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## EDUCATION

Year	Degree	Department	Academic Institution	Thesis Title
2006	Ph.D.	Chemical Engineering	Hacettepe University, Turkey	Development Of New Membranes For Proton Exchange Membrane Fuel Cells By Alternative Methods
2000	M.Sc.	Chemical Engineering	Hacettepe University, Turkey	Investigation Of Pyrolysis Kinetics Of Various Turkish Coals By Thermogravimetric Analysis
1997	B.Sc.	Chemical Engineering	Hacettepe University, Turkey	

## ACADEMIC APPOINTMENTS

Year(s)	Academic Title	Department	Academic Institution
2013 – 2015	Assistant Professor	Energy Systems Engineering	Atılım University, Turkey
2015- Present	Associated Professor	Energy Systems Engineering	Atılım University, Turkey

## RESEARCH EXPERIENCE

Year(s)	Position	Department	Institution
2015- Present	Associated Professor	Energy Systems Engineering	Atılım University, Turkey
2013 -2015	Assistant Professor	Energy Systems Engineering	Atılım University, Turkey
2011-2008	Post-doctoral Researcher	Chemical Engineering	Middle East Technical University, Turkey
2008 – 2007	Post-doctoral Fellow	Chemical Engineering	Middle East Technical University, Turkey
2006 -2000	Research Assistant / PhD Student	Chemical Engineering	Hacettepe University, Turkey
2000 -1997	Research Assistant / M.Sc. Student	Chemical Engineering	Hacettepe University, Turkey

## TEACHING EXPERIENCE

Year(s)	Position	Department	Institution	Courses Taught
2015 – Present	Associate Professor	Energy Systems Engineering	Atılım University, Turkey	Fuel Cell Technology, Energy System Engineering I, Energy System Engineering II, Hydrogen Technology, Heat Transfer
2013 – 2015	Assistant Professor	Energy Systems Engineering	Atılım University, Turkey	Fuel Cell Technology, Energy System Engineering I, Energy System Engineering II, Hydrogen Technology, Heat Transfer
2013 – 2016	Assistant Professor	Automotive Engineering	Atılım University, Turkey	Heat Transfer

## PROJECTS

1. **TUBITAK 1001:** Design and Development of the High Temperature Fuel Cell Fueled by Reformate Gases for Evaluation of Micro- Cogeneration Application, 2015-2018.
2. **EU PROJECT, TUBITAK 1509:** Development and Integration of 2 kW HT-PEM Fuel Cell Hybrid System for Ground Utility Vehicles at the Airport, 2015-2018.
3. **Ankara Development Agency:** Development of PEM Fuel Cell UPS, 2013-2014.
4. **TÜBİTAK 1507:**Development of 500 W PEM Fuel Cell Generator, 2012-2013.
5. **ICHET international H2-FC projects:** Development of 3 kW Fuel Cell system, 2010-2012.
6. **Atılım University ATÜ-LAP-SD-1314-02:** Development of High Performance MEA for PEM Fuel Cell and Prototype Application of Solar Hydrogen Energy Hybrid System, 2013-2014.
7. **Atılım University ATÜ-LAP-C-1516-03:** Hydrogen Production from Sodium Borohydride and Development of Sodium Borohydride PEM Fuel Cell, 2015-2016.
8. **Atılım University ATÜ-LAP-1415-02:** Development of High Performance Membrane Electrode Assembly For Pem Fuel Cell And Use In Fuel Cell Powered Scooter Prototype.
9. **TÜBİTAK-MAG-109M221:** Development of Composite Membranes and Electrocatalyst for PEM Fuel Cells and Investigation of Long Term Stabilities, 2009-2012.
10. **KOSGEB:** Development of DMFC and PEM Test Station Prototype, 2011-2012.
11. **DPT Project 02K 120 290-16:** Synthesis of New Membranes for Proton Exchange Membrane Fuel Cells and Performance Evaluation in Prototype Fuel Cell.
12. **TÜBİTAK-MAG-104M364:** Development of High Temperature Proton Exchange Membrane Fuel Cell
13. **ODTÜ -BAP-03-04-2008-07:** High Temperature Proton Exchange Membrane Fuel Cells, 2008-2010.
14. **TÜBİTAK-TBAG-101T188:** BIOENG1: Synthesis/ Production/ Characterization Application of Biodegradable Polymer and Composite Biomaterials for Soft and Hard Tissue Therapy and Repair. BIOENG2: Design of the carrier for gene delivery to cells and Cell Culture Applications 2002-2005.
15. **MAG-100M072:** Synthetic Biodegradable Polymeric Materials Production for Soft and Hard Tissue Therapy and Repair, 2000.
16. **TÜBİTAK-TBAG-105T509:** Tissue Engineering for Biomedical Technology, 2006-2008. FP6-SSA-2.
17. **TÜBİTAK BİDEP:** Synthesis and Characterization of Sulfonated Polyarylene Ether Sulfone Membranes for Proton Exchange Membrane Fuel Cell, 2007-2008.

