

CURRICULUM VITAE

Name : Dilek Varışlı
Title : Assist.Prof.Dr.
Employer : Gazi University, Ankara, Turkey
Telephone : (+90) 312 2023701
Fax : (+90) 312 2023710
e-mail : dilekvarisli@gazi.edu.tr
Date of birth : 19.04.1979

Education:

Degree Name	Degree Major	Institution Name	Date
Bachelor of Science	Chemical Engineering	Middle East Technical University	2000
Master of Science	Chemical Engineering	Middle East Technical University	2003
Doctor of Philosophy	Chemical Engineering	Middle East Technical University	2007

Academic Positions:

Titles	Institution	Date
Teaching Assistant	Middle East Technical University, Department of Chemical Engineering	2000-2007
Assist.Prof.Dr.	Gazi University, Advanced Technologies	2008- contunied
Assist.Prof.Dr.	Gazi University, Ataturk Vocational Colleges	2009- contunied

Research Positions:

1. “Transition metal (Co,Fe)-silicate based nanocomposite porous catalysts for hydrogen production from ammonia”, supported by The Scientific and Technological Research Council of Turkey (TUBITAK) (Project Code: 109M560), Project Director, 2010-2012.
2. “Synthesis of Diesel Fuel Alternate, Dimethylether: Catalytic Studies”, supported by The Scientific and Technological Research Council of Turkey (TUBITAK) (Project Code: 108M571), Researcher, 2009-2011.

3. "Nanomaterials as Catalysts for Bioethanol Transformation", supported by The Scientific and Technological Research Council of Turkey (TUBITAK) (Project Code: 107M184), Joint project with The Ministry of Ukraine for Education and Science, Researcher, 2008-2010.
4. "Pd, Ni and silicotungstic acid activated MCM-41 type mesoporous nanocomposite catalysts for hydrogen and ethylene production from ethanol", supported by The Scientific and Technological Research Council of Turkey (TUBITAK) (Project Code: 106M073), Researcher, 2006-2008.
5. "Synthesis and Characterization of Low Pt loading-ceria nanocomposite catalysts for direct alcohol fuel cells", supported by The Scientific and Technological Research Council of Turkey (TUBITAK) (Project Code: 111M474, COST Project), Researcher, 2012-Cont.
6. "Synthesis and characterization of metal-heteropolyacid nanocomposite materials", supported by Gazi University Research Fund (Project Code: BAP 18/2011-03), Project Director, 2011-2012.
7. "Synthesis and Characterization of Co,Fe based mesoporous silicate catalysts for hydrogen production", supported by Gazi University Research Fund (Project Code, BAP 18/2010-07), Project Director, 2010-2011.
8. "Synthesis and characterization of ruthenium activated mesoporous silicate catalysts", supported by Gazi University Research Fund (Project Code: BAP 18/2010-09), Project Director, 2010-2011.
9. "Preparation of Pt-silicate based anode catalysts for direct ethanol fuel cells", supported by Gazi University Research Fund (Project Code: BAP 18/2009-05), Project Director, 2009-2010.
10. "Synthesis and Characterization of Fe,Ni activated mesoporous catalysts using different supports", supported by Gazi University Research Fund (Project Code: BAP 18/2012-06), Project Director, 2012-Cont.

11. “Production of diesel alternative fuel from coal based synthesis gas”, supported by Middle East Technical University Research Fund (Project code: BAP-2008-03-04-03), Researcher, 2008-2009.
12. “Synthesis of dimethyl ether and diethyl ether”, supported by Middle East Technical University Research Fund (Project Code: BAP-03-04-DPT-2003(06K120920-17)), Researcher, 2006-2007.
13. “Solid acid catalysts for ethanol dehydration reaction”, supported by Middle East Technical University Research Fund (Project Code: BAP-2006-03-04-02), Researcher, 2006-2008.
14. “Kinetic studies for dimethyl ether and diethyl ether production”, supported by Middle East Technical University Research Fund (Project Code: BAP-2005-07-02-00-76), Researcher, 2005-2008.
15. “Synthesis of catalysts for octane enhancers, ETBE, TAME and TAE and kinetic studies”, supported by Middle East Technical University Research Fund (Project Code: BAP-03-04-DPT-2002-K120540-19), Researcher, 2002-2005.
16. “Reactive distillation process for etherification of isoolefines”, supported by Middle East Technical University Research Fund (Project code: AFP-2001-07-02-00-25), Researcher, 2001-2003.

