

Curriculum Vitae



Personal Data

Name and Surname: *Murat SÖNMEZ*

Title: *Assoc. Prof. Dr.*

Date and Place of Birth: *May 06, 1959*

Nationality: *Turkish*

Marital Status: *Married, 2 Children*

Present Employment: *Instructor Dr., Mechanical Engineering, Middle East Technical University Northern Cyprus Campus, Güzelyurt KKTC.*

Office Address: *METU NCC Mechanical Engineering R- 217, Phone: (0 392) 661 2934*

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Other Affiliations: Member of Turkish Thermal Sciences and Technology Society,
Member of Chamber of Turkish Mechanical Engineers,
Member of Turkish Mechanical Design and Production Society.

Academic Qualification:

B.Sc. in Mechanical Engineering, Faculty of Engineering and Architecture of Ankara State Academy of Engineering and Architecture, 1981. (Cum. GPA: 3.23/4.00, achieving the highest grade point average)

M.Sc. in Mechanical Engineering, Middle East Technical University, 1986, (Cum. GPA: 3.36/ 4.00), Thesis Title: Modeling and Optimization of Rotary Regenerative Type Waste-Heat Heat Exchangers.

Ph.D. in Mechanical Engineering, Middle East Technical University, 1995, (Cum. GPA: 3.69/ 4.00), Thesis Title: A New Double Hybrid Computer System to Analyze Natural Convection Heat Transfer.

Associate Professor: in Mechanical Science-Technology Education, 2012.

Other Formal Education:

English Preparatory Program (two semesters, 1981- 82 Academic Year), School of Foreign Languages of Middle East Technical University,

Preparatory Program for Master of Science Education, as a special student (two semesters, 1982- 83 Academic Year, Courses of the Program: Computer Programming with Fortran IV, System Dynamics, Control Theory, Fluid Mechanics, Thermodynamics II, Mechanisms)

Areas of Interest:

Computer Aided Design and Drafting, Energy Management, Technical Education/ Curriculum Development, Solid Mechanics, Engineering Thermodynamics, Process Measurement, Fluid Mechanics.

Employment History:

Research Engineer, Research Institute of Thermal Environment and Thermal Processes (ISILMAREN), Mech. Eng. Dep. of METU (September 1981-1984).

Teaching Assistant, of Thermodynamics, Heat Transfer and Boiler Heat Exchanger courses, Mechanical Engineering Dep. , Middle East Technical University (1984-86).

Instructor, Mechanical Engineering Dep., METU (1986- 1995).

Instructor Dr., Mechanical Engineering Dep., METU (1995- 1996).

Instructor Dr., Technical Vocational School of Higher Education, Industrial Automation Program, METU (1996- 2006).

Part-time Instructor Dr., Mechanical Engineering Dep. of Yozgat Engineering Faculty of Erciyes University (1996-1997).

Part-time Instructor Dr., Mechanical Engineering Dep. of TOBB Economy and Technology University, (2005- 2007).

Part-time Asst. Prof. Dr., Mechanical Engineering Dep. of TOBB Economy and Technology University, (2007- 2008).

Asst. Prof. Dr., Mechanical Engineering Dep. of Gazi University, (2006- 2008).

Instr. Dr., Mechanical Engineering, METU NCC, (2008-)

Administrative Duties:

Vice Chairperson of Technical Programs of Vocational Technical School of Higher Education, METU (September 2000- August 2002)

Associate Director of the Vocational Technical School of Higher Education, METU (August 2002- September 2005)

Elected Member of Academic Board of Engineering and Natural Sciences, METU Northern Cyprus Campus (2009- September 2018)

Assistant to Campus President, METU Northern Cyprus Campus (November 2020-December 2021)

Secretary General (A.), METU Northern Cyprus Campus (December 2021- October 2023)

Teaching Experience:

Mechanical Engineering Lab., ME 310, Mechanical Eng. Dep., METU (spring 1986)
Engineering Graphics ME101, Mechanical Eng. Dep., METU (fall 1986 to spring 1996, 20 semesters, 2 Sections/ Semester)
Scientific Principles of Technology (Statics) TPR 121, METU, fall 1996 to spring 2002, ~10 semesters, ~1 Section/ Semester)
Engineering Science I (Dynamics) TPR124, METU, (spring 1996 to spring 2003, ~12 semesters, ~1 Section/ Semester)
Engineering Science II (Fluid Mechanics) AUTO 225, METU, (fall 1996 to fall 2003, ~10 semesters, ~1 Section/ Semester)
Technical Drawing TPR 131, METU, (fall 1997 to 2002, ~5 semesters, ~1 Section/Sem.)
Engineering Drawing I TPR132, METU, (spring 1998 to spring 2006, ~10 semesters, ~1 Section/ Semester)
Engineering Drawing II TPR233, METU, (fall 1998 to fall 2006, ~10 semesters, ~1 Section/ Semester)
Directed Studies (Heat Transfer), AUTO 271, METU, fall 1998 to spring 2004, ~8 semesters, ~1 Section/ Semester)
Directed Studies (Computer Programming, Qbasic) TPR172, METU, spring 2001, 2002, 2 semesters, ~1 Section/ Semester)
Integrated Project AUTO 274, METU, (spring 1997 to fall 2002, ~6 semesters, ~1 Section/ Semester)
Mathematics II TPR 112, METU, (Fall 2002)
Mechanical Science (Strength of Materials) TPR 223, METU, (Summer School 2003)
Welding and Allied Processes II, WELD 142, METU, spring 2006)
Teknolojinin Bilimsel İlkeleri TKPR 115, METU- MYO Evening Program, (Fall 2002-2006, ~6 semesters, ~2 Section/ Semester)
Süreç Ölçümleri I ENOT 203, METU-MYO Evening Program, (Fall 2002- Spring 2006, ~5 semesters, ~1 Section/ Semester)
Süreç Ölçümleri II ENOT 204, METU- MYO Evening Program, (Spring 2003- Spring 2006, ~6 semesters, ~1 Section/ Semester)
Enerji Yönetimi, TKPR 214, METU- MYO Evening Program, (Spring 2006)
Termodinamik II MM204, Erciyes University, Spring 1997
Termodinamik I MM203, Erciyes University, Fall 96
Akışkanlar Mekaniği I MM301, Erciyes University, Fall 96
Isı Transferi I MM309, Erciyes University, Fall 96
Bilgisayar Destekli Teknik Resim MAK 101, TOBB ETÜ, (Fall 2005, Fall 2006, Spring 2008),
Bilgisayar Destekli Teknik Resim II MAK 102, TOBB ETÜ, (Spring 2008)
Computer Aided Technical Drawing I, MM 103, Mechanical Engineering Dep., Gazi University, Fall 2006, Fall 2007, 4 sections/ Sem., Summer School 2007 1 section.
Bilgisayar Destekli Teknik Resim II, MM 106, Mechanical Engineering Dep., Gazi University, Spring 2007, Spring 2008, 2 sections/ Sem.
Computer Programming with Fortran 77, ENF 102, Mechanical Engineering Dep., Gazi University, Spring 2007, 2Sections, Summer School 2007 1 section, Spring 2008, 1 section.

Energy Engineering MM 416, Mechanical Engineering Dep., Gazi University, Spring 2007
2sections, Spring 2008 1 section.

Computer Aided Engineering Drawing I, MECH 113, Mechanical Engineering Program,
METU NCC, 2008-

Computer Aided Engineering Drawing II, MECH 114, Mechanical Engineering Program,
METU NCC, 2009-

Introduction to Mechanical Engineering, MECH 100, Mechanical Engineering Program,
METU NCC, 2019-

Computer Aided Design, MECH 533, Mechanical Engineering Program, METU NCC,
2020-

Computer Aided Engineering Design and Drawing, ASE 492, METU NCC, 2024-
Statics, MECH 205, METU NCC, 2024-

Manufacturing Technologies, MECH 202, METU NCC, 2024-

Academic Awards:

Award for the best performance in higher education, 1982, Turkish Society of Thermal
Sciences and Technology.

Academic Performance Reward for 2001-2003 period, 2004, METU.

