CV and list of the Academic Effort



**Name and surname :** Engin GEDİK

**Birth date :** 12.04.1981

**E-Posta Adresi :** [egedik@karabuk.edu.tr](mailto:egedik@karabuk.edu.tr)

**Telefon (İş) :** 03704338200-1384

**Adres :** Karabük University Technology Faculty, Energy Systems Engineering Department, 100.Yıl Karabük

1. **Education**

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| **Degree** | **Department** | **University** | **Year** |
| **Bachelor (BSc)** | Mechanical Education | Z. Karaelmas University | 2004 |
| **Master of Science (MSc)** | Mechanical Education | Z. Karaelmas University | 2007 |
| **Doctor of Philosophy (PhD)** | Mechanical Education | Karabük University | 2012 |

1. **Professional Experience**

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| **Title** | The institution | **Years** |
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| Asist.Prof.Dr. | Karabük University Energy Systems Engineering | 2012-now |
| Research Assist. | Karabük University | 2005-2012 |
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1. **Managed Master Thesis:**
   1. **TEKIR MUTLU, (2015) “CFD analysis of a two-stage natural gas pressure regulator”, Karabük University Graduate School of Natural&Applied Sciences, Mechanical Engineering Division.**
   2. **SARIMESE KENAN, (2015) “An examination of constant hot water supply via boiler in split air conditioners, the consequent energy saving and its thermodynamic and thermo-economic suitability” Karabük University Graduate School of Natural&Applied Sciences, Energy Systems Engineering Division.**
   3. **ALTUNDAG AHMET, (2015) “Exergy analysis of heating line of surgery air handling unit in a hospital”, Karabük University Graduate School of Natural&Applied Sciences, Energy Systems Engineering Division.**
   4. **ÖZTÜRK ERHAN, (2014) “Experimental investigation of modul temperature effect on photovoltaic panels efficiency”, Karabük University Graduate School of Natural&Applied Sciences, Energy Systems Engineering Division.**
2. **Managed Ph.D. Dissertation:**
3. **Assignments of Project:**
4. **Design optimization and experimental investigation of reactor on hydrogen stored sytesms based on metal hydride, *Scientific and Technological Research Council of TURKEY (TÜBİTAK),* 3001 R&G Project, Researcher, 01.07.2014-01.07.2016, Completed.**
5. **Theoretical and Experimental Investigation of Magnetic and Electrical Field Effect on MR (Magneto-Rheological) Fluid Flow, *Scientific and Technological Research Council of TURKEY (TÜBİTAK)*, 1001 Research Project, 110M030, Researcher and Scholarship holder. 01.11.2010-01.11.2012, Completed.**
6. **Investigation of magnetic and electrical field effect on two-phase fluid flow in circular pipes, *Karabük University, Scientific Research Project (SRP)*, 10D2104301, Researcher. Finished.**
7. **Investigation of module temperature effect on Photovoltaic panel efficiency, *Karabük University, Scientific Research Project (SRP)*, 10D2104301, Researcher. Manager, 10/12/2013 - 18/12/2015. Finished**
8. **Performance enhancement of gravity assisted heat pipe using various working fluids, *Karabük University, Scientific Research Project (SRP)*, KBÜ-BAP-16/1-YL-097, Manager, continue**
9. **Numerical investigation of laminar flow and convective heat transfer of nanofluids in sudden expansion channels, *Karabük University, Scientific Research Project (SRP)*, KBÜ-BAP-16/1-YL-101, Manager, continue**
10. **Assignments of Administrative:**

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| **Deputy of Director** | **Karabük University Graduate School of Natural&Applied Sciences** | **2015-now** |
| **Deputy of Head** | **Energy Systems Engineering Department** | **2013-2015** |

1. **Members of the academic institutions:**

Turkish Society for Thermal Science and Technology 2011-now

1. **Awards:**
2. Scientific and Technological Research Council of TURKEY (TÜBİTAK) Award for International Scientific Publications Promotions, 2009-2016.
3. Erasmus Scholarship, Romania ***Politehnica University of Bucharest- Hydraulics Department-REOROM Group***, February-May 2010.
4. **Courses:**

Undergraduate

* Thermodynamic
* Fluid Mechanics I-II
* Simulation on Energy Systems Engineering (Ansys Fluent)

