

# Prof. DİLEK VARIŞLI

## Personal Information

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## International Researcher IDs

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ScopusID: 8682367100

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## Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Kimya Mühendisliği (Dr), Turkey 2003 - 2007

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Kimya Mühendisliği (YI) (Tezli), Turkey 2000 - 2003

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Chemical Engineering, Turkey 1995 - 2000

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Kinetic studies for dimethyl ether and diethyl ether production, Middle East Technical University, Analiz ve Fonksiyonlar Teorisi, Kimya Mühendisliği (Dr), 2007

Postgraduate, Simultaneous production of tert-amyl alcohol and tert-amyl-ethyl-ether in a reactive distillation column, Middle East Technical University, Analiz ve Fonksiyonlar Teorisi, Kimya Mühendisliği (YI) (Tezli), 2003

## Research Areas

Chemical Reaction Engineering, Catalysis and Catalytic Processes

## Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2020 - Continues

Associate Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2019 - 2020

Associate Professor, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler ABD, 2013 - 2019

Associate Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2013 - 2019

Assistant Professor, Gazi University, Atatürk Meslek Yüksekokulu, Kimya ve Kimyasal İşleme Teknolojileri, 2009 - 2013

Assistant Professor, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler ABD, 2008 - 2013

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Chemical Engineering, 2000 - 2007

## Academic and Administrative Experience

Farabi Coordinator, Gazi University, Mühendislik Fakültesi, 2020 - Continues

Mevlana Exchange Program Coordinator, Gazi University, Mühendislik Fakültesi, 2020 - Continues

Erasmus Coordinator, Gazi University, Mühendislik Fakültesi, 2020 - Continues

Mühendislik Fakültesi BAP Birim Proje Değerlendirme Grubu Üyesi, Gazi University, Mühendislik Fakültesi, 2019 - 2020

Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2013 - 2015

Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2013 - 2014

## Advising Theses

Varişli D., Yeni Nesil Gözenekli Malzemeler ile Hidrojen Üretimine Yönelik Kinetik Çalışmalar, Doctorate, R.Can(Student), Continues

VARIŞLI D., Investigation On Conversion Of Ammonia To Hydrogen In Microwave Focused System In The Presence Of Cobalt, Nickel And Molybdenum Activated Supported Catalysts, Postgraduate, R.CAN(Student), 2020

VARIŞLI D., Application Of Alumina Supported Iron, Cobalt Loaded Mono/Bimetallic Catalysts For High Purity Hydrogen Production In Microwave Reactor System, Postgraduate, M.AKCA(Student), 2019

VARIŞLI D., Microwave Assisted Cox-Free Hydrogen Production Over Carbon Supported Molybdenum Nanocatalysts, Postgraduate, M.Güler(Student), 2018

VARIŞLI D., Studies On Hydrogen Production From Ammonia Over Cobalt Incorporated Carbon Nanomaterials, Postgraduate, A.MAMMADLI(Student), 2016

VARIŞLI D., Synthesis, Characterization And Reaction Studies On Cerium Oxide, Alumina And Silicate Supported Iron, Nikel And Cobalt Incorporated Catalysts For Hydrogen Production, Postgraduate, İ.ETHEM(Student), 2015

VARIŞLI D., Synthesis, characterization and usage of cobalt and iron based silicate catalysts for production of hydrogen from ammonia, Postgraduate, N.GÜLÇİN(Student), 2012

VARIŞLI D., Synthesis and characterization of ruthenium based silicate catalysts and studies on hydrogen synthesis, Postgraduate, E.EMRE(Student), 2012

VARIŞLI D., Materials synthesis and characterization of mesoporous activated with metal to increase performance of direct ethanol fuel cells, Postgraduate, T.RONA(Student), 2011

VARIŞLI D., Direct synthesis of dimethyl ether (DME) from synthesis gas using novel catalysts, Postgraduate, A.ARINAN(Student), 2010

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

- I. **Conversion of ammonia to hydrogen in the microwave reactor system using Mo@Alumina catalysts with the promotion of rare-earth and alkaline earth elements**  
Yildiz Z. N., Varişli D.  
RENEWABLE ENERGY, no.https://doi.org/10.1016/j.renene.2024.120603, pp.120603, 2024 (SCI-Expanded)
- II. **Performance of microwave reactor system in decomposition of ammonia using nickel based catalysts with different supports**  
Seyfeli R. C., Varişli D.  
International Journal of Hydrogen Energy, vol.47, pp.15175-15188, 2022 (SCI-Expanded)
- III. **Ammonia decomposition reaction to produce COx-free hydrogen using carbon supported cobalt catalysts in microwave heated reactor system**