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## SCHOLARSHIPS

1. TUBITAK National Doctorate Scholarship (2001-2004).
2. TUBITAK National Post. Doctorate Scholarship (2007-2008).

## AWARDS, FELLOWSHIPS, GRANTS

1. 3rd prize: Selçuk University, Student Project Competition, 2016, (Supervisor).
2. Second Prize-ICEM 2014, International Conference on Energy and Management, 5-7 June 2014, Student Competition (Supervisor).
3. 3rd prize: Selçuk University, Student Project Competition, 2014, (Supervisor).
4. 4. International Istanbul Smart Grid Congress and Fair, 2015, Turkey, Best Presentation Award (Second Prize)

## PUBLICATIONS

### Refereed Journals

1. Berna Sezgin, Dilara Gulcin Caglayan, **Yülser Devrim**, Thomas Steenberg, Inci Eroglu, Modeling and sensitivity analysis of high temperature PEM fuel cells by using Comsol Multiphysics, International Journal of Hydrogen Energy, Volume 41, Issue 23, 22 June 2016, Pages 10001-10009. [doi:10.1016/j.ijhydene.2016.03.142](https://doi.org/10.1016/j.ijhydene.2016.03.142)
2. **Yülser Devrim**, Hüseyin Devrim, Inci Eroglu, Polybenzimidazole/SiO<sub>2</sub> hybrid membranes for high temperature proton exchange membrane fuel cells, International Journal of Hydrogen Energy, Volume 41, Issue 23, 22 June 2016, Pages 10044-10052. [doi:10.1016/j.ijhydene.2016.02.043](https://doi.org/10.1016/j.ijhydene.2016.02.043)
3. Dilara Gulcin Caglayan, Berna Sezgin, **Yülser Devrim**, Inci Eroglu, Three-dimensional modeling of a high temperature polymer electrolyte membrane fuel cell at different operation temperatures, International Journal of Hydrogen Energy, Volume 41, Issue 23, 22 June 2016, Pages 10060-10070. [doi:10.1016/j.ijhydene.2016.03.049](https://doi.org/10.1016/j.ijhydene.2016.03.049)
4. **Yülser Devrim**, and Ayhan Albostan, Graphene-Supported Platinum Catalyst-Based Membrane Electrode Assembly For PEM Fuel Cell Journal of Electronic Materials DOI: 10.1007/S11664-016-4703-2.
5. Yağmur Özdemir, Nurhan Üregen, **Yülser Devrim**, Polybenzimidazole based nanocomposite membranes with enhanced proton conductivity for high temperature PEM fuel cells, International Journal of Hydrogen Energy, In Press, Corrected Proof, Available online 9 May 2016. [doi:10.1016/j.ijhydene.2016.04.132](https://doi.org/10.1016/j.ijhydene.2016.04.132).
6. Ekin Özgirgin, **Yülser Devrim**, Ayhan Albostan, Modeling and simulation of a hybrid photovoltaic (PV) module-electrolyzer-PEM fuel cell system for micro-cogeneration applications, International Journal of Hydrogen Energy, Volume 40, Issue 44, 26 November 2015, Pages 15336-15342. [doi:10.1016/j.ijhydene.2015.06.122](https://doi.org/10.1016/j.ijhydene.2015.06.122)
7. Levent Bilir, Mehmet İmir, **Yülser Devrim**, Ayhan Albostan, Seasonal and yearly wind speed distribution and wind power density analysis based on Weibull distribution function, International Journal of Hydrogen, Volume 40, Issue 44, 26 November 2015, Pages 15301-15310. [doi:10.1016/j.ijhydene.2015.04.140](https://doi.org/10.1016/j.ijhydene.2015.04.140)
8. **Yülser Devrim**, Ayhan Albostan, Enhancement of PEM fuel cell performance at higher temperatures and lower humidities by high performance membrane electrode assembly based on Nafion/zeolite membrane, International Journal of Hydrogen Energy, Volume 40, Issue 44, 26, 2015, Pages 15328-15335. DOI: 10.1016/j.ijhydene.2015.02.078
9. Levent Bilir, Mehmet İmir, **Yülser Devrim**, Ayhan Albostan, An investigation on wind energy potential and small scale wind turbine performance at İncek region – Ankara, Turkey, Energy Conversion and Management, Volume 103, October 2015, Pages 910-923. [doi:10.1016/j.enconman.2015.07.017](https://doi.org/10.1016/j.enconman.2015.07.017).