Memberships:

Turkish Catalysis Society

Awards/ Scholarships:

1. Nominated by The Scientific and Technological Research Council of Turkey for participation in the **63rd Meeting of Nobel Laureates (Chemistry)** - from 30/6/2013 to 5/7/2013.
2. Middle East Technical University Prof.Dr. Mustafa N. Foundation Awards, “**METU Thesis of the Year**” Award, 2003.
3. University of Bath, **The Best Poster Presentation in the GlaxoSmithKline Award**, ISMR3-CCRE18, 2003.

Publications:

Thesis:

1. **M.Sc.Thesis:** “The Simultaneous Production of Tert-Amyl Alcohol and Tert-Amyl-Ethyl Ether in A Reactive Distillation Column”, Middle East Technical University, Ankara, 2003, **Supervisor:** Prof.Dr.Timur Dogu.
2. **Ph.D. Thesis:** “Kinetic Studies for Dimethyl Ether and Diethyl Ether Production”, Middle East Technical University, Ankara, 2007, **Supervisor:** Prof.Dr.Timur Dogu; **Co-Supervisor:** Prof.Dr.Gulsen Dogu.

Articles Published In International Journals:

1. Varisli D., Kaykac, N.G., “CO_x free Hydrogen Production over Cobalt Incorporated Silicate structured Mesoporous Catalysts”, *Applied Catalysis B: Environmental*, 127, 389-398 (2012) (SCI).
2. Varisli, D., Rona, T., “CO_x Free Hydrogen Production From Ammonia Decomposition Over Platinum Based Siliceous Materials”, *International Journal of Chemical Reactor Engineering*, Vol 10, A56 (2012) (SCI-Expanded).
3. Ciftci, A., Varisli, D., Tokay, K.C., Sezgi, N.A., Dogu, T., “Dimethyl ether, diethyl ether & ethylene from alcohols over tungstophosphoric acid based mesoporous catalysts”, *Chemical Engineering Journal*, 207-208, 85-93 (2012) (SCI).
4. Varisli, D., Rona, T., Tapan, N.A., "Synthesis and Characterization of Pt-Sn Incorporated MCM-41 and Pt Incorporated Sn-SiO₂ Type Mesoporous Catalysts for Direct Ethanol Fuel Cell", *International Journal of Chemical Reactor Engineering*, Vol 8, A152 (2010) (SCI-Expanded).
5. Varisli, D., Dogu, T., Dogu, G., “Petrochemicals from ethanol over A W-Si based nanocomposite bidisperse solid acid catalyst”, *Chemical Engineering Science*, 65, 153-159 (2010) (SCI).
6. Ciftci, A., Varisli, D., Dogu, T., “Dimethyl Ether Synthesis over Novel Silicotungstic Acid Incorporated Nanostructured Catalysts”, *International Journal of Chemical Reactor Engineering*, Vol 8, A45 (2010) (SCI-Expanded).