- Can Seyfeli R., Varışlı D.  
International Journal of Hydrogen Energy, vol.45, no.60, pp.34867-34878, 2020 (SCI-Expanded)
- IV. **Performance of Co-Fe@Alumina catalysts in comparison to monometallic Co@Alumina and Fe@Alumina catalysts for microwave assisted CO<sub>x</sub>-free hydrogen production**  
Akca M., VARIŞLI D.  
MOLECULAR CATALYSIS, vol.485, 2020 (SCI-Expanded)
- V. **Multiwall carbon nanotube-supported molybdenum catalysts for ammonia decomposition reaction under microwave effect**  
Guler M., VARIŞLI D.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.2, pp.309-324, 2020 (SCI-Expanded)
- VI. **Catalytic Decomposition of Ammonia for Hydrogen Production over Carbon Nanofiber Supported Fe and Mo Catalysts in a Microwave Heated Reactor**  
Guler M., Korkusuz C., VARIŞLI D.  
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, vol.17, no.6, 2019 (SCI-Expanded)
- VII. **Hydrogen production over molybdenum loaded mesoporous carbon catalysts in microwave heated reactor system**  
Guler M., DOĞU T., VARIŞLI D.  
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.219, pp.173-182, 2017 (SCI-Expanded)
- VIII. **Microwave-assisted ammonia decomposition reaction over iron incorporated mesoporous carbon catalysts**  
VARIŞLI D., Korkusuz C., DOĞU T.  
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.201, pp.370-380, 2017 (SCI-Expanded)
- IX. **Hydrogen from ammonia over cobalt incorporated silicate structured catalysts prepared using different cobalt salts**  
VARIŞLI D., Kaykac N. G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.14, pp.5955-5968, 2016 (SCI-Expanded)
- X. **Ceria Based Nano-composite Synthesis for Direct Alcohol Fuel Cells**  
TAPAN N. A., Cacan U. B., VARIŞLI D.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.9, no.8, pp.4440-4464, 2014 (SCI-Expanded)
- XI. **Synthesizing hydrogen from ammonia over Ru incorporated SiO<sub>2</sub> type nanocomposite catalysts**  
VARIŞLI D., Elverisli E. E.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.39, no.20, pp.10399-10408, 2014 (SCI-Expanded)
- XII. **Performance of Silicotungstic Acid Incorporated Mesoporous Catalyst in Direct Synthesis of Dimethyl Ether from Syngas in the Presence and Absence of CO<sub>2</sub>**  
ÇELİK G., Arinan A., Bayat A., Ozbelge H. O., DOĞU T., VARIŞLI D.  
TOPICS IN CATALYSIS, vol.56, pp.1764-1774, 2013 (SCI-Expanded)
- XIII. **CO<sub>x</sub> free hydrogen production over cobalt incorporated silicate structured mesoporous catalysts**  
Varışlı D., Kaykac N. G.  
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.127, pp.389-398, 2012 (SCI-Expanded)
- XIV. **Dimethyl ether, diethyl ether & ethylene from alcohols over tungstophosphoric acid based mesoporous catalysts**  
Ciftci A., VARIŞLI D., Tokay K. C., SEZGİ N. A., DOĞU T.  
CHEMICAL ENGINEERING JOURNAL, vol.207, pp.85-93, 2012 (SCI-Expanded)
- XV. **CO<sub>x</sub> Free Hydrogen Production From Ammonia Decomposition Over Platinum Based Siliceous Materials**  
VARIŞLI D., Rona T.  
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, vol.10, 2012 (SCI-Expanded)
- XVI. **Dimethyl Ether Synthesis over Novel Silicotungstic Acid Incorporated Nanostructured Catalysts**  
Ciftci A., VARIŞLI D., DOĞU T.  
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, vol.8, 2010 (SCI-Expanded)
- XVII. **Petrochemicals from ethanol over a W-Si-based nanocomposite bidisperse solid acid catalyst**

- Varisli D., DOĞU T., Dogu G.  
Chemical Engineering Science, vol.65, no.1, pp.153-159, 2010 (SCI-Expanded)
- XVIII. **Synthesis and Characterization of Pt-Sn Incorporated MCM-41 and Pt Incorporated Sn-SiO<sub>2</sub> Type Mesoporous Catalysts for Direct Ethanol Fuel Cell**  
VARIŞLI D., Rona T., TAPAN N. A.  
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, vol.8, 2010 (SCI-Expanded)
- XIX. **Novel mesoporous nanocomposite WO<sub>x</sub>-silicate acidic catalysts: Ethylene and diethylether from ethanol**  
Varisli D., DOĞU T., Dogu G.  
Industrial and Engineering Chemistry Research, vol.48, no.21, pp.9394-9401, 2009 (SCI-Expanded)
- XX. **Methanol dehydration reaction to produce clean diesel alternative dimethylether over mesoporous aluminosilicate-based catalysts**  
Varisli D., Tokay K. C., Ciftci A., DOĞU T., Dogu G.  
Turkish Journal of Chemistry, vol.33, no.3, pp.355-366, 2009 (SCI-Expanded)
- XXI. **Silicotungstic acid impregnated MCM-41-like mesoporous solid acid catalysts for dehydration of ethanol**  
Varisli D., DOĞU T., Dogu G.  
Industrial and Engineering Chemistry Research, vol.47, no.12, pp.4071-4076, 2008 (SCI-Expanded)
- XXII. **Ethylene and diethyl-ether production by dehydration reaction of ethanol over different heteropolyacid catalysts**  
Varisli D., Dogu T., Dogu G.  
CHEMICAL ENGINEERING SCIENCE, vol.62, pp.5349-5352, 2007 (SCI-Expanded)
- XXIII. **Alcohols as alternatives to petroleum for environmentally clean fuels and petrochemicals**  
DOĞU T., Varisli D.  
TURKISH JOURNAL OF CHEMISTRY, vol.31, no.5, pp.551-567, 2007 (SCI-Expanded)
- XXIV. **Simultaneous production of tert-Amyl ethyl ether and tert-Amyl alcohol from isoamylen-ethanol-water mixtures in a batch-reactive distillation column**  
Varisli D., Dogu T.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.44, no.14, pp.5227-5232, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Production of Clean Transportation Fuel Dimethylether by Dehydration of Methanol Over Nafion Catalyst**  
VARIŞLI D., DOĞU T.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.21, no.2, pp.37-41, 2008 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Development of Bimetallic Catalysts for CO<sub>x</sub>-free Hydrogen Production by Microwave-Assisted Catalytic Methane Decomposition**  
Acar C., VARIŞLI D.  
8th International Hydrogen Technologies Congress (IHTEC-2024), Diyarbakır, Turkey, 12 - 15 May 2024, pp.1
- II. **Investigation of Methane Catalytic Decomposition over Mesoporous Carbon Supported Ni/La Based Catalysts**  
Köse H. P., VARIŞLI D.  
8th International Hydrogen Technologies Congress, Diyarbakır, Turkey, 12 - 15 May 2024, pp.1
- III. **MIL-101 STRUCTURED MATERIALS AND ITS APPLICATION IN CLEAN HYDROGEN PRODUCTION**  
YEĞENOĞLU E. C., EKİNCİ E., VARIŞLI D.

