

## **Prof. ÇETİN HOŞTEN**

### **Personal Information**

**Email:** hosten@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/hosten>

### **Education Information**

Doctorate, University of California, Berkeley, Engineering, Mineral Engineering, United States Of America 1977 - 1982

Postgraduate, Middle East Technical University, Faculty of Engineering, Maden Mühendisliği, Turkey 1973 - 1976

Undergraduate, Middle East Technical University, Faculty of Engineering, Maden Mühendisliği, Turkey 1968 - 1973

### **Foreign Languages**

English, C1 Advanced

### **Research Areas**

Technical Sciences, Mining Engineering and Technology, Ore-Dressing, Communion-Sizing-Classification, Benefication by Gravity, Dense-Medium, Magnetic and Electrostatic, Flotation and Flocculation, Dewatering, Process and Plant Design

### **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 1973 - Continues

### **Academic and Administrative Experience**

Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 1997 - 2000

### **Advising Theses**

HOŞTEN Ç., The Influence of chemical pre-treatment on particle fracture pattern and mineral liberation, Doctorate, M.Camalan(Student), 2018

HOŞTEN Ç., Effect of soft fine particles on the kinetics and energetics of grinding hard coarse particles, Postgraduate, S.Yılmaz(Student), 2016

HOŞTEN Ç., Polyethylene oxide-induced flocculation of dolomite/clay/borax-containing suspensions, Doctorate, M.Çırak(Student), 2014

HOŞTEN Ç., Effect of carbonate alkalinity on the flocculation behavior of hematite, Postgraduate, M.Camalan(Student), 2012

HOŞTEN Ç., Investigation of the particle breakage parameters in locked-cycle ball milling, Doctorate, C.Acar(Student), 2012

HOŞTEN Ç., A comparative analysis of the recent cement grinding systems with particle-based influences on cement

properties, Postgraduate, B.Fidan(Student), 2011

HOŞTEN Ç., Flocculation behavior of two different clay samples from Kırka tincal deposit, Postgraduate, M.Çırak(Student), 2010

HOŞTEN Ç., A parametric comparative study of electrocoagulation and coagulation of aqueous suspensions of kaolinite and quartz powders, Doctorate, M.Gülsün(Student), 2009

HOŞTEN Ç., An investigation of the principles of laboratory-scale particle-bed comminution, Postgraduate, H.Cimilli(Student), 2008

HOŞTEN Ç., Determination of contact angles of powders by capillarity dewatering of filter cakes, Postgraduate, Ö.Deniz(Student), 2005

HOŞTEN Ç., A computer simulator for ball mill grinding, Postgraduate, Y.Yeşilay(Student), 2004

HOŞTEN Ç., Breakage characteristics of cement components, Doctorate, Ç.Avşar(Student), 2003

HOŞTEN Ç., Reactivity of limestones of different sources for flue gas desulfurization application, Postgraduate, M.Gülsün(Student), 2003

HOŞTEN Ç., The effects of hydrogenated tallow amine acetate on rutile and ilmenite surfaces, Doctorate, M.Köse(Student), 2000

HOŞTEN Ç., Floatability and adsorption characteristics of zircon with sodium oleate, Doctorate, R.Aykul(Student), 2000

HOŞTEN Ç., Liberation and particle shape effects in interparticle breakage, Postgraduate, C.Özbay(Student), 1998

HOŞTEN Ç., Mathematical simulation for predicting the size distribution of pilot scale AG/SAG mill product, Postgraduate, N.Kalbitemiz(Student), 1998

HOŞTEN Ç., A comparison of grindability methods for cement clinker, Postgraduate, N.Hemmati(Student), 1995

HOŞTEN Ç., Split feed flotation of Zonguldak coal fines, Postgraduate, R.Aykul(Student), 1994

HOŞTEN Ç., Analysis of the constant pressure filtration and electrofiltration behavior of kaolin slurries, Doctorate, O.Şan(Student), 1991