7. Varisli, D., Dogu, T., And Dogu, G., “Novel Mesoporous Nanocomposite WO_x-Silicate Acidic Catalysts: Ethylene And Diethylether From Ethanol”, *Industrial and Engineering Chemistry Research*, 48, 9394-9401 (2009) (SCI).
8. Varışlı, D., Tokay, K.C., Çiftci, A., Doğu,T., Doğu, G., "Methanol Dehydration Reaction To Produce Clean Diesel Alternative Dimethylether Over Mesoporous Aluminosilicate-Based Catalysts", *Turkish Journal of Chemistry*, 33, 355-366 (2009) (SCI-Expanded).
9. Varisli, D., Dogu, T. and Dogu, G., “Silicotungstic Acid Impregnated MCM-41-like Mesoporous Solid Acid Catalysts for Dehydration of Ethanol”, *Industrial and Engineering Chemistry Research*, 47, 4071-4076 (2008) (SCI).
10. Varisli, D., Dogu, T., Dogu, G., “Ethylene and diethyl-ether production by dehydration reaction of ethanol over different heteropolyacid catalysts”, *Chemical Engineering Science*, 62, 5349-5352 (2007) (SCI).
11. Doğu, T., Varışlı, D., “Alcohols as Alternates to Petroleum for Environmentally Clean Fuels and Petrochemicals”, *Turkish Journal of Chemistry*, 31, 551-567 (2007) (SCI-Expanded).
12. Varisli, D. and Dogu,T. “Simultaneous Production of Tert-Amyl Ethyl Ether and Tert-Amyl Alcohol from Isoamylene-Ethanol-Water Mixtures in a Batch-Reactive Distillation Column”, *Industrial and Engineering Chemistry Research*, 44, 5227-5232 (2005) (SCI).

Articles Published In National Journals:

1. Varisli, D., Dogu, T., “Production of Clean Transportation Fuel Dimethylether by Dehydration of Methanol over Nafion Catalyst”, *G.U.Journal of Science*, **21(2)**, 37-41 (2008).

Citations from ISI Web of Knowledge: 125

International Symposium Presentations:

1. Ciftci, A., Varisli, D., Tokay, K.C., Sezgi, N.A., Dogu, T., “Dimethyl Ether, Diethyl Ether and Ethylene From Alcohols over Tungstophosphoric Acid Based Mesoporous Catalysts”, ISCRE 22, International Symposium on Chemical Reaction Engineering, Programme List of Participants P.29, Maastricht, The Netherlands, September 2-5, 2012.

2. Varisli, D., Kaykac, N.G., "The Effects of the Promoter in Cobalt Based Mesoporous Silicate Catalysts for Ammonia Decomposition", 12th Mediterranean Congress of Chemical Engineering, Abstracts pp.24/13_036_P, Barcelona, Spain, November 15-18, 2011.
3. Varisli, D., Elverisli, E.E., "CO_x free Hydrogen from Ammonia over Ruthenium Incorporated Mesoporous Silicate Catalysts", 12th Mediterranean Congress of Chemical Engineering, Abstracts pp.33/21_050_P, Barcelona, Spain, November 15-18, 2011.
4. Arinan, A., Ciftci, A., Celik, G., Dogu, T., Varisli, D., Dogu, G., "Synthesis of Diesel Fuel Alternate Dimethyl Ether from Synthesis Gas & also by Methanol Dehydration over Heteropolyacid Based Catalysts", 12th Mediterranean Congress of Chemical Engineering, Abstracts pp.19/13_006_O, Barcelona, Spain, November 15-18, 2011.
5. Varisli, D., Kaykac, N.G., "Co-silicate based nanocomposite materials for production of CO_x free hydrogen from ammonia", 8th European Congress of Chemical Engineering together with ProcessNet-Annual Meeting, Programme pp.72/P01.04, Berlin, Germany, September 25-29, 2011.
6. Varisli, D., Ciftci, A., Dogu, G., Dogu, T., "Tungstophosphoric Acid Incorporated Silicate Structured Nanocomposite Mesoporous Solid Acid Catalysts: Alcohol Dehydration Applications", 5th International FEZA Conference, Abstracts pp.241, Valencia, Spain, July 3-7, 2011.
7. Arinan, A., Celik, G., Varisli, D., Dogu, T., Dogu, G., "Bi-Functional Catalytic Reactor for Direct Synthesis Of Dimethyl Ether From Synthesis Gas", Catalysis in Multiphase Reactors CAMURE-8 & International Symposium on Multifunctional Reactors ISMR-7, Abstract Book pp. 100, Finland, 22-25 May, 2011.
8. Varisli, D., Ciftci, A., Tokay, K.C., Arinan, A., Dogu, T., "Dimethyl Ether (DME) As An Environmentally Friendly Transportation Fuel Alternate", ICAT 10 International Conference on Energy and Automotive Technologies, ICAT 10_CD, pp.1-8, Istanbul, Turkey, November 5, 2010.
9. Degirmenci, L., Oktar, N., Varisli, D., Dogu, G., Dogu, T., "Catalytic Studies for Ethanol Based Oxygenates as Gasoline Octane Enhancers", ICAT 10, International Conference on

Energy and Automotive Technologies, ICAT 10_CD, pp.1-9, Istanbul, Turkey, November 5, 2010.