6th International Hydrogen Technologies Congress, 23 January 2022

- IV. **Effects of Promoters (Lanthanium, Magnesium And Potassium) on The Catalytic Acitivity of Molybdenum-based Catalysts to Produce CO<sub>x</sub>-Free Hydrogen in Different Reactor Systems**  
Topal Z. N., VARIŞLI D.  
6th International Hydrogen Technologies Congress (IHTEC-2022), 23 January 2022
- V. **PRODUCTION OF HYDROGEN IN THE MICROWAVE FOCUS REACTOR SYSTEM LOADED WITH MOLYBDENUM BASED CATALYSTS**  
SEYFELİ R. C., Guler M., VARIŞLI D.  
6th International Hydrogen Technologies Congress (IHTEC-2022), 23 January 2022
- VI. **Hydrogen Production via Decomposition of Ammonia in the Presence of Alumina-Supported Catalysts**  
PEKMEZCİ KARAMAN B., Özben Z., VARIŞLI D., OKTAY N.  
NCC-8 National Catalysis Congress, 09 September 2021
- VII. **Catalytic Studies on Decomposition of Ammonia: An Environmentally Friendly Way of Clean Hydrogen Production**  
Varışlı D.  
NCC-8 National Catalysis Congress, Ankara, Turkey, 09 September 2021, pp.1
- VIII. **Alumina Supported Cobalt and Iron Incorporated Catalysts for Clean Hydrogen Production in Microwave Reactor System**  
Akca M., Varışlı D.  
NCC-8 National Catalysis Congress, Ankara, Turkey, 09 September 2021, pp.1
- IX. **Performance of Carbon Supported Cobalt Catalysts for CO<sub>x</sub> Free Hydrogen Production Under Microwave Effect**  
Seyfeli R. C., Varışlı D.  
NCC-8 National Catalysis Congress, Ankara, Turkey, 09 September 2021, pp.1
- X. **Mikrodalga Isıtmalı Reaktörde Alümina Destekli Molibden Katalizörler Varlığında Amonyanın Hidrojene Dönüşümünün İncelenmesi**  
Topal Z. N., Seyfeli R. C., Varışlı D.  
14. Ulusal Kimya Mühendisliği Kongresi, Konya, Turkey, 10 June 2021, pp.19
- XI. **Activities of mesoporous carbon supported nickel catalysts for CO<sub>x</sub> free hydrogen production in microwave focused reactor system**  
Seyfeli R. C., VARIŞLI D.  
5th Anatolian School of Catalysis, 8 - 11 September 2019
- XII. **Ammonia Decomposition Reaction to Produce CO<sub>x</sub>-free Hydrogen using Carbon Supported Cobalt Catalysts in Microwave Heated Reactor System**  
Seyfeli R. C., VARIŞLI D.  
4th International Hydrogen Technologies Congress, 20 - 23 June 2019
- XIII. **Microwave Heated Reactor System with Multiwall Carbon Nanotube Supported Molybdenum Incorporated Catalysts to Produce Hydrogen from Ammonia**  
Seyfeli R. C., VARIŞLI D.  
4th International Hydrogen Technologies Congress, 20 - 23 June 2019
- XIV. **Application of Microwave Assisted Reaction System on Clean Hydrogen Production**  
VARIŞLI D., Guler M., Korkusuz C.  
4th International Conference on Environmental Science and Technology, ICOEST 4, 19 - 23 September 2018
- XV. **Activities of Cobalt Incorporated Mesoporous Silicate Catalysts on Ammonia Decomposition Using Microwave Heated Reactor System**  
VARIŞLI D., Guler M., Kaykaç N. G.  
4th International Conference on Environmental Science and Technology, ICOEST 4, 19 - 23 September 2018
- XVI. **Amonyaktan CO<sub>x</sub> İçermeyen Hidrojen Üretimi İçin Bakır-Çinko Yüklü Karbon Esaslı Katalizörlerin Mikrodalga Reaktör Sisteminde Uygulaması**  
Akca M., VARIŞLI D.

