görgü (Malatya) Çinko-Kurşun Cevher Atıklarının Asit Maden Drenajı Oluşturma Potansiyelinin Belirlenmesi, 2020 - Continues
- SİS H., GENÇ M., KIYAK T., FENERLİ C., Project Supported by Higher Education Institutions, Mermer tozu ve uçucu kül atıkları karışımlarının beton ve harç yapımında kullanımı, 2018 - 2019
- SİS H., BİRİNCİ M., KARAAĞAÇ T., Project Supported by Higher Education Institutions, Beğre (Dođanşehir) Yöresi Demir Cevherlerinin Zenginleştirilme Özelliklerinin İncelenmesi, 2017 - 2019
- Sis H., Önal M., Project Supported by Higher Education Institutions, Mühendislik Fakültesi, Maden Mühendisliđi Öğrenci Laboratuvarları Altyapı Güçlendirmesi, 2015 - 2017
- Sis H., Birinci M., Project Supported by Higher Education Institutions, Malatya Parçikan Yöresi Kömürlerin Yıkanaabilirlik Olanaklarının Araştırılması, 2013 - 2016
- Sis H., Project Supported by Higher Education Institutions, Su içerisindeki ağır metal iyonların Kuluncak Malatya

vermikülitleri üzerine adsorpsiyonu, 2011 - 2012

SİS H., TUBITAK Project, Revisiting sulphide mineral processing Flotation selectivity and fine particle processing, 2011 - 2012

Sis H., Project Supported by Higher Education Institutions, Hidrofobik pigmentlerin yüzey özelliklerini değiştirerek su içerisindeki akışkanlıklarının düzenlenmesi, 2009 - 2011

Sis H., Başarır H., Project Supported by Higher Education Institutions, İnönü Üniversitesi Mühendislik Fakültesi Maden Mühendisliği Öğrenci Laboratuvarları Altyapı Güçlendirmesi, 2009 - 2010

SİS H., TUBITAK Project, Hidrofobik Pigmentlerin Reaktifler Kullanılarak Su İçerisinde Dağılma Özelliklerinin Arttırılması, 2006 - 2007

Sis H., Alıcı B., Seçkin T., TUBITAK Project, Moderatör Polimerler ile Metal Oksit Sollerinin Oluşumlarının Yapısal Kontrolünün Araştırılması, 2005 - 2007

Sis H., Sarıkaya M., Project Supported by Higher Education Institutions, Bingöl Bitlis Fosfatlı Demir Cevherlerinin Zenginleştirme Olanaklarının Araştırılması, 2002 - 2005

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

Citations

Total Citations (WOS):478

h-index (WOS):11

Scholarships

2219 Doktora sonrası araştırma bursu, TUBITAK, 2011 - 2011

Yurtdışı Doktora Bursu, YOK, 1995 - 2001