

**Name-Surname:** ZEYNEP TUTUMLU

**Date of Birth/Place:** 1978/ Ankara

**Nationality:** T.C

**Marital Status:** Married

**Mailing Address:** TOBB University of Economics and Technology-Department of Material Science and Nanotechnology Engineering

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## **EDUCATION**

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- 2003- 2010      Chemical Engineering-Ph.D (CGPA:3.79/4.00)  
Middle East Technical University, Ankara  
*Thesis Title:* Synthesis of aluminum incorporated mesoporous catalysts for pyrolysis of polypropylene  
Advisor:Assoc.Prof.Dr.Naime A.Sezgi;Co-Advisor: Prof.Dr.Timur Doğu
- 2000 –2003      Chemical Engineering –MSc. (CGPA: 3.50 / 4.00)  
Middle East Technical University, Ankara  
*Thesis Title:* Heteropolyacid catalysts for etherification of isoolefins  
Advisor: Prof.Dr. Timur Doğu
- 1996 – 2000      Chemical Engineering –BSc. (CGPA: 3.82 / 4.00)  
Middle East Technical University, Ankara
- 1989 – 1996      TED Ankara College, Ankara

## **RELEVANT WORK EXPERIENCE**

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- 2012- now      TOBB University of Economics and Technology- Assist.Prof.Dr.  
2000-2007      ODTÜ Department of Chemical Engineering-Teaching Assistant
- 07-08.1998      Summer Intern- AKKİM, Yalova

## **SKILLS**

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### **Language**

English – Upper

### **IT**

MS Office, Polymath, Visio

## **RESEARCH INTERESTS**

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Catalysis, Nanotechnology, Chemical Reaction Engineering, Energy and Fuel Technology, Environmental and Material Sciences

## **SCHOLARS & AWARDS**

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- Middle East Technical University High Honour List (Fall 1997, Spring 1998, Fall 1998, Fall 1999, Spring 2000)
- Middle East Technical University Honour List (Spring 1999)

## **ARTICLES AND CONFERENCES**

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### **Articles**

- Obalı Z., Doğu T., “Activated carbon-tungstophosphoric acid catalysts for the synthesis of tert-amyl ethyl ether(TAEE)”, *Chemical Engineering Journal*, 2008, **138**, 548-555.
- Obalı Z., Sezgi N.A., Doğu T., “Performance of Acidic MCM-like Aluminosilicate catalysts in pyrolysis of polypropylene”, *Chemical Engineering Communications*, 2009, **196**, 116-130.
- Obalı Z., Sezgi, N.A., Doğu, T., “The Synthesis and Characterization of Aluminum Loaded SBA-type Materials as Catalyst for Polypropylene Degradation Reaction”, *Chemical Engineering Journal*, 2011, **176-177**, 202-210.
- Obalı Z., Sezgi, N.A., Doğu, T., “Catalytic degradation of polypropylene over alumina loaded mesoporous catalysts”, *Chemical Engineering Journal*, 2012, **207-208**, 421-425.

### **National and International Conferences**

- Obalı Z., Doğu T., “ Heteropoliasit katalizörlerin tersiyer amil etil eter üretimindeki aktifliği”, 6.National Chemical Engineering Conference, RM-36, 7–10 September 2004, İzmir,Türkiye
- Obalı Z., Doğu T., “ Activated carbon-tungstophosphoric acid catalysts for the synthesis of tert-amyl ethyl ether”, II.International Symposium on Carbon for Catalysis, OP-II-11, 11-13 July 2006, St.Petersburg, Rusya
- Obalı Z., Sezgi, N.A., Doğu T., “ Polipropilenin Katalizörlü Ortamda Parçalanması”, XX.National Chemistry Conference, SKS-03, 4-8 September 2006, Kayseri, Türkiye
- Obalı Z., Sezgi N.A., Doğu T., “ Catalytic degradation of polypropylene with a mesoporous aluminosilicate catalyst”, I.National Catalysis Conference, C-3, 17-20 January 2007, Güzelyurt, TRNC
- Obalı Z., Sezgi N.A., Doğu T., “ Recycling of polypropylene by catalytic cracking over acidic MCM-like aluminosilicate catalysts, 1. International Congress on Green Process Engineering, Book of Abstracts p. 290, 24-26 April 2007, Toulouse, France

- Obalı Z., Sezgi N.A., Doğu T., “ Performance of acidic MCM-like aluminosilicate catalysts in pyrolysis of polypropylene, 1.Somer Symposium Series, Somer-S-26, 14-15 May 2007, Ankara,Turkiye
- Obalı Z., Sezgi N.A., Doğu T., “ Catalytic degradation of polypropylene with SBA-type catalysts”, II.National Catalysis Conference, P2, 18-21 June 2008, Erzurum, Türkiye
- Obalı Z., Sezgi N.A., Doğu T., “ SBA-tipi katalizörlerin sentezlenmesi ve polipropilenin parçalanma reaksiyonundaki performansı”, XXII.Natioanl Chemistry Conference, FKP201, 6-10 October 2008, Mağusa, KKTC
- Obalı Z., Sezgi, N.A., Doğu T., “Synthesis and Characterization of SBA-type Catalysts and Their Applicability to the Degradation of Polypropylene”, 2.International Congress on Green Process Engineering, CD of Proceedings text no:92, 14-17 June 2009, Venedik, Italya
- Obalı Z., Sezgi, N.A., Doğu T., “SBA-type Catalysts in Degradation of Polypropylene”, 6<sup>th</sup> EFCATS Summer School, 13-19 September 2010, İzmir, Türkiye

## **RESEARCH PROJECTS**

- AFP-2001-07-02-00-33, “İzoolefinlerin Eterifikasyonunda Kullanılan Heteropoliasit Katalizörleri”, Researcher, ODTÜ Fen Bilimleri Enstitüsü Tez Projesi, Duration:2001-2003
- BAP-03-04-DPT.2002K120540-19, “ Benzin Oktan Yükselticileri ETBE,TAME,TAEE üretimi için katalizör geliştirilmesi ve kinetik çalışmalar”, Scholarship, DPT, Duration:2002-2005
- BAP-2007-03-04-08, “Polipropilen Plastik Atığının Katalitik İndirgenmesiyle Değerli Kimyasallar ve Sıvı Yakıt Üretimi”, Reseacher, ODTÜ Mühendislik Fakültesi Dekanlık Projesi, Duration:2007-2009
- 107M303, “Polipropilen Plastik Atıklarının Katalitik Parçalanması ile Değerli Kimyasallar ve Sıvı Yakıt Üretimi”, Scholarship, TÜBİTAK, Duration:2007-2009
- 112M474, “Elektrikli Araçlar için Kimyasal Hidritler ile Yüksek Kinetikli Hidrojen Gazi Elde Eden Kartuj Sistemi Üretilmesi, Researcher, TÜBİTAK, Duration: 2012-2014
- “CİGSSE/PEROVSKİT TANDEM GÜNEŞ PİLLERİNİN SPREY PİROLİZ YÖNTEMİ İLE ÜRETİMİ VE BU YAPILAR İÇİN YENİ MALZEMELERİN GELİŞTİRİLMESİ”, Researcher, TÜBİTAK, still in progress

## **ATTENDED COURSES**

- “ISO 9001/2000 Kalite Yönetim Sistemleri Temel Eğitimi”, 10-11 December 2005, Chambers of Chemical Engineers, Ankara
- “Polimer Sektöründe Termal Analiz ve Reoloji Uygulamaları”, 21 December 2005, Gazi University, Ankara, Turkiye