10. **Yülser Devrim**, Kübra Pehlivanoglu, Design of a hybrid photovoltaic-electrolyzer-PEM fuel cell system for developing solar model, *Phys. Status Solidi C*, 1–6 (2015) / DOI 10.1002/pssc.201510091.
11. **Yülser Devrim**, Huseyin Devrim, Inci Eroglu, Development of 500 W PEM fuel cell stack for portable power generators, *International Journal of Hydrogen Energy*, Volume 40, Issue 24, 29 June 2015, Pages 7707-7719. doi:10.1016/j.ijhydene.2015.02.005
12. **Yülser Devrim**, Huseyin Devrim, PEM fuel cell short stack performances of silica doped nanocomposite membranes, *International Journal of Hydrogen Energy*, Volume 40, Issue 24, 29 June 2015, Pages 7870-7878. doi:10.1016/j.ijhydene.2014.11.018
13. **Yülser Devrim**, Fabrication and Performance Evaluation of Hybrid Membrane based on a Sulfonated Polyphenyl Sulfone/Phosphotungstic acid/Silica for Proton Exchange Membrane Fuel Cell at Low Humidity Conditions, *Electrochimica Acta*, Volume 146, 10 November 2014, Pages 741-751, (DOI: 10.1016/j.electacta.2014.08.131).
14. **Yülser Devrim**, Preparation and testing of Nafion/titanium dioxide nanocomposite membrane electrode assembly by ultrasonic coating technique, *Journal of Applied Polymer Science*, Volume 131, Issue 15, 5 August 2014, (DOI: 10.1002/app.40541).
15. **Yülser Devrim**, Serdar Erkan, Nurcan Baç, İnci Eroğlu, Nafion/Titanium Silicon Oxides Nanocomposite Membranes for PEM Fuel Cells, *International Journal of Energy Research*, Volume 37, Issue 5, pages 435–442, April 2013 (DOI: 10.1002/er.2909).
16. **Yülser Devrim**, Serdar Erkan, Nurcan Baç, İnci Eroğlu, Improvement of PEMFC performance with Nafion/Inorganic nanocomposite membrane electrode assembly prepared by ultrasonic coating technique, *International Journal of Hydrogen Energy*, Volume 37, Issue 21, 16748-16758, November 2012 (<http://dx.doi.org/10.1016/j.ijhydene.2012.02.148>).
17. Dilek Ergun, **Yülser Devrim**, Nurcan Baç, İnci Eroğlu, Phosphoric acid doped polybenzimidazole membrane for high temperature PEM fuel cell, *Journal of Applied Polymer Science*, Special Issue: Membranes, Volume 124, Issue S1, pages E267–E277, 25 June 2012 (DOI: 10.1002/app.36507).
18. **Yülser Devrim**, Serdar Erkan, Nurcan Baç, İnci Eroğlu, Preparation and Characterization of Sulfonated Polysulfone/Titanium Dioxide Composite Membranes for Proton Exchange Membrane Fuel Cells, *International Journal of Hydrogen Energy*, 34 (2009) 3467-3475 (<http://dx.doi.org/10.1016/j.ijhydene.2009.02.019>).
19. **Yülser G. Devrim**, Pyrolysis Kinetics of Blends of Yeni Çeltik Lignite, *Energy Sources, Energy Sources, Part A*, 30:238–246, 2008 (DOI: 10.1080/00908310600712646).
20. **Yülser G. Devrim**, Zakir M.O. Rzaev and Erhan Pişkin, Physically and Chemically Cross-linked Poly [(maleic anhydride-alt-styrene) -co- 2- acrylamido- 2-methyl- 1-propanesulfonic acid]/Poly(ethylene glycol) Proton-Exchange Membranes, *Macromol. Chem. Phys.* 2007, 208, 175–187, (DOI: 10.1002/macp.200600331).
21. **Yülser G. Devrim**, Zakir M.O. Rzaev and Erhan Pişkin, Functionalization of Isotactic Polypropylene with Citraconic Anhydride, *Polymer Bulletin*, 2007, 59, 4, 447-456 ( DOI: 10.1007/s00289-007-0785-6).
22. **Yülser G. Devrim**, Zakir M.O. Rzaev and Erhan Pişkin, Synthesis and Characterization of Poly[((maleic anhydride)-alt-styrene)- co - (2-acrylamido-2-methyl-1-propanesulfonic acid)], *Macromol. Chem. Phys.* 2006, 207, 111–121 (DOI: 10.1002/macp.200500393).