Graduate

* Computational Fluid Dynamics

**Academic Publication and Effort:**

1. **Articles published in international refereed journals (SCI-SCI Expanded):**
2. **E.Gedik,** Experimental and numerical investigation on laminar pipe flow of Magneto-Rheological fluids under applied external magnetic field, Journal of Applied Fluid Mechanics 10 (3), (2017) 801-811.
3. **E.Gedik,** Experimental investigation of the thermal performance of a two-phase closed thermosyphon at different operating conditions. Energy and Buildings, 127, (2016) 1096-1107.
4. **E.Gedik**, E. Kılıçaslan, B. Acar, A. Ergün, E. Özbaş, “Experimental Investigation of a Household Refrigerator Performance Using Chimney-Type Condenser. Arabian Journal for Science and Engineering, 41(5), (2016) 1691-1697.
5. **E. Gedik**, M. Yılmaz, H. Kurt, Experimental investigation on the thermal performance of heat recovery system with gravity assisted heat pipe charged with R134a and R410A. Applied Thermal Engineering, 99, (2016) 334-342.
6. Z. Recebli, **E. Gedik**, S. Selimli, Electrical field effect on three dimensional magnetohydrodynamic pipe flow: a CFD study. Progress in Computational Fluid Dynamics, An International Journal, 16(4), 261, (2016).
7. İ. Ceylan, **E. Gedik**, O. Erkaymaz, A.E. Güler, The artificial neural network model to estimate the photovoltaic modul efficiency for all regions of the Turkey. Energy and Buildings, 84, (2014) 258-267.
8. Z.Recebli, S.Selçuk, **E.Gedik**, [Three dimensional numerical analysis of magnetic field effect on Convective heat transfer during the MHD steady state laminar flow of liquid lithium in a cylindrical pipe](http://www.sciencedirect.com/science/article/pii/S0045793013003514), *Computers & Fluids*88 (2013) 410-417.
9. M. Kayfeci, A. Keçebaş **E. Gedik**, Determination of optimum insulation thickness of external walls with two different methods in cooling applications, *Applied Thermal Engineering*, 50 1: (2013) 217-224.
10. **E. Gedik**, H. Kurt, Z. Recebli, C.Balan, Two-dimensional CFD simulation of magnetorheological fluid between two fixed parallel plates applied external magnetic field. *Computers & Fluids* 63 (2012) 128-134.
11. **E. Gedik**, H. Kurt, Z. Recebli, A. Keçebaş, Unsteady flow of two-phase fluid in circular pipes under applied external magnetic and electrical fields, *International Journal of Thermal Science*, 53 (2012) 156-165.
12. A.Keçebaş, M. Kayfeci, **E. Gedik,** Performance investigation of the Afyon geothermal district heating system for building applications: Exergy analysis, *Applied Thermal Engineering*, 31 (6-7): (2011) 1229-1237.
13. Karabulut, **E. Gedik,** A. Keçebaş, M.A. Alkan, An investigation on renewable energy education at the university level in Turkey, *Renewable Energy* 36 (4): (2011) 1293-1297.
14. M. Caner, **E.** **Gedik,** A. Keçebaş, Investigation on Thermal Performance Calculation of Two Type Solar Air Collectors Using Artificial Neural Network, *Expert Systems with Applications* 38 3: (2011) 1668-1674.
15. H. Kurt, Z. Recebli, **E. Gedik**, Performance analysis of open cycle gas turbines *International Journal of Energy Research*, 33 (3): (2009) 285-294.
16. **E. Gedik,** A. Keçebaş, E.S. Öz, Effect to the performance of different type absorber plates on the solar air collectors” *Journal of the Faculty of Engineering and Architecture of Gazi University*, 23 (4): (2008) 777-784.
17. Acar, E.S. Öz, **E**. **Gedik,** Experimental investigation of collector efficiencies on separated and connected heat pipes, *Journal of the Faculty of Engineering and Architecture of Gazi University*, 23 (2): (2008) 425-429.