HOŞTEN Ç., Influence of size reduction and frothers on the flotation of Kutlular pyritic copper ore, Postgraduate, A.Tezcan(Student), 1989

HOŞTEN Ç., Flotation concentration of Çayeli complex copper-zinc ore, Postgraduate, M.Köse(Student), 1988

HOŞTEN Ç., Beneficiation studies on the fine iron ore tailings of Divriği concentrator, Postgraduate, G.Başaran(Student), 1988

HOŞTEN Ç., Oil agglomeration beneficiation of Zonguldak coal fines, Postgraduate, Y.Uçbaş(Student), 1986

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

- I. **Assessment of grinding additives for promoting chromite liberation**  
CAMALAN M., HOŞTEN Ç.  
MINERALS ENGINEERING, vol.136, pp.18-35, 2019 (SCI-Expanded)
- II. **Assessment of chromite liberation spectrum on microscopic images by means of a supervised image classification**  
Camalan M., Cavur M., Hosten C.  
POWDER TECHNOLOGY, vol.322, pp.214-225, 2017 (SCI-Expanded)
- III. **Optimization of coagulation-flocculation process for treatment of a colloidal suspension containing dolomite/clay/borax**  
ÇIRAK M., Hosten C.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.159, pp.30-41, 2017 (SCI-Expanded)
- IV. **Characterization of clay rock samples of a borax ore in relation to their problematical flocculation behavior**  
ÇIRAK M., Hosten C.  
POWDER TECHNOLOGY, vol.284, pp.452-458, 2015 (SCI-Expanded)
- V. **Ball-Mill Grinding Kinetics of Cement Clinker Comminuted in the High-Pressure Roll Mill**  
Camalan M., Hosten C.  
MINERAL PROCESSING AND EXTRACTIVE METALLURGY REVIEW, vol.36, no.5, pp.310-316, 2015 (SCI-Expanded)

- VI. **Grinding kinetics of steady-state feeds in locked-cycle dry ball milling**  
Acar C., Hosten C.  
POWDER TECHNOLOGY, vol.249, pp.274-281, 2013 (SCI-Expanded)
- VII. **Flocculation behavior of clayey dolomites in borax solutions**  
Hosten C., Cirak M.  
POWDER TECHNOLOGY, vol.235, pp.263-270, 2013 (SCI-Expanded)
- VIII. **An industrial comparative study of cement clinker grinding systems regarding the specific energy consumption and cement properties**  
Hosten C., Fidan B.  
POWDER TECHNOLOGY, vol.221, pp.183-188, 2012 (SCI-Expanded)
- IX. **A comparative study of electrocoagulation and coagulation of aqueous suspensions of kaolinite powders**  
Kilic M. G., Hosten C.  
JOURNAL OF HAZARDOUS MATERIALS, vol.176, pp.735-740, 2010 (SCI-Expanded)
- X. **A parametric comparative study of electrocoagulation and coagulation using ultrafine quartz suspensions**  
Kilic M. G., Hosten C., DEMİRCİ Ş.  
JOURNAL OF HAZARDOUS MATERIALS, vol.171, pp.247-252, 2009 (SCI-Expanded)
- XI. **The effects of feed size distribution on confined-bed comminution of quartz and calcite in piston-die press**  
Hosten C., Cimilli H.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.91, pp.81-87, 2009 (SCI-Expanded)
- XII. **The bond work index of mixtures of ceramic raw materials**  
Ipek H., Ucbas Y., Hosten C.  
MINERALS ENGINEERING, vol.18, no.9, pp.981-983, 2005 (SCI-Expanded)
- XIII. **An alternative solution to the grinding equation in cumulative size distribution form**  
Hosten C.  
MINERALS ENGINEERING, vol.18, no.5, pp.489-493, 2005 (SCI-Expanded)
- XIV. **Ternary-mixture grinding of ceramic raw materials**  
Ipek H., Ucbas Y., Hosten C.  
MINERALS ENGINEERING, vol.18, no.1, pp.45-49, 2005 (SCI-Expanded)
- XV. **Dry grinding kinetics of binary mixtures of ceramic raw materials by Bond milling**  
Ipek H., Ucbas Y., Yekeler M., Hosten C.  
CERAMICS INTERNATIONAL, vol.31, no.8, pp.1065-1071, 2005 (SCI-Expanded)
- XVI. **Variation of back-calculated breakage rate parameters in Bond-mill grinding**  
Hosten C., Avsar C.  
SCANDINAVIAN JOURNAL OF METALLURGY, vol.33, no.5, pp.286-293, 2004 (SCI-Expanded)
- XVII. **Reactivity of limestones from different sources in Turkey**  
Hosten C., Gulsun M.  
MINERALS ENGINEERING, vol.17, no.1, pp.97-99, 2004 (SCI-Expanded)
- XVIII. **Investigation of the layering mechanism of agglomerate growth during drum pelletization**  
Sastry K., Dontula P., Hosten C.  
POWDER TECHNOLOGY, vol.130, pp.231-237, 2003 (SCI-Expanded)
- XIX. **Fabrication of microporous ceramics from ceramic powders of quartz-natural zeolite mixtures**  
San O., Abali S., Hosten C.  
CERAMICS INTERNATIONAL, vol.29, no.8, pp.927-931, 2003 (SCI-Expanded)
- XX. **Filtration testing of a ceramic capillary filter produced from a high-silica glaze**  
San O., Hosten C.  
MINERALS ENGINEERING, vol.15, no.7, pp.553-556, 2002 (SCI-Expanded)
- XXI. **Reassessment of correlations for the dewatering characteristics of filter cakes**  
Hosten C., San O.

