

## Prof. Hale Grbz

### Personal Information

Office Phone: [+90 212 285 6807](tel:+902122856807)

Email: [gurbuzh@itu.edu.tr](mailto:gurbuzh@itu.edu.tr)

Web: <https://avesis.itu.edu.tr/gurbuzh>

Address: İT Kimya-Metalurji Fakltesi, Kimya Mhendislięi Blm İT Ayazaęa Kamps, 34469, Maslak, İstanbul

### Education Information

Doctorate, İstanbul Teknik niversitesi, Fen Bilimleri Enstits, Kimya Mhendislięi Anabilim Dalı, Turkey 1984 - 1991

Postgraduate, İstanbul Teknik niversitesi, Kimya-Metalurji Fakltesi, Kimya Mhendislięi Blm, Turkey 1982 - 1984

Undergraduate, İstanbul Teknik niversitesi, Kimya-Metalurji Fakltesi, Kimya Mhendislięi Blm, Turkey 1977 - 1982

### Foreign Languages

English, A2 Elementary

### Certificates, Courses and Trainings

Measurement and Evaluation, MDEK Deęerlendirici Eęitim alıřtayı, 12 – 13 Eyll 2009, Ankara, MDEK, 2009

Measurement and Evaluation, RosEvaluation Conference 2009, Assessment for Program and Institutional Accreditation, Rose-Hulman Institute Of Technology, 2009

Vocational Training, CHEMCAD Kullanıcılar Forumu, Chemstations & BİS Bureau of Integrated Systems, 2007

Measurement and Evaluation, Best Assessment Processes V, A Working Symposium, Rose-Hulman Institute of Technology, 2003

Education Management and Planning, ABET Faculty Workshop for Continuous Program Improvement, İstanbul Teknik niversitesi, 2002

Vocational Training, Seminar mit Praktikum-Korrosion und Korrosionsschutz-, DECHEMA Gesellschaft fr Chemische Technik und Biotechnologie e.V., 1993

Vocational Training, Seminar mit Praktikum -Technische Chemie (Grundoperationen und Reaktionstechnik), DECHEMA Gesellschaft fr Chemische Technik und Biotechnologie e.V., 1992

Vocational Course, Radiochemischen Praktikumskurs, Kernforschungszentrum Karlsruhe GmbH, 1992

### Dissertations

Doctorate, Yař Yntem Fosforik Asitin Mono- ve Dikalsiyum Fosfat Kristalizasyonu ile Saflařtırılması, Istanbul Technical University, Kimya-Metalurji, Kimya Mhendislięi, 1991

Postgraduate, amaltı Tuzlası Atık zeltelerinden Boraks Kullanımı ile Potasyum ve Magnezyum Tuzlarının Kazanılması, Istanbul Technical University, Kimya-Metalurji, Kimya Mhendislięi, 1984

### Research Areas

Chemical Engineering and Technology, Engineering and Technology

## Academic Titles / Tasks

Professor, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 2011 - Continues  
Associate Professor, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 1996 - 2011  
Assistant Professor, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 1991 - 1996  
Research Assistant, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 1984 - 1991

## Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 2018 - Continues  
Fakülte Kurulu Üyesi, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 2013 - 2016  
Fakülte Yönetim Kurulu Üyesi, Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, 2004 - 2007

## Courses

Bor Teknolojisi, Undergraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021  
Chemical Engineering Design 1, Undergraduate, 2013 - 2014, 2014 - 2015, 2015 - 2016, 2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022  
Boron Technology, Undergraduate, 2021 - 2022  
Chemical Engineering Design II, Undergraduate, 2010 - 2011, 2011 - 2012, 2012 - 2013, 2013 - 2014, 2014 - 2015, 2015 - 2016, 2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020  
Chemical Technologies, Undergraduate, 2013 - 2014, 2014 - 2015, 2015 - 2016, 2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020  
Kimya Mühendisliği Tasarımı 1, Undergraduate, 2000 - 2001, 2001 - 2002, 2002 - 2003, 2003 - 2004, 2004 - 2005, 2005 - 2006, 2006 - 2007, 2007 - 2008, 2008 - 2009, 2009 - 2010, 2010 - 2011, 2011 - 2012, 2012 - 2013

## Advising Theses

Gürbüz H., Boraks Dekahidrat'ın Kristalizasyon Kinetiğine Çözeltinin Na<sub>2</sub>O/B<sub>2</sub>O<sub>3</sub> Oranının Etkisinin İncelenmesi, Postgraduate, E.Deniz(Student), 2007  
Gürbüz H., Potasyum Pentaborat Oktahidratın Kristal Büyüme ve Çözünme Hızlarının Akışkan Yataklı Ölçüm Sisteminde İncelenmesi, Postgraduate, G.Badem(Student), 2004  
Gürbüz H., Boraks Dekahidratın Kristalizasyon Kinetiğine Safsızlıkların Etkisinin İncelenmesi, Postgraduate, N.Erkan(Student), 2002  
Gürbüz H., Boraks Dekahidrat ve Çinkosülfat Heptahidrat Çözeltilerinin Metastabil Bölge Genişliğinin Ultrasonik Yöntemle Belirlenmesi, Postgraduate, B.Özdemir(Student), 2001  
Gürbüz H., Karboksimetilselülozun Çözünürlüğünün Artırılması, Postgraduate, B.Günel(Student), 1999  
Gürbüz H., Boksit ve  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>'in Sodyum Borat Çözeltilerinde Çözündürülmesi-Yük. Lis., Postgraduate, S.Çatalbaş(Student), 1997  
Gürbüz H., Boraks Çözeltilerinde Probertit Çökme Kinetiği, Postgraduate, M.Onur(Student), 1996