- 13.Ulusal Kimya Mühendisliği Kongresi, Van, Turkey, 03 September 2018
- XVII. **Kobalt Yüklü Mezogözenekli Karbon Destekli Katalizörler ile Mikrodalga Isıtmalı Reaksiyon Sisteminde Amonyaktan Hidrojen Üretimi**  
Seyfeli R. C., VARIŞLI D.  
13.Ulusal Kimya Mühendisliği Kongresi, Van, Turkey, 03 September 2018
- XVIII. **Microwave assisted ammonia decomposition reaction for clean hydrogen production**  
Guler M., Korkusuz C., Doğu T., VARIŞLI D.  
9TH EASTERN MEDITERRANEAN CHEMICAL ENGINEERING CONFERENCE, 31 August - 02 September 2018
- XIX. **CO<sub>x</sub>-free Hydrogen From Ammonia over Iron Incorporated Catalysts in Microwave Assisted Reactor System**  
Korkusuz C., Doğu T., VARIŞLI D.  
1st International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018
- XX. **Comparison of Microwave Heated System to Conventional Heated System via Ammonia Decomposition Reaction to Produce CO<sub>x</sub> free Hydrogen**  
VARIŞLI D.  
International Congress on Engineering and Life Science, Kastamonu, Turkey, 26 April 2018
- XXI. **Hydrogen Production via Ammonia Decomposition Reaction over Fe, Mo Incorporated Bimetallic Catalysts in Microwave Assisted Reactor System**  
Guler M., Korkusuz C., Doğu T., VARIŞLI D.  
1st International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 April 2018
- XXII. **Microwave Assisted Hydrogen Production From Ammonia Over Carbon Supported Materials**  
VARIŞLI D., Korkusuz C., Guler M., Dogu T.  
2016 AIChE Annual Meeting, San-Francisco, Costa Rica, 11 - 18 November 2016
- XXIII. **Çok Duvarlı Karbon Nanotup Üzerine Molibden Nanokatalizörlerle Mikrodalga Ortamında CO<sub>x</sub> İcermeye Hidrojen Üretimi**  
Guler M., VARIŞLI D., Doğu T.  
12.Ulusal Kimya Mühendisliği Kongresi UKMK 12, İzmir, Turkey, 23 August 2016
- XXIV. **Karbon Nanofiber Destek Üzerine Demir Yüklü Nanokatalizörler ile Mikrodalga Ortamında Amonyaktan Hidrojen Üretimi**  
Korkusuz C., VARIŞLI D., Doğu T.  
12.Ulusal Kimya Mühendisliği Kongresi UKMK 12, İzmir, Turkey, 23 - 26 August 2016
- XXV. **Microwave Assisted CO<sub>x</sub> free Hydrogen Production Over Mesoporous Carbon Supported Molybdenum Nanocatalysts**  
VARIŞLI D., Guler M., Dogu T.  
NCC6- The 6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016
- XXVI. **Hydrogen Production over Mesoporous Carbon Supported Iron Nanocatalysts using Microwave Reactor System**  
VARIŞLI D., Korkusuz C., Dogu T.  
NCC6- The 6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016
- XXVII. **Characterization of Ceria Nano-composites and Their Performance of in Direct Alcohol Fuel Cells**  
TAPAN N. A., Cacac U., VARIŞLI D.  
Characterization of Ceria Nano-composites and Their Performance of in Direct Alcohol Fuel Cells, Adana, Turkey, 23 - 26 April 2014
- XXVIII. **CO<sub>x</sub> Free Hydrogen Production For Fuel Cell Applications Using Cobalt Incorporated Carbon Supported Material**  
VARIŞLI D., Mammadli A.  
Fuel Cells Science and Technology 2016 (FUCE 2016), Glaskow, United Kingdom, 13 - 14 April 2016
- XXIX. **Ceria Based Cobalt Incorporated Nanocatalysts for Clean Hydrogen Production**  
VARIŞLI D., Doğanay İ. E.  
8th International Porous Powder Materials Symposium and Exhibition PPM2015, İzmir, Turkey, 15 - 18 September 2015, pp.97