**B. Refereed International Conference Proceedings:**

1. Bacak Sefa, Gökoglu Murat, TEKIR MUTLU, **GEDIK ENGIN** (2016). Aerodynamic analysis of a high-speed train with CFD. 3rd. International Railway Systems Engineering Symposium, (ISERSE’16), 8-19.
2. **GEDIK ENGIN**,ACAR BAHADIR,KAYA METIN,SARIMESE KENAN (2016). Thermodynamic and Thermoeconomic Analysis of Split Type Air Conditioners Combined with Boiler. International Conference on Engineering and Natural Sciences, 995-1001.
3. ERGÜN ALPER, **GEDIK ENGIN**, ÖZKAYMAK MEHMET, SANSLI BAHTIYAR (2016). Evaluation of Commercial Type of Split Air Conditions by Using Condenser Waste Heat in a Boiler. International Conference on Engineering and Natural Science, 900-904.
4. **GEDIK ENGIN**, MUHAMMED ATIF TOPAL, ERGÜN ALPER, ACAR BAHADIR (2015). Numerical investigation of Al2O3-water nanofluid flow and heat transfer in sudden expansion channels. International Conference on Engineering and Natural Science, 541-548.
5. KILIÇASLAN ERDOGAN, ERGÜN ALPER, **GEDIK ENGIN**, ACAR BAHADIR, ÖZBAS ENGIN (2015). Energy efficiency enhancement of a household refrigerator using with oil cooling condenser. International Conference on Engineering and Natural Science, 488-495.
6. **E. Gedik,** H. Kurt, Z. Recebli, CFD Simulation of Magnetohydrodynamic flow of liquid- metal in circular pipes, *Sixth International Conference on Thermal Engineering: Theory and Applications* May 29-June 1 2012, Istanbul, Turkey, 1-4.
7. **E. Gedik,** H. Kurt, Z. Recebli, Na22K78 liquid-metal magnetohydrodynamic flow in non-conducting circular pipes, *NuRER 2012 – III. International Conference on Nuclear & Renewable Energy Resources*, İstanbul, TURKEY, 20-23 May 2012, 1-7.
8. **E.** **Gedik,** H., Kurt, Z., Recebli, Investigation of Magnetic Field Effect on Steady Laminar Two Phase Fluid Flow, *6th International Advanced Technologies Symposium (IATS’11)*, 16-18 May 2011, Elazığ, Turkey, 43-45.
9. A., Keçebaş, **E.** **Gedik,** First and second law analysis of the geothermal district heating systems: Sandıklı and Afyon example, *10th International Conference on Clean Energy (ICCE-2010)*, Famagusta, N. Cyprus, September 15-17, 2010.
10. A. Keçebaş, **Gedik, E.,** The effect on environment of geothermal district heating systems: A case example from Afyon, Turkey, *The Fifth International Ege Energy Symposium and Exhibition IEESE - 5*, Page: Ieese289, June 27-30, 2010, Denizli, Turkey, (ISBN ).
11. A., Keçebaş, **E.** **Gedik,** M., Kayfeci, Investigation of the energy and exergy performance of a solar ejector cooling system using various working fluids, *The Fifth International Ege Energy Symposium and Exhibition IEESE - 5*, Page: Ieese048, June 27-30, 2010, Denizli, Turkey, (ISBN ).
12. E., Özbaş, A. Keçebaş, **E**., **Gedik,** The effects of various stoker mechanisms used in coal stoves on the air pollution, *The Eleventh International Combustion Symposium,* Page: S-6. 1-4, June 24-27, 2010, Sarajevo, Bosnia and Herzegovina.
13. **E**. **Gedik,** M. Kayfeci, A. Keçebaş, H. Kurt, Magnetic refrigeration technology applications on near-room temparature, *5th International Advanced Technologies Symposium (IATS’09)*, May 13-15, 2009, Karabük, Turkey, 1887-1893.
14. M. Kayfeci, **E,** **Gedik,** S. Sağıroğlu, H.,Kurt, Investigation of using alternative air conditioning systems in vehicle air conditioning, *5th International Advanced Technologies Symposium (IATS’09)*, May 13-15, 2009, Karabük, Turkey, 1882-1886.

**C. Articles published in national refereed journals:**

1. **GEDIK ENGIN** (2016). Experimental Investigation of Module Temperature Effect on Photovoltaic Panels Efficiency. Polytechnic Journal, 19(4), 569-576.
2. BIBERCI MEHMET ALI, ATAMAN TEVFIK, **GEDIK ENGIN**, ÇELIK MUSTAFA BAHATTIN (2016). Çok Silindirli Buji Ateslemeli Bir Motorda Emme Manifoldunun Hesaplamalı Akıskanlar Dinamigi Ile Sayısal Olarak Incelenmesi. Ileri Teknoloji Bilimleri Dergisi, 5(2), 120-130.
3. ALTUNDAG AHMET, **GEDIK ENGIN**, ERGÜN ALPER, ARSLAN KAMIL, EKICILER RECEP (2015). Bir Hastanede Ameliyathane Klima Santrali Isıtma Hattının Ekserji Analizi. Makine Teknolojileri Elektronik Dergisi (elektronik), 12(4), 103-114.
4. Keçebas A., Kayfeci M., **Gedik E.,** “Evaluation on variations of sulphur dioxide and particulate matter measured in Afyonkarahisar” *Engineer and Machine*, Vol:51 No:610, 2010,14-19.
5. Keçebas A., **Gedik E.,** Kayfeci M., “The effect of using geothermal energy and natural gas on air pollution arisen from using fossil fuels: Afyon Example” *Engineering Journal of Machine Technologies* Vol 7, No:3 2010, 23-30.
6. **Gedik, E.,** Öz, E.S., “Design of heat box-type solar cooker and a sample study” *Technology*, Vol 10, No: 4, 2007, 303-310.