MINERALS ENGINEERING, vol.15, no.5, pp.347-353, 2002 (SCI-Expanded)

- XXII. **Role of the clogging phenomena in erroneous implications of conventional data analysis for constant pressure cake filtration**

Hosten C., San O.

SEPARATION SCIENCE AND TECHNOLOGY, vol.34, no.9, pp.1759-1772, 1999 (SCI-Expanded)

- XXIII. **A comparison of particle bed breakage and rod mill grinding with regard to mineral liberation and particle shape effects**

Hosten C., Ozbay C.

MINERALS ENGINEERING, vol.11, no.9, pp.871-874, 1998 (SCI-Expanded)

- XXIV. **A preliminary study on split feed flotation of Turkish bituminous coal fines**

Hosten C., Muratoglu R.

FUEL, vol.75, no.6, pp.651-653, 1996 (SCI-Expanded)

- XXV. **CAKE FILTRATION-RATE EQUATIONS - A REVIEW OF CLASSICAL AND MODERN APPROACHES**  
HOSTEN C.

MINERALS ENGINEERING, vol.6, no.7, pp.775-783, 1993 (SCI-Expanded)

- XXVI. **EMPIRICAL CORRELATIONS FOR THE PREDICTION OF CAKE DEWATERING CHARACTERISTICS**

HOSTEN C., SASTRY K.

MINERALS ENGINEERING, vol.2, no.1, pp.111-119, 1989 (SCI-Expanded)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Linking impact-related progeny sizes of cement clinker to modes of single-particle breakage**

Camalan M., Hosten C.

Mineral Engineering Conference (MEC), Swieradow Zdroj, Poland, 25 - 28 September 2016, vol.8

## **Supported Projects**

HOŞTEN Ç., CAMALAN M., Project Supported by Higher Education Institutions, Kimyasal Ön Kondisyonlamanın Ufalama Sistemlerinde Mineral Serbestleşmesine ve Kırılma Moduna Olan Etkisi, 2017 - 2017

HOŞTEN Ç., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

HOŞTEN Ç., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

HOŞTEN Ç., Project Supported by Higher Education Institutions, Tinkal Cevheri Kolloidal Atıklarının Flokülasyon Özellikleri, 2012 - 2012

## **Metrics**

Publication: 27

Citation (WoS): 328

Citation (Scopus): 293

H-Index (WoS): 12

H-Index (Scopus): 12