Memberships:

1. TMMOB Makina Mühendisleri Odası
2. American Society of Mechanical Engineers
3. Türk Isı Bilimi ve Tekniği Derneği
4. Makina Tasarımı ve İmalatı Derneği, MATİMAREN

Publications:

https://www.researchgate.net/profile/Dr_Murat_Sonmez > **Murat Sonmez on ResearchGate**

1. **Sönmez, M.**, “Two Offers to Prevent Excessive Water Consumption: A Proposal for Industrial Design Departments of Universities”, International Journal of Water Resources and Environmental Engineering, Vol.8(2), pp 24-31, DOI: 10.5897/IJWREE2014.0531, available online at <http://www.academicjournals.org/IJWREE> March 2016
2. **Sönmez, M.**, “ The Role of Technology Faculties in Engineering Education”, Procedia - Social and Behavioral Sciences 141(2014), pp. 35-44, Available online at , <http://www.sciencedirect.com/science/article/pii/S1877042814034338>, DOI: 10.1016/j.sbspro.2014.05.009, Elsevier, 2014.
3. **Sönmez, M.**, “Shall We Continue Keeping High School Courses in Mechanical engineering Curriculum?”, Proceedings of the 12th Biennial Conference on Engineering Systems Design and Analysis ESDA2014, July 25-27, 2014, Copenhagen, Denmark, DOI: 10.1115/ESDA2014-20103

4. **Sönmez, M.**, "Solid Modelling and Creativity", *Procedia - Social and Behavioral Sciences* 93 (2013), pp. 169 – 173, Available online at www.sciencedirect.com , Elsevier, doi.org/10.1016/j.sbspro.2013.09.172 , 2013.
5. **Sönmez, M.**, “ The Role of Technology Faculties in Engineering Education”, 4th World Conference on Learning, Teaching and Educational Leadership, Oct. 27-29, 2013, Barcelona, Spain, 2013..
6. **Sönmez, M.**, "Solid Modelling and Creativity", 3rd World Conference on Learning, Teaching and Educational Leadership, Oct.25-28 2012, Brusells, Belgium.
7. **Sönmez, M.**, "When will High School Defend its Science Education against University?", *Procedia Social and Behavioral Sciences*, v.31, pp. 509-516, Available online at www.sciencedirect.com, DOI: 10.1016/j.sbspro.2011.12.095, Elsevier, 2012.
8. **Sönmez, M.**, "When will high school defend its science education against University?", 2ndWorld Conference on Learning, Teaching and Administration, 28-30 October 2011, Istanbul, Turkey.
9. **Sönmez, M.**, "Physics and Chemistry Courses in Mechanical Engineering Curriculum", ICEE 2011 An International Conference on Engineering Education, Article No: 55, Paper ID: FR.A.SC 11.55, Belfast, Northern Ireland, UK., 21-26 August 2011, ISSN: 1562-3580.
10. **Sönmez, M.**, "The Role of Vocational School of Universities in Lifelong Learning for Engineers, Engineering Technicians and Technicians", *Ejovoc- Electronic Journal of Vocational Collages*, v1, December 2011, ISSN 2146-7684, pp.1-7, 2011
11. **Sönmez, M.**, "Energy Efficiency Law: Role of Universities in Educating Energy Managers", *Journal of Materials Science and Engineering*, B1, ISSN 2161-6221, DOI:10.17265/2161-6221/2011.08.014 , pp. 358- 364, 2011
12. **Sönmez, M.**, “The Role of Vocational School of Universities in Lifelong Learning for Engineers, Engineering Technicians and Technicians”, III, International Conference of Educational Research- Life-Long Learning and Informal Education), Girne, N. Cyprus, 4-7 May, 2011.
13. **Sönmez, M.**, Muhtaroglu, A., Tuncay, K., “Energy Efficiency Legislation in Turkey and the Role of the Universities”, International Conference on Clean Energy 8 ICCI-2010), Gazimagusa- N. Cyprus, Proceedings, Ref. No.: 10-03, September 2010.
14. **Sönmez, M.**, “Energy Efficiency Law- Role of Universities in Educating Energy Managers”, 2nd International Conference on Nuclear and Renewable Energy Resources, Proceedings, ISBN: 978-605-88549-0-1, pp 682-687, 04-07 July 2010, Gazi Univ. Ankara.
15. **Sönmez, M.**, Rahim, M., “Ekonomizerlerin Enerji Verimliliğine Etkisi- Bir Düzeltme”, 17. Ulusal Isı Bilimi ve Tekniği Kongresi, Sivas Cumhuriyet Üniv., Haziran 2009.
16. Rahim, M., **Sönmez, M.**, Durmaz, A., “ Gaz Türbini Tasarımı, Optimizasyonu ve Uygulamaları”, IV. Ege Enerji Sempozyumu, 21-23 Mayıs 2008.