23. **Yülser Güldoğan**, Sinan Eğri, Zakir M.O. Rzaev and Erhan Pişkin, "Comparison of Maleic Anhydride Grafting onto Powder and Granular Polypropylene in Melt by Reactive Extrusion, Journal of Applied Polymer Science, 2004, Vol. 92, 3675–3684 (DOI: 10.1002/macp.200500393) .
24. **Yülser Güldoğan**, Tülay Durusoy and Tijen Özbaş Bozdemir, "Effect of heating rate and particle size on pyrolysis kinetics of Gediz lignite", 2002, Energy Sources, 24, 8, 753-760 (DOI:10.1080/00908310290086671).
25. **Yülser Güldoğan**, Vural Evren, Tülay Durusoy, Tijen Özbaş Bozdemir, "Effects of heating rate and particle size on the pyrolysis kinetics of Mengen lignite", 2001, Energy Sources, 23, 377-344 (DOI: 10.1080/009083101300110887).
26. **Yülser Güldoğan**, Tijen Özbaş Bozdemir and Tülay Durusoy, "Pyrolysis kinetics of blends of Gediz lignite with Denizli peat", 2001, Energy Sources, 23, 393-400 (DOI: 10.1080/009083101300110940).
27. **Yülser Güldoğan**, Tülay Durusoy and Tijen Özbaş Bozdemir, "Pyrolysis kinetics of blends of Mengen lignite with Denizli peat", 2001, Energy Sources, 23, 59-65 (DOI: 10.1080/00908310120913).
28. **Yülser Güldoğan**, Tijen Özbaş Bozdemir and Tülay Durusoy, "Effect of heating rate on pyrolysis kinetics of Tunçbilek lignite", 2000, Energy Sources, 22, 305-312 (DOI: 10.1080/00908310050013901).
29. **Yülser Güldoğan**, Tülay Durusoy and Tijen Özbaş Bozdemir, "Pyrolysis kinetics of blends of Tunçbilek lignite with Denizli peat", 1999, Thermochimica Acta, 75-81 ([http://dx.doi.org/10.1016/S0040-6031\(99\)00078-7](http://dx.doi.org/10.1016/S0040-6031(99)00078-7)).

