

## Assoc. Prof. Mehmet HANÇER

### Personal Information

**Office Phone:** [+90 352 207 6666](tel:+903522076666) Extension: 32931

**Email:** mhancer@erciyes.edu.tr

**Web:** <https://avesis.erciyes.edu.tr/mhancer/>

**Address:** Erciyes Üniversitesi, Mühendislik Fakültesi, Malzeme Bilimi ve Mühendisliği Bölümü 38039 KAYSERİ

### Education Information

Doctorate, The University of Utah, College Of Engineering, Metalurgy And Materials Engineering , United States Of America 1995 - 2000

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Cevher Hazırlama Mühendisliği, Turkey 1993 - 1995

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Other, Photon Exchange Membrane (PEM) Fuel Cells, EU Institute for Energy and Transport, 2012

Health&Medicine, Micro Fluidic and medical device fabrication, University of Minnesota, Nanofabrication Center ABD, 2012

### Research Areas

Technical Sciences, Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Corrosion and Corrosion Protection, Adhesion and Adhesives, Polymeric Materials, Plating, Nanomaterials, Production Metallurgy

### Academic Titles / Tasks

Associate Professor, Erciyes University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2010 - Continues

### Academic and Administrative Experience

Erciyes Üniversitesi, Ernam Nanoteknoloji Araştırma Merkezi , 2011 - Continues

Erciyes Üniversitesi, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği Bölümü, 2010 - Continues

### Courses

Malzeme Bilimi ve Mühendisliğine Giriş, Undergraduate, 2015 - 2016  
Structures of Materials , Undergraduate, 2015 - 2016  
Polimerik Malzemeler, Postgraduate, 2014 - 2015  
İleri Teknoloji Seramikleri , Undergraduate, 2014 - 2015  
İş Hayatı için İngilizce , Undergraduate, 2014 - 2015, 2011 - 2012  
Katı Sıvı Ara Yüzeyleri , Postgraduate, 2011 - 2012

## Advising Theses

HANÇER M., PECVD YÖNTEMİ İLE SENTEZLENEN GRAFEN YAPILI KARBON YAPILARIN YAPI VE YÜZEY KAREKTERİZASYONU, Postgraduate, S.Pekdemir(Student), 2015  
HANÇER M., In-situ biomineralization of hydroxyapatite grafted poly- $\epsilon$ -caprolactone silver nanofiber biocomposites via electrospinning in saturated stimulated body fluid characterised by quartz crystal microbalance, Postgraduate, B.Kiremitler(Student), 2015  
HANÇER M., Nanomaterials Doped Thin Organic Coatings for Application of Power Transmission and Cable Industry, Postgraduate, H.Arkaz(Student), 2014  
HANÇER M., Antibakteriyel Seramik Sır Malzeme Üretimi, Postgraduate, H.IPEKÇİ(Student), 2014  
HANÇER M., Çeşitli BiyoAktif Maddeleri İçeren Nano Malzeme Dolgulu Ambalaj Üretimi, Doctorate, F.Törnük(Student), 2014  
HANÇER M., Nano-Kil Takviyeli Polimer Kompozitlerin Korozyon ve Bakteri Önleme Amacı ile Ambalaj Sanayine Uygulanması, Postgraduate, L.Atabek(Student), 2014

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

- I. **Flame retardant effect of aluminum hypophosphite in heteroatom-containing polymers**  
ATABEK SAVAŞ L., HACIOĞLU F., HANÇER M., DOĞAN M.  
POLYMER BULLETIN, vol.7, pp.1-16, 2019 (SCI-Expanded)
- II. **Low temperature growth of graphene using inductively-coupled plasma chemical vapor deposition**  
Pekdemir S., Önses M. S., Hancer M.  
SURFACE & COATINGS TECHNOLOGY, vol.309, pp.814-819, 2017 (SCI-Expanded)
- III. **Ambient, rapid and facile deposition of polymer brushes for immobilization of plasmonic nanoparticles**  
Yılmaz H., Pekdemir S., Ipekci H. H., Kiremitler N. B., Hancer M., Önses M. S.  
APPLIED SURFACE SCIENCE, vol.385, pp.299-307, 2016 (SCI-Expanded)
- IV. **Superhydrophobic coatings with improved mechanical robustness based on polymer brushes**  
Ipekci H. H., Arkaz H. H., ÖNSES M. S., Hancer M.  
SURFACE & COATINGS TECHNOLOGY, vol.299, pp.162-168, 2016 (SCI-Expanded)
- V. **LLDPE based food packaging incorporated with nanoclays grafted with bioactive compounds to extend shelf life of some meat products**  
TÖRNÜK F., Hancer M., SAĞDIÇ O., Yetim H.  
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.64, no.2, pp.540-546, 2015 (SCI-Expanded)
- VI. **A facile fabrication of superhydrophobic nanocomposite coating with contact angles approaching the theoretical limit**  
Hancer M., ARKAZ H.  
APPLIED SURFACE SCIENCE, vol.354, pp.342-346, 2015 (SCI-Expanded)
- VII. **Synthesis of copper ion incorporated horseradish peroxidase-based hybrid nanoflowers for enhanced catalytic activity and stability**  
Somturk B., Hancer M., ÖÇSOY I., ÖZDEMİR N.  
DALTON TRANSACTIONS, vol.44, no.31, pp.13845-13852, 2015 (SCI-Expanded)