D. ****National Conference Proceedings****:

1. Öztürk Murat,KILIÇASLAN ERDOGAN,**GEDIK ENGIN** (2015). Toprak kaynaklı ısı pompalarında toprak neminin ısı pompasının enerji tüketimine etkisinin deneysel olarak arastırılması. ULIBTK’15 20. Ulusal Isı Bilimi ve Teknigi Kongresi, 498-504.
2. EKICILER RECEP, ARSLAN KAMIL, **GEDIK ENGIN** (2015). TiO2/Su nanoakıskanının 180 derecelik yatay bir egrisel kare kesitli kanal içerisindeki zorlanmıs konveksiyon akıs ve ısı transferinin sayısal analizi. ULIBTK’15 20. Ulusal Isı Bilimi ve Teknigi Kongresi, 786-793.
3. H. Kurt, A. Özsoy, **E.Gedik**, Y.Çay, Effect of the working fluid and inclination to heat pipe efficiency. 18. National Thermal Science and Technique Congress (ULIBTK’11) Proceedings, 7-10 September 2011, Zonguldak Turkey, Page:496-501.
4. A. Daşdemir, M. Kayfeci, **E. Gedik**, H. Kurt, Effect of the using air gap on external wall compositions to the optimum insulation thickness and cost, 18. National Thermal Science and Technique Congress (ULIBTK’11) Proceedings, 7-10 September 2011, Zonguldak Turkey, Page:859-865.
5. M. Kayfeci, **E. Gedik**, A.Keçebaş, H. Kurt, Thermal control of electronic devices, Elektronik Cihazların Isıl Kontrolü, 18. National Thermal Science and Technique Congress (ULIBTK’11) Proceedings, 7-10 September 2011, Zonguldak Turkey, Page:871-877.
6. **Gedik, E.,** Şimşak, O., Kurt, H., An experimental investigation of termosyphon heat pipe efficiency, 17. National Thermal Science and Technique Congress 24-27 June 2009, Sivas Turkey.
7. **Gedik, E.,** Kaya, M., Anlysis of the rainfall water evaluation on the a sample site project in Karabük city, 16. National Thermal Science and Technique Congress (ULIBTK’07) Proceedings, 30 May-2 June 2007, Kayseri Turkey, Page:185-189.
8. **Alkan**, M.A., **Gedik, E.,** Keçebaş, A. Expectations from solar energy education in Turkey and recommendations, III. Solar energy systems symposium and exhibition, 8-10 June 2007, Mersin Turkey.
9. Kaya, M., Yüksel, R., **Gedik, E.,** Ceylan, İ., Experimental investigation of trap radiation absorber solar collectors and flat plate solar collectors, 16. National Thermal Science and Technique Congress (ULIBTK’07) Proceedings, 30 May-2 June 2007, Kayseri Turkey, Page:180-185.

## E. Other academic publication and Effort:

1. **Gedik, E.,** Kayfeci, M. Keçebaş, A., Kurt, H., Magnetic refrigeration technology on near-room temperature applications, *Indian Cooling, Indian Premier magazine on the cooling industry* , Vol 5 No 3, 52-66, July-August 2009.

## F. Total Number of Citations to the Papers (from Web of Science): 160

## G. List of Journals making the referee

|  |  |  |
| --- | --- | --- |
| **Journal** | **Year** | **Number** |
| Journal of Applied Fluid Mechanics | 2011-2016 | 51 |
| Energy Conversion and Management | 2105 | 1 |
| Energy and Buildings | 2013-2016 | 7 |
| International Journal of Thermal Science | 2012 | 1 |
| Arabian Journal Science and Engineering | 2011-2016 | 12 |
| Progress in Computational Fluid Dynamics | 2013-2016 | 3 |
| Drying Technology | 2013-2016 | 3 |
| International Journal of Thermal Science | 2012 | 1 |
| Journal of Energy Engineering | 2012 | 1 |
| Journal of Mechanical Science And Technology | 2011 | 1 |
| Journal of Agricultural Science and Technology | 2010 | 1 |

## H. Other