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

- I. **Effects of ultrasound on the synthesis of silicalite-1 nanocrystals**  
Gürbüz H., Tokay B., Erdem-Senatar A.  
ULTRASONICS SONOCHEMISTRY, vol.19, no.5, pp.1108-1113, 2012 (Journal Indexed in SCI)
- II. **Non-Evaporative Solvent Recovery Step in Deacidification of Used Frying Oil as Biodiesel Feedstock by Methanol Extraction**

- Tunc M. F. , Gürbüz H., Turkay S. Z.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.87, no.2, pp.195-203, 2010 (Journal Indexed in SCI)
- III. **Effects of ultrasound on the reaction step of boric acid production process from colemanite**  
Taylan N., Gurbuz H., Bulutcu A. N.  
ULTRASONICS SONOCHEMISTRY, vol.14, no.5, pp.633-638, 2007 (Journal Indexed in SCI)
- IV. **Determination of crystal growth kinetics of potassium pentaborate in a fluidized bed crystallizer**  
Gurbuz H., Badem G., Bulutcu A. N.  
JOURNAL OF CRYSTAL GROWTH, vol.283, pp.222-229, 2005 (Journal Indexed in SCI)
- V. **Experimental determination of the metastable zone width of borax decahydrate by ultrasonic velocity measurement**  
Gurbuz H., OZDEMIR B.  
JOURNAL OF CRYSTAL GROWTH, vol.252, pp.343-349, 2003 (Journal Indexed in SCI)
- VI. **Growth kinetics of probertite in borax solutions in the presence of crystalline seeds**  
Gurbuz H., Eroglu O., Yavasoglu N., SAYAN P., Bulutcu N.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.39, no.2, pp.372-377, 2000 (Journal Indexed in SCI)
- VII. **Recovery of potassium salts from bittern by potassium pentaborate crystallization**  
Gürbüz H., Yavasoglu N., Bulutcu A.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.31, no.6, pp.857-870, 1996 (Journal Indexed in SCI)
- VIII. **PREPARATION OF REASONABLY PURE CALCIUM ORTHOPHOSPHATES FROM WET-PROCESS PHOSPHORIC-ACID .1.**  
GURBUZ H., BULUTCU N.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.34, no.5, pp.1914-1918, 1995 (Journal Indexed in SCI)
- IX. **Direct transformation of borax decahydrate into borax pentahydrate**  
Gürbüz H., Ozcan O., Turkay S., Bulutcu N.  
TURKISH JOURNAL OF CHEMISTRY, vol.19, no.4, pp.243-249, 1995 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **A new strategy for edible vegetable oil production**  
Turkay S., Gürbüz H.  
Lipid Technology, vol.25, no.1, pp.11-13, 2013 (Refereed Journals of Other Institutions)
- II. **Precipitation kinetics of probertite in borax solutions in presence of amorphous seed crystals**  
Gürbüz H., Eroglu O., Yavasoglu N., Bulutcu A. N.  
Acta Polytechnica Scandinavica, Chemical Technology Series, no.244, pp.99-101, 1997 (Refereed Journals of Other Institutions)

## Supported Projects

- Gürbüz H., Project Supported by Higher Education Institutions, Yüksek Asitli Yağların Biyodizel Hammaddesi Olarak Hazırlanması İçin Sıvı Sıvı Ekstraksiyonu ile Asit Giderme, 2013 - 2018
- Gürbüz H., Project Supported by Higher Education Institutions, ÇÖREK OTU YAĞI SERBEST YAĞ ASİDİ ETANOL SU SİSTEMİNİN 298.2 K DE SIVI -SIVI FAZ DENGELERİNDE KISMİ GLİSERİDLERİN ETKİSİ, 2012 - 2018
- Gürbüz H., Project Supported by Higher Education Institutions, YEMEKLİK YAĞLARIN ETANOL EKSTRAKSİYONU İLE RAFİNASYONUNDA KALSİYUM SABUNU ÇÖKTÜRME YÖNTEMİYLE ÇÖZÜCÜ GERİ KAZANIMI, 2009 - 2018
- Gürbüz H., Project Supported by Higher Education Institutions, A Novel Process For Deacidification of High FFA Vegetable Oils and Waste Cooking Oils, 2008 - 2018
- Gürbüz H., Project Supported by Higher Education Institutions, Application of in situ Measurement Techniques in Crystallization of FAMES in Biodisel, 2007 - 2018
- Gürbüz H., Project Supported by Higher Education Institutions, Ultrases Enerjinin Hidrate Çinko Borate

(2ZnO.3B2O3.3.5H2O) Çöktürülmesindeki Etkisi, 2006 - 2018

Gürbüz H., Project Supported by Higher Education Institutions, Atık Yağlardan Metanol Ekstraksiyonu ile Serbest Asitlerin Giderilmesinde Elde Edilen Ekstrakt Farzında Metanol Kazanımı İçin Alternatif Proses Geliştirilmesi, 2008 - 2009

Gürbüz H., Project Supported by Higher Education Institutions, Boraks Dekahidratın Çözelti Ortamında Boraks Pentahidrata Dönüşüm Kinetiği, 2007 - 2008

Gürbüz H., Project Supported by Higher Education Institutions, Boraks Dekahidratın Metastabil Bölge Genişleme Safsızlıklarının İncelenmesi, 2001 - 2008

Gürbüz H., Project Supported by Higher Education Institutions, Boraks Çözeltilerinde Probertit Çökme Kinetiği, 1996 - 1998

Gürbüz H., Project Supported by Higher Education Institutions, Aliminanın Borakslı Ortamda Çözünürlüğü, 1996 - 1998

## Citations

Total Citations (WOS):106

h-index (WOS):5