#### Refereed Conference Proceedings (International)

1. M. Ercelik, A. Ozden, **Y. Devrim**, C. O. Colpan, Investigation of Nafion/SiO<sub>2</sub> and Nafion/TiO<sub>2</sub> composite membranes for the DMFC applications", 8th International Exergy, Energy and Environment Symposium (IEEEES-8), May 1-4, 2016, Antalya, Turkey (Oral Presentation).
2. **Yülser Devrim**, Kübra Pehlivanoglu, Ayhan Albostan, Inci Eroglu, Development of Graphene Oxide Supported Platinum Catalyst For High Temperature PEM Fuel Cell, World Hydrogen Energy Conference 2016 (WHEC 2016), Zaragoza Spain, 13-16 June, 2016, (Poster Presentation).
3. Nurhan Üregen, Yagmur Özdemir, **Yülser Devrim**, Fabrication and Performance Evaluation of Polybenzimidazole/Graphene Oxide Composite Membrane for High Temperature Proton Exchange Membrane Fuel Cell, World Hydrogen Energy Conference 2016 (WHEC 2016), Zaragoza Spain, 13-16 June, 2016, (Oral Presentation).
4. Berna Sezgin, D. Gulcin Caglayan, **Yülser Devrim**, Inci Eroglu, Modeling And Sensitivity Analysis of High Temperature Pem Fuel Cells By Using Comsol Multiphysics, World Hydrogen Energy Conference 2016 (WHEC 2016), Zaragoza Spain, 13-16 June, 2016, (Oral Presentation).
5. D. Gulcin Caglayan, Berna Sezgin, **Yülser Devrim**, Inci Eroglu, Three-Dimensional Modeling of a High Temperature PEM Fuel Cell for Different Flow Channel Geometries, World Hydrogen Energy Conference 2016 (WHEC 2016), Zaragoza Spain, 13-16 June, 2016, (Oral Presentation).
6. **Yülser Devrim**, Huseyin Devrim and Inci Eroglu, Polybenzimidazole/silica hybrid membranes for high temperature PEM fuel cells mESC-IS 2015, International Symposium on Materials for Energy Storage and Conversion, 7-9 September, 2015(Oral presentation).
7. Dilara Gülçin Çağlayan, Berna Sezgin, **Yülser Devrim** and İnci Eroğlu, Modeling of polymer electrolyte membrane fuel cell and sensitivity analysis, International Symposium on Materials for Energy Storage and Conversion, 7-9 September, 2015, (Oral presentation).
8. Berna Sezgin, Dilara Gülçin Çağlayan, İnci Eroğlu and **Yülser Devrim**, Modeling and sensitivity analysis of high temperature PEM Fuel cells by using comsol multiphysics, International Symposium on Materials for Energy Storage

and Conversion, 7-9 September, 2015, (Poster presentation).