- XXX. **Cobalt Incorporated Carbon Based Catalysts for Ammonia Decomposition Reaction**  
VARIŞLI D., Memmedli A.  
8th International Porous Powder Materials Symposium and Exhibition PPM2015, İzmir, Turkey, 15 - 18 September 2015, pp.155
- XXXI. **Amonyaktan Hidrojen Üretiminde Kullanılmak Üzere Nanoyapıda Metal Oksit Katalizörlerin Geliştirilmesi**  
VARIŞLI D., İbrahim E D., Özdemir B., Yılmaz T., Okan S., Erkal B., Oruç M.  
27. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015
- XXXII. **Iron Activated Silicate Structured Nanocomposite Catalysts for CO<sub>x</sub> Free Hydrogen Production from Ammonia**  
VARIŞLI D., Kaykac N. G.  
NCC-5, 5th National Catalysis Conference, Adana, Turkey, 23 - 26 April 2014
- XXXIII. **Platinum Incorporated Mono/Bi Metallic Silicate Catalysts to Produce CO<sub>x</sub> free Hydrogen from Ammonia**  
VARIŞLI D., Rona T.  
9th European Congress of Chemical Engineering ECCE9/ECAB2, The Hague, Netherlands, 21 - 25 April 2013
- XXXIV. **Effects of Precursors on the Performance of Cobalt Based Silicate Catalysts to Produce Hydrogen for Fuel Cell Applications**  
VARIŞLI D., Kaykac N. G.  
9th European Congress of Chemical Engineering ECCE9/ECAB2, The Hague, Netherlands, 21 - 25 April 2013
- XXXV. **Amonyaktan Hidrojen Üretimi için Kobalt Esaslı Silikat Malzemeler**  
Kaykac N. G., VARIŞLI D.  
UKMK 10, 10.Ulusal Kimya Mühendisliği Kongresi, İstanbul, Turkey, 3 - 06 September 2012
- XXXVI. **Dimethyl Ether, Diethyl Ether Ethylene From Alcohols over Tungstophosphoric Acid Based Mesoporous Catalysts**  
Ciftci A., Tokay K. C., SEZGİ N. A., Doğu T., VARIŞLI D.  
ISCRE 22, 22nd International Symposium on Chemical Reaction Engineering, Maastricht, Netherlands, 2 - 05 September 2012
- XXXVII. **Ruthenium Incorporated Mesoporous Silicate Catalysts for CO<sub>x</sub> free Hydrogen Production**  
Elverisli E. E., VARIŞLI D.  
4th National Catalysis Conference, Kocaeli, Turkey, 21 - 24 March 2012
- XXXVIII. **Ammonia Decomposition over Cobalt Based Mesoporous Silicate Catalysts**  
Kaykac N. G., VARIŞLI D.  
4th National Catalysis Conference, Kocaeli, Turkey, 21 March 2012
- XXXIX. **Dimethyl Ether from Synthesis Gas over Bifunctional Hybrid Catalysts**  
ÇELİK G., Arman A., VARIŞLI D., Doğu T.  
4th National Catalysis Conference, Kocaeli, Turkey, 21 March 2012
- XL. **Synthesis of Diesel Fuel Alternate Dimethyl Ether from Synthesis Gas also by Methanol Dehydration over Heteropolyacid Based Catalysts**  
Arman A., Ciftci A., ÇELİK G., Doğu T., VARIŞLI D., Gülşen D.  
12th Mediterranean Congress of Chemical Engineering, Barcelona, Spain, 15 - 18 November 2011
- XLI. **The Effects of the Promoter in Cobalt Based Mesoporous Silicate Catalysts for Ammonia Decomposition**  
VARIŞLI D., Kaykac N. G.  
12th Mediterranean Congress of Chemical Engineering, Barcelona, Spain, 15 - 18 November 2011
- XLII. **CO<sub>x</sub> free Hydrogen from Ammonia over Ruthenium Incorporated Mesoporous Silicate Catalysts**  
VARIŞLI D., Elverisli E. E.  
12th Mediterranean Congress of Chemical Engineering, Barcelona, Spain, 15 - 18 November 2011
- XLIII. **Co-silicate based nanocomposite materials for production of CO<sub>x</sub> free hydrogen from ammonia**  
VARIŞLI D., Kaykac N. G.  
8th European Congress of Chemical Engineering together with ProcessNet-Annual Meeting, Berlin, Germany, 25 -