- VIII. **Self Assembled Nano Coatings by Chemical Vapor Deposition**  
HANÇER M.  
ADVANCED SCIENCE LETTERS, vol.5, pp.5-10, 2012 (SCI-Expanded)
- IX. **The Effect of Surface Chemistry on MEMS Stiction in an Ultralow-Humidity Environment**  
Sammoura F., Hancer M., Yang K.  
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, vol.20, no.2, pp.522-526, 2011 (SCI-Expanded)
- X. **The Effect of Humidity on the stability of Octadecyltrichlorosilane For the Self Assembled Monolayer Applications**  
HANÇER M.  
Journal of Progress in Organic Coatings, vol.63, pp.395-398, 2008 (SCI-Expanded)
- XI. **Flotation chemistry of boron minerals**  
Çelik M., HANÇER M., Miller J.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.256, no.1, pp.121-131, 2002 (SCI-Expanded)
- XII. **Micellization and adsorption of phospholipids and soybean oil onto hydrophilic and hydrophobic surfaces in nonaqueous media**  
HANÇER M., Patist A., Kean R., Muralidhara H.  
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.204, pp.31-41, 2002 (SCI-Expanded)
- XIII. **The significance of interfacial water structure in soluble salt flotation systems**  
HANÇER M., Çelik M., Miller J.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.235, no.1, pp.150-161, 2001 (SCI-Expanded)
- XIV. **Anomalous dispersion effects in the IR-ATR spectroscopy of water**  
HANÇER M., Sperline R. P., Miller J.  
APPLIED SPECTROSCOPY, vol.54, no.1, pp.138-143, 2000 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Nanokompozit gıda ambalajlarında kullanılan nanokillerin sağlık boyutu**  
Törnük F., Uslu E. Ş., HANÇER M., YETİM H.  
Gıda Teknolojisi, vol.19, no.11, pp.78-80, 2015 (Peer-Reviewed Journal)
- II. **Kütahya-Gümüşköy Silisifiye Tüf Cevherlerinden Gümüşün Tiyoüre ile Kazanılması**  
Arslan F., Kızıldere B., Berek K., HANÇER M.  
Metakürji Dergisi, vol.54, pp.66-70, 1995 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Graphene growth by Inductively-Coupled Plasma Chemical Vapor Deposition at Low Temperature**  
PEKDEMİR S., ÖNSES M. S., HANÇER M.  
Graphene & Related Materials Conference (GRM-2016), Ankara, Turkey, 13 - 15 July 2016, pp.67
- II. **Assembly of plasmonic heterostructures on poly(ethylene glycol) brushes for SERS applications**  
PEKDEMİR S., KİREMİTLER N. B., Karabel S., HANÇER M., KAYA S., ÖNSES M. S.  
12th Nanoscience and Nanotechnology Conference (NanoTR-12), Kocaeli, Turkey, 3 - 05 June 2016, pp.422
- III. **Superhydrophobic Nanocomposite Coatings With Enhanced Mechanical Robustness Using Polymer Matrices With Dual Wetting Properties**  
İPEKÇİ H. H., ARKAZ H. H., ÖNSES M. S., HANÇER M.  
Nanotr12, Kocaeli, Turkey, 3 - 05 June 2016, pp.320
- IV. **Electrospun nanofibers as templates for surface patterning**  
KİREMİTLER N. B., PEKDEMİR S., HANÇER M., ÖNSES M. S.  
12th Nanoscience and Nanotechnology Conference (NanoTR-12), Kocaeli, Turkey, 3 - 05 June 2016, pp.422