9. Thomas Steenberg, Hans Aage Hjuler, Hector Rodrigo Garcia, **Yülser Devrim**, Hüseyin Devrim and Omer Erdemir, Development of a commercial HT-PEM fuel cell stack module, International Symposium on Materials for Energy Storage and Conversion, 7-9 September, 2015, (Oral presentation).
10. **Yülser Devrim**, Ayhan Albostan, Development Of Graphane Oxide Supported Platinum Catalyst Based Membrane Electrode Assembly For PEM Fuel Cell, III. European Conference on Renewable Energy Systems 07-10 October 2015, Kemer, Antalya, Turkey (Oral presentation).
11. **Yülser Devrim**, Ayhan Albostan, Analysis of a Hybrid Photovoltaic-Electrolyzer-PEM Fuel Cell System for Household Application (0041), SOLARTR 2014 Conference and Exhibition, 19-21 November 2014, İzmir, p 109, (Oral presentation).
12. Ekin Özgirgin, **Yülser Devrim**, Ayhan Albostan, Modelling and Simulation of a Hybrid Photovoltaic (PV) Module-Electrolyzer-PEM Fuel Cell System for Micro-Cogeneration Applications, 4th International Conference on Nuclear and Renewable Energy Resources (NURER2014), 26-29 October, 2014, Antalya, Turkey, 43 (Oral presentation).
13. **Yülser Devrim**, Ayhan Albostan, Enhancement of PEM fuel cells performance at higher temperatures and lower humidities by high performance membran electrode assembly based on Nafion/Zeolite membrane, 4th International Conference on Nuclear and Renewable Energy Resources (NURER2014), 26-29 October, 2014, Antalya, Turkey, 38 (Oral presentation).
14. Levent Bilir, Mehmet İmir, **Yülser Devrim**, Ayhan Albostan, Determination of Weibull parameters for wind speed distribution at İncek region – Ankara, 4th International Conference on Nuclear and Renewable Energy Resources (NURER2014), 26-29 October, 2014, Antalya, Turkey, 53 (Oral presentation).
15. **Yülser Devrim**, Polybenzimidazole/titania composite membranes for high temperature proton exchange membrane fuel cell applications, 4th International Conference on Nuclear and Renewable Energy Resources (NURER2014), 26-29 October, 2014, Antalya, Turkey, 126 (Poster presentation).
16. **Yülser Devrim**, Hüseyin Devrim, İnci Eroglu, Development and Testing 500 W PEM Fuel Cell System for Portable Power Generators, The 20th World Hydrogen Energy Conference 2014, June 15-20 2014, Korea (Poster presentation).
17. **Yülser Devrim**, Hüseyin Devrim, İnci Eroglu, DEVELOPMENT OF 500 W PEM FUEL CELL SYSTEM, International Conference on Clean Energy 2014, Istanbul, 8-12 June, 2014, P:21 (Oral presentation).
18. **Yülser Devrim**, Hüseyin Devrim, PEM FUEL CELL STACK PERFORMANCES OF SILICA DOPED NANOCOMPOSITE MEBRANES, International Conference on Clean Energy 2014, Istanbul, 8-12 June, 2014, P:23 (Oral presentation).
19. **Yülser Devrim**, Nurcan Baç, İnci Eroğlu, Nanocomposite membranes based on nafion and TiSiO<sub>4</sub> nanoparticle, T4-02, European Polymer Congress 2011 XII Congress of the Specialized Group of Polymers, June 26 - July 1, 2011, Granada, Spain (Poster presentation).
20. **Yülser Devrim**, Serdar Erkan, Nurcan Baç, İnci Eroğlu, Nafion/Mixed Inorganic Oxide Nanocomposite Membranes for PEM Fuel Cells, International Conference on Clean Energy (ICCI-2010), Gazimagusa-N.Cyprus, 15-17 September, 2010 (Oral presentation).