29 September 2011

- XLIV. **Tungstophosphoric Acid Incorporated Silicate Structured Nanocomposite Mesoporous Solid Acid Catalysts: Alcohol Dehydration Applications**  
VARIŞLI D., Ciftci A., Gülşen D., Doğu T.  
5th International FEZA Conference, Valencia, Spain, 3 - 07 July 2011
- XLV. **Bi-Functional Catalytic Reactor for Direct Synthesis Of Dimethyl Ether From Synthesis Gas**  
Arınan A., ÇELİK G., VARIŞLI D., Doğu T., Gülşen D.  
Catalysis in Multiphase Reactors CAMURE-8 International Symposium on Multifunctional Reactors ISMR-7, 22 - 25 May 2011
- XLVI. **ZrO<sub>2</sub> modified CuO-ZnO incorporated mesoporous catalysts for synthesis gas conversion**  
Arınan A., VARIŞLI D., DOĞU T.  
19th International Congress of Chemical and Process Engineering, CHISA 2010 and 7th European Congress of Chemical Engineering, ECCE-7, Prague, Czech Republic, 28 August - 01 September 2010
- XLVII. **Dimethyl Ether (DME) As An Environmentally Friendly Transportation Fuel Alternate**  
VARIŞLI D., Ciftci A., Tokay K. C., Arınan A., Doğu T.  
ICAT 10 International Conference on Energy and Automotive Technologies, İstanbul, Turkey, 05 November 2010
- XLVIII. **Catalytic Studies for Ethanol Based Oxygenates as Gasoline Octane Enhancers**  
DEĞİRMENCİ L., OKTAR N., VARIŞLI D., Gülşen D., Dogu G., Doğu T.  
ICAT 10, International Conference on Energy and Automotive Technologies, İstanbul, Turkey, 05 November 2010
- XLIX. **Mesoporous Catalysts for Dimethyl Ether Synthesis from Synthesis Gas**  
Arınan A., VARIŞLI D., Doğu T.  
6th EFCATS Summer School, İzmir, Turkey, 13 September 2010
- L. **ZrO<sub>2</sub> Modified CuO-ZnO Incorporated Mesoporous Catalysts For Synthesis Gas Conversion**  
Arınan A., VARIŞLI D., Doğu T.  
Chisa 2010 19th International Congress Of Chemical And Process Engineering, Prag, Czech Republic, 28 August - 01 September 2010
- LI. **İki Fonksiyonlu Katalizör Karışımı ile Sentez Gazından Doğrudan Dimetil Eter Sentezi**  
Arınan A., VARIŞLI D., Doğu T.  
UKMK 9, 9. Ulusal Kimya Mühendisliği Kongresi, Ankara, Turkey, 22 June 2010
- LII. **STA Incorporated Catalysts for ETBE Synthesis**  
DEĞİRMENCİ L., VARIŞLI D., OKTAR N., Dogu G., Doğu T.  
NCC-3 3rd National Catalysis Congress, Zonguldak, Turkey, 28 April 2010
- LIII. **Synthesis of ZrO<sub>2</sub> Modified CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> Incorporated Mesoporous Silicate Structured Materials by One-pot Hydrothermal Synthesis Method**  
Arınan A., VARIŞLI D., Doğu T.  
NCC-3 3rd National Catalysis Congress, Zonguldak, Turkey, 28 April - 01 May 2010
- LIV. **Ethylene from ethanol over Al@SBA-15**  
Tokay K. C., VARIŞLI D., Doğu T., Dogu G.  
NCC-3 3rd National Catalysis Congress, Zonguldak, Turkey, 28 April 2010
- LV. **Synthesis and Characterization of Pt@MCMC-41 and Pt-Sn@MCM-41 Mesoporous Catalysts for Direct Ethanol Fuel Cell**  
Rona T., VARIŞLI D., TAPAN N. A.  
NCC-3 3rd National Catalysis Congress, Zonguldak, Turkey, 28 April 2010
- LVI. **Na<sub>2</sub>CO<sub>3</sub> Modified Bifunctional CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> Incorporated Mesoporous Silicate Structured Catalysts for Synthesis of Alcohols and Dimethyl Ether from Synthesis Gas**  
Arınan A., VARIŞLI D., Doğu T.  
6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries EMCC 6, Antalya, Turkey, 7 - 12 March 2010
- LVII. **Synthesis and Characterization of Mesoporous Pt-Based Silicate Catalysts**  
VARIŞLI D., Rona T.  
6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries EMCC 6,



Antalya, Turkey, 7 - 12 March 2010

- LVIII. Bifunctional CuO-ZnO-Al<sub>2</sub>O<sub>3</sub> incorporated mesoporous silicate structured catalysts for direct synthesis of dimethyl ether from syngas**  
Arman A., VARIŞLI D., Doğu T.  
EuropaCat IX, Salamanca, Mexico, 30 August - 04 September 2009
- LIX. Effects of different surfactant removal methods on the catalytic activity of novel Si-W oxide catalysts for ethanol dehydration reaction**  
VARIŞLI D., Doğu T., Dogu G.  
EuropaCat IX, Salamanca, Mexico, 30 August - 04 September 2009
- LX. Dimethyl Ether Synthesis over Novel Silicotungstic Acid Incorporated Nanostructured Catalysts**  
Ciftci A., VARIŞLI D., Doğu T.  
GPE 2009, 2nd International Congress on Green Process Engineering, Venezia, Italy, 14 - 17 June 2009
- LXI. Petrochemicals From Ethanol Over a WSi Based Nanocomposite Bidisperse Solid Acid Catalyst**  
VARIŞLI D., Doğu T., Dogu G.  
ISCRE 20- The 20th International Symposium on Chemical Reaction Engineering, Kyoto, Japan, 7 - 10 September 2008
- LXII. Temiz Dizel Alternatifi Dimetil-Eterin Heteropoliasit Katalizörler Kullanılarak Üretimi**  
VARIŞLI D., Doğu T., Dogu G.  
UKMK 8, 8. Ulusal Kimya Mühendisliği Kongresi, Malatya, Turkey, 26 - 29 August 2008
- LXIII. Mesoporous Cu-Zn-Al Incorporated Mesoporous Catalysts for Direct Synthesis of Dimethyl Ether from Synthesis Gas**  
Arman A., VARIŞLI D., Obalı Z., Doğu T.  
Second National Catalysis Conference (NCC-2), Erzurum, Turkey, 18 June 2008
- LXIV. Methanol Dehydration Reaction to Produce Clean Diesel Alternative Dimethylether**  
VARIŞLI D., Tokay K. C., Ciftci A., Doğu T., Dogu G.  
Second National Catalysis Conference (NCC-2), Erzurum, Turkey, 18 - 21 June 2008
- LXV. Nanocomposite silicotungstic acid impregnated MCM-41 like mesoporous solid acid catalysts for dehydttion of alcohols**  
VARIŞLI D., Doğu T., Dogu G.  
Chemical Nanotechnology Talks VIII Energising a Sustainable Future, Frankfurt, Germany, 20 November 2007
- LXVI. Novel Mesoporous Si-W Oxide Catalysts For Simultaneous Dehydration And Dehydrogenation of Ethanol**  
VARIŞLI D., Doğu T., Dogu G.  
Europacat 8, Turku, Finland, 26 - 31 August 2007
- LXVII. Ethanol Deyhdration over Solid Acid Catalysts Silicotungstic Acid, Tungstophosphoric Acid, Molybdophosphoric Acid and Nafion**  
VARIŞLI D., Doğu T., Dogu G.  
First National Catalysis Conference (NCC-1), Güzelyurt, Cyprus (Kktc), 17 January 2007
- LXVIII. Etil Alkolün Dehidrasyon Reaksiyonu**  
VARIŞLI D., Doğu T., Dogu G.  
7.Ulusal Kimya Mühendisliği Kongresi, Eskişehir, Turkey, 5 - 08 September 2006
- LXIX. Ethylene and Diethyl-Ether Production by Dehydration Reaction of Ethanol Over Different Heteropolyacid Catalysts**  
VARIŞLI D., Doğu T., Dogu G.  
ISCRE 19, 19th International Symposium on Chemical Reaction Engineering, Berlin, Germany, 3 - 06 September 2006
- LXX. Dehydration of Ethanol Over Solid Acid Catalysts Such As Amberlyst-15, Nafion and Tungstophosphoric Acid**  
Dogu G., Arslan K., OKTAR N., Murtezaoğlu K., VARIŞLI D., Doğu T.  
1st European Chemistry Congress, Budapest, Hungary, 27 August 2006
- LXXI. MCM-like Novel Mesoporous Silicotungstic Acid Catalysts**