10. Varisli, D., Rona, T., "Synthesis and Characterization of Platinum-Based Mesoporous Silicate Materials", 6th EFCATS Summer School, Program & Abstracts p.78, Izmir, Turkey, September 13-19, 2010.
11. Arinan, A., Varisli, D., Dogu, T., "Mesoporous Catalysts for Dimethyl Ether Synthesis from Synthesis Gas", 6th EFCATS Summer School, Program & Abstracts p.36, Izmir Turkey, September 13-19, 2010.
12. Arinan A., Varisli D., Dogu T., "ZrO₂ Modified CuO-ZnO Incorporated Mesoporous Catalysts For Synthesis Gas Conversion", Chisa 2010 19th International Congress of Chemical and Process Engineering, Summaries 1, Reaction and Electrochemical Engineering Page 345-346, P1.139, Prague, Czech Republic, 28 August-1 September, 2010.
13. Varisli, D., Rona, T., "Synthesis and Characterization of Mesoporous Pt-Based Silicate Catalysts", 6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries EMCC 6, Book of Abstracts p.138, Antalya Turkey, March 7-12, 2010.
14. Arinan, A., Varisli, D., Dogu, T., "Na₂CO₃ Modified Bifunctional CuO-ZnO-Al₂O₃ Incorporated Mesoporous Silicate Structured Catalysts for Synthesis of Alcohols and Dimethyl Ether from Synthesis Gas", 6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries EMCC 6, Book of Abstracts p.169, Antalya Turkey, March 7-12, 2010.
15. Varisli, D., Dogu, T., Dogu, G., "Effects of different surfactant removal methods on the catalytic activity of novel Si-W oxide catalysts for ethanol dehydration reaction", EuropaCat IX, Abstracts pp. 409, Salamanca, Spain, 30th August-4th September 2009.
16. Arinan, A., Varisli, D., Dogu, T., "Bifunctional CuO-ZnO-Al₂O₃ incorporated mesoporous silicate structured catalysts for direct synthesis of dimethyl ether from syngas", EuropaCat IX, Abstracts pp. 522, Salamanca, Spain, 30th August-4th September 2009.

17. Ciftci, A., Varisli, D., Dogu, T., "Dimethyl Ether Synthesis over Novel Silicotungstic Acid Incorporated Nanostructured Catalysts", GPE 2009, 2nd International Congress on Green Process Engineering, Programme p.24, Venezia, Italy, June 14-17, 2009.
18. Varisli, D., Dogu, T., Dogu, G., "Petrochemicals From Ethanol over a W-Si Based Nanocomposite Bidisperse Solid Acid Catalyst", ISCRE 20- The 20th International Symposium on Chemical Reaction Engineering, Book of Abstract pp. 406-407, Kyoto Japan, September 7-10, 2008.
19. Varisli, D., Dogu, T., Dogu, G., "Nanocomposite silicotungstic acid impregnated MCM-41 like mesoporous solid acid catalysts for dehydrtion of alcohols", Chemical Nanotechnology Talks VIII Energising a Sustainable Future, Books of Abstracts pp.16, Messe, Frankfurt, November 20-21, 2007.
20. Varisli, D., Dogu, T., Dogu, G., "Novel Mesoporous Si-W Oxide Catalysts For Simultaneous Dehydration And Dehydrogenation of Ethanol", Europacat 8, Abstracts P12-45, Turkuabo, Finland, 26-31 August 2007.
21. Varisli, D., Sener, C., Ozdogan, E., Dogu, T., "Novel Mesoporous Nanocomposite Catalysts For Reforming And Dehydration Reactions", Somer Symposium Series 1, P.82, METU, Ankara, Turkey, May 14-15, 2006.
22. Varisli, D., Dogu, T., Dogu, G., "Ethylene and Diethyl-Ether Production by Dehydration Reaction of Ethanol Over Different Heteropolyacid Catalysts", ISCRE 19, 19th International Symposium on Chemical Reaction Engineering, Book of Abstracts p. 448, Potsdam/Berlin, Germany, September 3-6, 2006.
23. Dogu, G., Arslan, K., Oktar, N., Murtezaoglu, K., Varisli, D., Dogu, T., "Dehydration of Ethanol Over Solid Acid Catalysts Such As Amberlyst-15, Nafion and Tungstophosphoric Acid", 1st European Chemistry Congress, Abstract Book p.42, Budapest HUNGARY, 27-31 August 2006.
24. Varisli, D., Dogu, T., Dogu, G., "MCM-like Novel Mesoporous Silicotungstic Acid Catalysts", NANOMAT 2006 International Workshop on Nanostructured Materials, Proceedings p. 165, Antalya Turkey, June 21-23, 2006.