- V. **TGA and DSC profiles of LLDPE based active nanocomposite films reinforced with nanoclays grafted with some plant extracts**  
Törnük F., HANÇER M., YETİM H.  
First International Conference on Applied Chemistry, Cidde, Saudi Arabia, 18 - 19 November 2015, pp.73
- VI. **Imaging Nanoflower**  
ŞAKİR M., HANÇER M., ÖÇSOY İ.  
22. Ulusal Elektron Mikroskopi Kongresi, İstanbul, Turkey, 2 - 04 September 2015, vol.1, pp.164
- VII. **Yüksek Katalitik Aktivite Ve Kararlılığa Sahip Çiçek Şekli Yeni Nesil Nanobiyokatalizörlerin Sentezlenmesi Ve Uygulamaları**  
ÖÇSOY İ., ÖZDEMİR N., SOMTÜRK B., HANÇER M., Doğru E., Usta Ş.  
27. ulusal genel kimya kongresi, Çanakkale, Turkey, 23 - 28 August 2015
- VIII. **In-situ biomineralization of hydroxyapatite grafted polycaprolactone silver (PCL/HA-Ag) nanofiber biocomposites via electrospinning in saturated SBF characterised by QCM-D**  
KİREMİTLER N. B., HANÇER M.  
4th International Conference on Multifunctional Hybrid Nanomaterials, Barselona, Spain, 9 - 13 March 2015, pp.1-5
- IX. **THE SURFACE CHEMISTRY OF ATOMICALLY THIN GRAPHENE FILM GROWN ONTO LARGE AREA COPPER SUBSTRATE USING LOW PRESSURE ICP-CVD**  
PEKDEMİR S., HANÇER M.  
Science and Applications of Thin Films, Conference & Exhibition (SATF 2014), Antalya, Turkey, 14 - 15 September 2014, pp.1-5
- X. **Superhydrophobic Polymer Nanocomposite Thin Film Coatings for Anti-ice Purpose**  
ARKAZ H. H., HANÇER M.  
30th European Conference on Surface Science, Antalya, Turkey, 31 August - 05 September 2014, pp.5-8
- XI. **Clay Reinforced Antibacterial LDPE Composites**  
ATABEK SAVAŞ L., HANÇER M.  
1st Joint Turkey-Japan Workshop (JTJW) on Polymeric Composite Materials, İstanbul, Turkey, 12 - 13 May 2014, pp.63
- XII. **Nanokompozit Gıda Ambalajlamada Kullanılan Nanokillerin Sağlık Yönünden Değerlendirilmesi**  
TÖRNÜK F., HANÇER M., YETİM H.  
TGDF Gıda Kongresi, Antalya, Turkey, 1 - 04 November 2013, pp.35
- XIII. **The Mechanism of Antibacterial Properties of Ceramic Glazing Powder Materials**  
HANÇER M.  
Int. Porous Powder Materials, İzmir, Turkey, 1 - 04 September 2013, vol.1, no.24, pp.24
- XIV. **Health aspects of nanoclays used in nanocomposite food packaging materials**  
TÖRNÜK F., HANÇER M., YETİM H.  
59th ICoMST International Congress of Meat Science and Technology, Turkey, 1 - 04 August 2013, pp.171
- XV. **Influence of novel active nanocomposite polyethylene films incorporated with nanoclays and plant extracts in controlling lipid oxidation and growth of Escherichia coli O157:H7 in ground beef**  
TÖRNÜK F., YETİM H., HANÇER M., Sağdıç O.  
59th ICoMST International Congress of Meat Science and Technology, Turkey, 1 - 04 August 2013, pp.85

## Supported Projects

- ÖNSES M. S., ÖÇSOY İ., HANÇER M., Project Supported by Higher Education Institutions, Çok Amaçlı Kullanıma Yönelik Nanomalzemelerin Sentezi ve Spektroskopik Karakterizasyonu, 2014 - 2017
- HANÇER M., PEKDEMİR S., Project Supported by Higher Education Institutions, Kendiliğinden Organize Olabilen İnce Organik Kaplamaların Kimyasal Buhar Biriktirme (CVD) Metodu ile Malzeme Yüzey Mühendisliğinde Uygulanması, 2014 - 2015
- HANÇER M., SAVAŞ S., Project Supported by Higher Education Institutions, Bakteri ve Lekeye Karşı Dirençli Seramik Sır

Üretimi, 2011 - 2014

SAVAŞ S., ATABEK L., HANÇER M., Project Supported by Higher Education Institutions, Nano-Kil Takviyeli Polimer Kompozitlerin Korozyon ve Bakteri Önleme Amacı ile Ambalaj Sanayine Uygulanması, 2011 - 2014

## Scientific Refereeing

Micro & Nano Letters, SCI Journal, October 2013

J. of Progress in Organic Coatings, SCI Journal, October 2008

J. of Colloid and Interface Science, SCI Journal, January 2006

J. of Surfactants and Detergents (AOS), SCI Journal, June 2002

## Metrics

Publication: 31

Citation (WoS): 394

Citation (Scopus): 380

H-Index (WoS): 10

H-Index (Scopus): 8

## Congress and Symposium Activities

2219 Tubitak bursiyer Perovskit gunes pili gelistirilmesi, Attendee, Minnesota , United States Of America, 2015

## Awards

HANÇER M., Kritik Proje Liderlik Ödülü, Seagate Teknoloji, January 2006

HANÇER M., En İyi Mezuniyet Semineri Konuşmacı Ödülü, Utah Universitesi, July 2000

## Non Academic Experience

Business Organization (private), Analog Devices, Mems Devision Boston , Uzman Ar&Ge Proje Yöneticisi

Business Organization (private), Seagate Technology Hard Disk Sürücü Üretim Teknolojisi, Minnesota

Business Organization (private), Cargill Central Research Center