- VARIŞLI D., Doğu T., Dogu G.  
NANOMAT 2006 International Workshop on Nanostructured Materials, Antalya, Turkey, 21 June 2006
- LXXII. **Novel Mesoporous Nanocomposite Catalysts For Reforming And Dehydration Reactions**  
VARIŞLI D., Sener C., Özdoğan E., Doğu T.  
Sommer Symposium Series, Ankara, Turkey, 14 - 15 May 2006
- LXXIII. **Effect of Feed Composition on Product Distribution in the Reaction of 2-Methyl-2-Butene (2M2B) with Ethanol-Water in a Batch Reactive Distillation Column**  
VARIŞLI D., Doğu T.  
CAMURE-5 ISMR-4 Symposium, 5th International Symposium on Catalysis in Multiphase Reactors 4th International Symposium on Multifunctional Reactors, Slovenia, 15 June 2005
- LXXIV. **Kesikli Katalitik Damıtma Prosesinde T-Amil Alkol ve T-Amil-Etil Eter Üretimi**  
VARIŞLI D., Doğu T.  
UKMK6 VI. Ulusal Kimya Müh. Kongresi, İzmir, Turkey, 02 September 2004
- LXXV. **Yüksek Oktanlı Benzin Katkı Maddeleri Tersiyer Eterlerin Reaktif Damıtma ve Geri Döngülü Reaktör Sistemlerinde Üretimi**  
BOZ N., VARIŞLI D., Doğu T., MÜRTEZAOĞLU K., Dogu G.  
XVIII. Ulusal Kimya Kongresi, Kars, Turkey, 05 July 2004
- LXXVI. **Performances of Batch Reactive Distillation and Batch Reflux Recycle Reactors in the Production of Tert-Amyl-Ethyl Ether**  
VARIŞLI D., BOZ N., Doğu T., Dogu G., MÜRTEZAOĞLU K.  
4th. Int Conference on Unsteady Processes in Catalysis, Montreal, Canada, 26 October 2003
- LXXVII. **Simultaneous Production of Tert-Amyl Alcohol and Tert-Amyl-Ethyl Ether in a Reactive Distillation Column**  
VARIŞLI D., Doğu T.  
ISMR-3 Int. Symp Multifunctional Reactors, Bath, United Kingdom, 27 August 2003
- LXXVIII. **İzo-olefinlerin Eterleşme Reaksiyonlarında Kullanılmak Üzere Reaktif Damıtma Prosesi**  
VARIŞLI D., Doğu T.  
UKMK 5, 5. Ulusal Kimya Müh. Kongresi, Ankara, Turkey, 2 - 05 September 2002