25. Varisli, D., Dogu, T., “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”, CAMURE-5 & ISMR-4 Symposium, 5th International Symposium on Catalysis in Multiphase Reactors & 4th International Symposium on Multifunctional Reactors, Proceedings p.241, Portoroz, Slovenia, 15-18 June, 2005.
26. Varisli, D., Dogu, T., “Simultaneous Production of Tert-Amyl Alcohol and Tert-Amyl-Ethyl Ether in a Reactive Distillation Column”, ISMR-3 Int. Symp Multifunctional Reactors, Proceedings p. 229-232, BATH, England, 27-30 August 2003.
27. Varisli D., Boz, N., Dogu, T., Dogu, G., Murtezaoglu K., “Performances of Batch Reactive Distillation and Batch Reflux Recycle Reactors in the Production of Tert-Amyl-Ethyl Ether”, USCPC-4, 4th. Int Conference on Unsteady Processes in Catalysis, Proceedings pp. 32, Montreal, Canada, 26-29 October 2003.

National Symposium Presentations:

1. Kaykaç, N.G., Varışlı, D., “Cobalt based silicate materials for hydrogen production from ammonia”, UKMK 10, 10th National Chemical Engineering Cong., Programme P-19, Istanbul, 3-6 September 2012.
2. Kaykac, N.G., Varisli, D., “Ammonia Decomposition over Cobalt Based Mesoporous Silicate Catalysts”, 4th National Catalysis Conference, Book of Abstracts pp.57, Kocaeli, 21-24 March 2012.
3. Elverisli, E.E., Varisli, D., “Ruthenium Incorporated Mesoporous Silicate Catalysts for CO_x free Hydrogen Production”, 4th National Catalysis Conference, Book of Abstracts pp.58, Kocaeli, 21-24 March 2012.
4. Celik, G., Arinan, A., Varisli, D., Dogu, T., “Dimethyl Ether from Synthesis Gas over Bifunctional Hybrid Catalysts”, 4th National Catalysis Conference, Book of Abstracts pp.47, Kocaeli, 21-24 March 2012.
5. Arinan, A., Varışlı, D., Dogu, T., “Direct Synthesis of Dimethyl Ether over bifunctional catalysts mixture”, UKMK 9, 9th Chemical Engineering Cong., Book of Abstracts, pp. 549-550, Ankara, 22-25 June 2010.