21. **Yülser Devrim**, Serdar Erkan, Nurcan Baç, İnci Eroğlu, Preparation and Characterization of Nafion/Titanium Dioxide Nanocomposite Membranes for Proton Exchange Membrane Fuel Cells, WHEC 2010, Essen, Germany, P:141-146 (Poster presentation).
22. Dilek Ergün, **Yülser Devrim**, Nurcan Baç, İnci Eroğlu, High Temperature Proton Exchange Membrane Fuel Cells, WHEC 2010, Essen, Germany (Poster presentation).
23. **Yülser Devrim**, Serdar Erkan, Nurcan Baç, İnci Eroğlu, Nanocomposite Membranes based on Nafion and TiO<sub>2</sub> for PEM Fuel Cells, 6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC-6) at the Atlantis Hotel, Belek, Antalya, Turkey on 7th-12th March, 2010 (Poster presentation).
24. Dilek Ergün, Serdar Erkan, **Yülser Devrim**, Nurcan Baç, İnci Eroğlu, High Temperature Proton Exchange Membrane Fuel Cells, HYPOTHESIS VIII Lisbon (Portugal) April 1-3, 2009 (Poster presentation).
25. **Yülser Devrim**, Nurcan Baç, İnci Eroğlu, Preparation and Characterization of Sulfonated Polysulfone/TiO<sub>2</sub> Composite Membranes for Proton Exchange Membrane Fuel Cell, 5th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries, EMCC5, May 24-29, 2008, A22 (Poster presentation)..
26. **Yülser Göldoğan Devrim**, Rzaev Zakir, Erhan Pişkin, Physically and chemically crosslinked poly (maleic anhydride-alt-styrene-co-2-acrylamido-2-methyl-1-propane sulfonic acid)s as ion-exchange membranes, Abstr. European Polymer Congress, Moscow, June 27 – July 1, 2005, Moscow State University. Section 6.1.5. Ref. 2058 (Oral presentation).
27. **Yülser Göldoğan Devrim**, Rzaev Zakir, Erhan Pişkin, Photoinduced Graft Polymerization of 2-Acrylamido-2-methyl-1-propanesulfonic acid/Triethylene Glycol Dimethacrylate System onto Microporous Polypropylene Film, European Polymer Congress, Moscow, June 27 – July 1, 2005, Moscow State University (Poster presentation).
28. **Yülser Göldoğan Devrim** and Erhan Pişkin, Modification of Polypropylene Based Membranes for Possible Use as Proton Exchange Membranes in Fuel Cells', International Hydrogen Energy Congress and Exhibition IHEC 2005, 13-15 July 2005, Istanbul, Turkey (Oral presentation).
29. **Yülser Göldoğan Devrim**, Rzaev Zakir, Erhan Pişkin, 'Physically and Chemically Crosslinked Poly[(maleic anhydride-alt-styrene)-co-2-acrylamido-2-methyl-1-propanesulfonic acid]s as Proton-Exchange Membranes'', International Hydrogen Energy Congress and Exhibition IHEC 2005, 13-15 July 2005, Istanbul, Turkey (Oral presentation).
30. **Yülser Göldoğan Devrim**, Zakir Rzaev, Erhan Pişkin, Grafting and Graft(co)polymerization of Polypropylene, MACRO 2004-40th IUPAC World Polymer Congress Paris, France, 2004 (Oral presentation).
31. **Yülser Göldoğan Devrim**, Zakir Rzaev, Erhan Pişkin, Grafting of Powder and Granular Polypropylene in Melt by Using Reactive Extrusion, MACRO 2004-40th IUPAC World Polymer Congress Paris, France, 2004 (Oral presentation).
32. **Yülser Göldoğan Devrim**, Zakir Rzaev, Erhan Pişkin, Complex-Radical Terpolymerization of maleic anhydride-styrene-2-acrylamido-2-methyl-1-propane sulfonic acid System. MACRO 2004 -40th IUPAC World Polymer Congress Paris, France, 2004 (Poster presentation).
33. **Yülser Göldoğan Devrim**, Zakir Rzaev, Erhan Pişkin, Anhydrido-Carboxylation of Polypropylene: Synthesis and Characterization of Poly(PP-g-MA), Poly(PP-g -CA) and Poly[PP-g-(MA-alt-AA)], Fifteenth International Conference on Organic Synthesis, IUPAC ICOS-15, 3-F-01, August 1-6, 2004 Nagoya, Japan (Poster presentation).

- 34. Yülser Gldođan**, Zakir M.O. Rzaev, Erhan Piřkin, Polypropylene Functionalization in Solution and in Melt by Reactive Extrusion, 11th International Conference on Polymers and Organic Chemistry 2004, P42, July 18-23, Prague, Czech Republic (Poster presentation).