## Supported Projects

- Varişlı D., TUBITAK Project, Mikrodalga Reaktör Teknolojisi İle Metanın Katalitik Ayrışması İçin Metal Yüklü Ve Yüksek Mikrodalga Absorplama Özelliğine Sahip Yeni Katalizörlerin Geliştirilmesi, 2023 - 2025
- Varişlı D., Project Supported by Higher Education Institutions, (06/2019-19) Nikel ve Molibden ile Aktifleştirilmiş Alumina Destekli Katalizörlerin Mikrodalga Isıtmalı Reaktör Sisteminde CO<sub>x</sub>-içermeyen Hidrojen Üretiminde Aktivitesinin İncelenmesi, 2019 - 2022
- Varişlı D., Project Supported by Higher Education Institutions, (06/2018-14) Mikrodalga Isıtmalı Reaktör Sisteminde Kabon Destekli Katalizörler ile Amonyaktan Temiz Hidrojen Eldesi, 2018 - 2020
- Varişlı D., TUBITAK Project, Karbon Destek Üzerine Molibden Ve Demir Yüklü Nanokatalizörlerle Mikro Dalga Ortamında CO<sub>x</sub> İçermeyen Hidrojen Üretimi, 2015 - 2016
- VARIŞLI D., Project Supported by Higher Education Institutions, Demir, Nikel ile Aktifleştirilmiş Farklı Desteklerle Hazırlanmış Mezogözenekli Yapıda Katalizörlerin Sentez ve Karakterizasyonu, 2012 - 2014
- VARIŞLI D., Project Supported by Higher Education Institutions, (BAP 18/2012-06) Demir Nikel ile Aktifleştirilmiş Farklı Desteklerle Hazırlanmış Mezogözenekli Yapıda Katalizörlerin Sentez ve Karakterizasyonu, 2012 - 2014
- Tapan N. A., Varişlı D., TUBITAK Project, Doğrudan Alkol Yakıt Hücreleri için Düşük Pt Yüklü Seryum Nanokompozit Katalizör Sentez ve Karakterizasyonu, 2012 - 2014
- VARIŞLI D., Project Supported by Higher Education Institutions, Metal-Heteropoliasit Nanokompozit Malzemelerin Sentez ve Karakterizasyonu, 2011 - 2012
- VARIŞLI D., Project Supported by Higher Education Institutions, (BAP 18/2011-03) Metal Heteropoliasit Nanokompozit Malzemelerin Sentez ve Karakterizasyonu Gazi Üniversitesi Bilimsel Araştırma Projesi, 2011 - 2012

VARIŞLI D., Project Supported by Higher Education Institutions, Rutenyum ile aktifleştirilmiş mezogözenekli silikat katalizörlerin Sentez ve Karakterizasyonu, 2010 - 2012

VARIŞLI D., Project Supported by Higher Education Institutions, Hidrojen Üretimi için (Co, Fe)-temelli Mezogözenekli Silikat Katalizörlerin Sentezi ve Karakterizasyonu, 2010 - 2012

VARIŞLI D., Project Supported by Higher Education Institutions, (BAP 18/2010-09) Rutenyum ile aktifleştirilmiş mezogözenekli silikat katalizörlerin Sentez ve Karakterizasyonu, 2010 - 2012

VARIŞLI D., Project Supported by Higher Education Institutions, (BAP 18/2010-07) Hidrojen Üretimi için Co Fe temelli Mezogözenekli Silikat Katalizörlerin Sentezi ve Karakterizasyonu, 2010 - 2012

Varişlı D., TUBITAK Project, Amonyaktan Hidrojen Üretimi İçin Geçiş Metali(Co,Fe)-Silikat Temelli Nanokompozit Yapıda Gözenekli Katalizörler, 2010 - 2012

VARIŞLI D., Project Supported by Higher Education Institutions, Doğrudan Etanol Yakıt Hücreleri İçin Pt-Silikat Esaslı Anot Katalizörlerin Hazırlanması, 2009 - 2011

VARIŞLI D., Project Supported by Higher Education Institutions, (BAP 18/2009-5) Doğrudan Etanol Yakıt Hücreleri İçin Pt Silikat Esaslı Anot Katalizörlerin Hazırlanması, 2009 - 2011

Varişlı D., Doğu T., TUBITAK Project, Dizel Alternatifi Dimetileter Sentezi: Katalitik Çalışmalar, 2009 - 2011

Doğu T., Varişlı D., Oktar N., TÜBİTAK International Bilateral Joint Cooperation Program Project, Nanomaterials as Catalysts for Bioethanol Transformation, 2008 - 2010

Doğu T., Varişlı D., Project Supported by Higher Education Institutions, (BAP-2008-03-04-03) Kömür Bazlı Sentez Gazlarından Alternatif Dizel Yakıt Üretimi, 2008 - 2009

Doğu T., TUBITAK Project, Etanolden Hidrojen ve Etilen Üretimi için Pd,Ni ve Silikotungstik Asit ile Aktifleştirilmiş MCM-41 Türü Mezogözenekli Nanokompozit Katalizör Geliştirilmesi, 2006 - 2008

## Congress and Symposium Activities

6th International Hydrogen Technologies Congress IHTEC 6, Attendee, Çanakkale, Turkey, 2022

NCC-8 National Catalysis Congress, Invited Speaker, Ankara, Turkey, 2021

NCC-8 National Catalysis Congress, Session Moderator, Ankara, Turkey, 2021

14. Ulusal Kimya Mühendisliği Kongresi, Attendee, Konya, Turkey, 2021

14.Ulusal Kimya Mühendisliği Kongresi, Attendee, Konya, Turkey, 2021

4th International Hydrogen Technologies Congress, Attendee, Edirne, Turkey, 2019

EMCC9 9th Eastern Mediterranean Chemical Engineering Conference, Invited Speaker, Ankara, Turkey, 2018

## Scholarships

BİDEB 2219, TUBİTAK, 2016 - 2017