6. Rona, T., Varışlı, D., Tapan, N.A., "Synthesis and Characterization of Pt@MCMC-41 and Pt-Sn@MCM-41 Mesoporous Catalysts for Direct Ethanol Fuel Cell", NCC-3 3rd National Catalysis Congress, Book of Abstract p.138, Zonguldak, April 28-May 1, 2010.
7. Arınan, A., Varisli, D., Dogu, T., "Synthesis of ZrO_2 Modified $\text{CuO-ZnO-Al}_2\text{O}_3$ Incorporated Mesoporous Silicate Structured Materials by One-pot Hydrothermal Synthesis Method", NCC-3 3rd National Catalysis Congress, Book of Abstract p.37, Zonguldak, April 28-May 1, 2010.
8. Tokay, K.C., Varışlı, D., Dogu, T., Dogu, G., "Ethylene from ethanol over Al@SBA-15", NCC-3 3rd National Catalysis Congress, Book of Abstract p.174, Zonguldak, April 28-May 1, 2010.
9. Degirmenci, L., Varışlı, D., Oktar, N., Dogu, G., Dogu, T., "STA Incorporated Catalysts for ETBE Synthesis", NCC-3 3rd National Catalysis Congress, Book of Abstract p.176, Zonguldak, April 28-May 1, 2010.
10. Varışlı, D., Doğu, T., Doğu, G., "Production of Clean Diesel Alternative Dimethyl ether with Heteropolyacid Catalysts", UKMK 8, 8th National Chemical Engineering Cong., Book of Abstract pp.170, Inonu University, Malatya, 26-29 August 2008.
11. Varışlı, D., Tokay, K.C., Çiftçi, A., Doğu, T., Doğu, G., "Methanol Dehydration Reaction to Produce Clean Diesel Alternative Dimethylether", Second National Catalysis Conference (NCC-2), Abstracts p.29, Erzurum, 18-21 June 2008.
12. Arınan, A., Varışlı, D., Obalı, Z., Doğu, T., "Mesoporous Cu-Zn-Al Incorporated Mesoporous Catalysts for Direct Synthesis of Dimethyl Ether from Synthesis Gas", Second National Catalysis Conference (NCC-2), Abstracts p.37, Erzurum, 18-21 June 2008.
13. Varışlı, D., Doğu, T., Doğu, G. "Ethanol Deyhdration over Solid Acid Catalysts Silicotungstic Acid, Tungstophosphoric Acid, Molybdophsphoric Acid and Nafion", First National Catalysis Conference (NCC-1), Abstracts p. 57, METU Northern Cyprus Campus, Güzelyurt, TRNC, 17-20 January 2007.

14. Varışlı, D., Doğu, T., Doğu, G., “Dehydration Reaction of Ethanol”, UKMK7, 7th National Chemical Engineering Cong., Book of Abstracts, pp. 449, Eskisehir, 5-8 September 2006.
15. Varışlı, D., Dogu, T., “T-Amyl Alcohol and T-amyl ethyl ether production on A Reactive Distillation Process”, UKMK6, 6th National Chemical Engineering Cong., Book of Abstracts RM-37, Izmir, September 2004.
16. Boz, N., Varışlı, D., Dogu, T., Murtezaoglu, K., Dogu, G., “Synthesis of tertiary ethers which are fuel additives with high octane number, on A Reactive Distillation Column and A Reflux Recycle Reactor System”, XVIII. National Chemistry cong, Book of Abstracts 746, Kars, 5-9 July 2004.
17. Varışlı, D., Dogu, T., “Reactive Distillation Process for etherification reaction of isoamylenes”, UKMK 5, 5th National Chemical Engineering Cong., Book of Abstracts RM02, Ankara, 2-5 September 2002.

Supervised Thesis:

1. Arınan, A., “Direct Synthesis of Dimethyl Ether (DME) from Synthesis Gas Using Novel Catalysts”, M.Sc. Thesis, Middle East Technical University, Ankara, January 2010 (Supervisor: Prof.Dr.Timur Dogu, Co-Supervisor: Assist.Prof.Dr.Dilek Varisli).
2. Rona, T., “Synthesis and Characterization of Metal Activated Mesoporous Materials to Increase the Performance of Direct Ethanol Fuel Cell”, M.Sc.Thesis, Gazi University, Ankara, June 2011.
3. Kaykaç, N.G., “Synthesis and Characterization and Usage of Cobalt and Iron Based Silicate Catalysts for Production of Hydrogen from Ammonia”, M.Sc. Thesis, Gazi University, Ankara, June 2012.
4. Elverisli, E.E., “Synthesis and Characterization of Rythenium Based Silicate Catalysts and Studies on Hydrogen Synthesis”, M.Sc. Thesis, Gazi University, Ankara, October 2012.
5. Doganay, I.E., “Synthesis and Characterization of Iron and Nickel Activated catalysts”, M.Sc. Thesis, Gazi University, Ankara, Continued.