### Refereed Conference Proceedings (National)

1. Hseyin Devrim, Kbra Pehlivanođlu, mer Erdemir, Thomas Steenberg, Hans Aage Hjuler, Hector Rodrigo Garcia, **Ylser Devrim**, İnci Erođlu, Development and Integration of 5kW HT-PEM Fuel Cell Powered Hybrid Power Station for Airport Service Vehicles, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
2. Kbra Pehlivanođlu, **Ylser Devrim**, Design of a Electrolyzer/Fuel Cell Hybrid System Combined with Solar Energy, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
3. Nurhan regen, Kbra Pehlivanođlu, Yađmur zdemir, **Ylser Devrim**, Preparation of Polybenzimidazole Membranes with Graphene Oxide Nanoparticles and Investigation of High Temperature Polymer Electrolyte Fuel Cell Performances, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
4. Dilara Glin ađlayan, Berna Sezgin, **Ylser Devrim**, İnci Erođlu, Modelling and Sensitivity Analysis of a Polymer Electrolyte Membrane Fuel Cell, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
5. Berna Sezgin, Dilara Glin ađlayan, İnci Erođlu, **Ylser Devrim**, Modelling of a High Temperature Polymer Electrolyte Membrane Fuel Cell by COMSOL Multiphysics and Sensitivity Analysis, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
6. **Ylser Devrim**, Kbra Pehlivanođlu, Hseyin Devrim, İnci Erođlu, Development of Polybenzimidazole Based Membrane Electrode Assemblies for High Temperature Polymer Electrolyte Membrane Fuel Cells, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
7. Yađmur zdemir, Nurhan regen, **Ylser Devrim**, Synthesis of Polybenzimidazole Based Composite Membranes for High Temperature Proton Exchange Membrane Fuel Cells and Investigation of Fuel Cell Performances, National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul.
8. **Ylser Devrim**, Kbra Pehlivanođlu, Design Of A Hybrid System Photovoltaicelectrolyzer- Pem Fuel Cell System With Developing A Solar Model, 27-29 April 2015 "Trk Gneř Elektriđi Konferans ve Sergisi" SolarTR-3.
9. **Ylser Devrim**, Kbra Pehlivanođlu, Hseyin Devrim, Preparation and Optimization of High Temperature PEM Fuel Cell Electrodes by Ultrasonik Coating Method, 27. National Chemistry Congress, 23-28 August 2015, anakkale/Turkey, S-E006, (Oral presentation).
10. **Ylser Devrim**, Kbra Pehlivanođlu, Development of Polybenzimidazole/Graphene Oxide Composite Membranes for High Temperature PEM Fuel Cell, 27. National Chemistry Congress, 23-28 August 2015, anakkale/Turkey, S-E005, (Oral presentation).
11. Duygu elik, Sercan Kolik, Egemen Gke, **Ylser Devrim**, Preparation of High Performance Grafen Supported PEM Fuel Cell Electrodes, 2. Student Project Competition, Seluk University, Konya, 14-15 May 2015, p 147-148, (Poster presentation).
12. Yađmur Budak, F. Cansu İskenderođlu, **Ylser Devrim**, Development of new Membrane electrode Assemblies for Regeneratřve Electrolyzer/Fuel cell Hybrid System and Designf of a Hybrid System, 2. Student Project Competition, Seluk University, Konya, 14-15 May 2015, p 149-150, (Poster presentation).
13. **Ylser Devrim**, Hseyin Devrim, İnci Erođlu, Development of 500 W Proton Exchange Membrane Fuel Cell System, 11. National Chemical Engineering Congress, 2-5 September, 2014, Eskiřehir, (Oral presentation).
14. Umut B. Cacan, **Ylser Devrim**, Necati zkan, İnci Erođlu, Development of Self-Humidified Nano Composite Membranes for Proton Exchange Membrane Fuel Cells, 11. Natioal Chemical Engineering Congress, 2-5 September, 2014, Eskiřehir, (Oral presentation).



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#### SUPERVISION OF GRADUATE STUDENTS

Year(s)	Name of the Student	Level of Studies	Thesis Title
2013 – 2015	Umut B Cacan	M.Sc.	Development of Self-Humidifying Membrane Electrode Assembly for PEM Fuel Cell
2014 – Present	Berna Sezgin	M.Sc.	Modelling a High Temperature PEM Fuel Cell
2014 – Present	Dilara Gülçin Çağlayan	M.Sc.	Investigation of Temperature Profile in High Temperature PEM Fuel Cell.

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2015 – Present	Yağmur Özdemir	M.Sc.	Development and Characterization of PBI Composite And Crosslinked Membranes For High Temperature PEM Fuel Cell Applications
2016 – Present	Melike Gözütok	M.Sc.	Development of Electrospun Membrane and Electrode Materials for Fuel Cell Applications

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## **INDUSTRIAL EXPERIENCE**

**TEKSIS Ltd**, Ankara, Turkey

2007-2013

Project Manager

**PETKIM** , Izmir, Turkey  
Intern

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## **SERVICE**

### **Organizational**

#### **Journal Reviewer**

- Electrochimica Acta
- International Journal of Hydrogen Energy
- Journal of Membrane Science
- Journal of Applied Polymer Science
- Polymer Bulletin
- ACS Applied Materials & Interfaces
- Fuel
- European Polymer Journal
- Fuel Cells
- Turkish Journal Of Electrical Engineering & Computer Sciences
- Applied Energy
- Energy Conversion and Management