17. **Sönmez, M.**, “Türkiye’ de Mesleki ve Örgün Öğretimin Sorunları ve Yeniden Yapılandırılma Zorunluluğu”, TED Eğitim ve Bilim Dergisi, v. 33, no: 147, pp. 71-84, Ocak 2008.
18. **Sönmez, M.**, “Mesleki Yeterliliğin Sağlanmasında İki Aşamalı Üniversite Eğitiminin Gerekliliği ve Niteliği”, Eğitimsen Yayınları, 1. Baskı, pp. 177- 184, Ocak 2008.
19. Eraslan. A., Orcan, Y., **Sönmez, M.**, “ A Comprehensive Stress Analysis of Rotating Variable Thickness Solid and Annular Disks Using von Mises Yield Criterion” ARI The Bulletin of Istanbul Technical University, Vol.54, No:5, July 2007.
20. **Sönmez, M.**, “Teknolojinin Bilimsel İlkeleri Dersinin Amacı, İçeriği ve Veriliş Yöntemi”, 4. Ulusal Meslek Yüksekokulları Sempozyumu, Bildiriler Kitabı, ISBN: 978-975-483-740-7 pp. 346- 350, Bergama- İzmir, Mayıs 2007.
21. **Sönmez, M.**, “Meslek Yüksekokullarının Yeni Tanımı ve İşlevi- Türkiye’nin Yükseköğretim Stratejisinin İrdelenmesi”, 4. Ulusal Meslek Yüksekokulları Sempozyumu, Bildiriler Kitabı, pp. 36- 39, Bergama- İzmir, Mayıs 2007.
22. **Sönmez, M.**, “Master of Engineering- Life Long Learning”, Proceedings of the 7th WFEO World Congress on Engineering Education, Budapest, Hungary, pp. 216-220, March 2006.
23. **Sönmez, M.**, “Mesleki ve Teknik Ortaöğretim Kurumlarının ve Meslek Yüksekokullarının Mühendislik Öğretimine Olan Etkisi”, TMMOB Mühendislik Eğitimi Sempozyumu, Bildiriler Kitabı ISBN: 975-395-990-7, pp. 165- 174, 18-19 Kasım 2005.
24. **Sönmez, M.**, “I. Ulusal Meslek Yüksekokulları Müdürler Toplantısında Ortaya Konulmuş Sorunlara Çözüm Önerileri Meslek Yüksekokullarının Geleceği”, III. Meslek Yüksekokulları Sempozyumu, Bildiriler Kitabı, pp. 1-5, Burdur, Eylül 2005.
25. **Sönmez, M., Yılmaz,A.**, “Meslek Yüksekokullarına Sınavsız Geçiş Uygulamasındaki Sorunlar- Meslek Liselerinin, Teknik Liselerin ve Meslek Yüksekokullarının Yeniden Yapılandırılması Gerekliliği”, 1. Uluslararası Üniversite Eğitimi Kongresi Bildiri Özetleri, p.133, 27-29 Mayıs 2004, İstanbul.
26. **Sönmez, M.**, “ Makina Mühendisliğinde Uzmanlık, Uzmanlık Eğitimi”, V. Ulusal Makina Mühendisliği ve Eğitimi Sempozyumu Bildiriler Kitabı, 7-8 Kasım 2003 İstanbul, pp.331-336.
27. **Sönmez, M.**, “ Üniversitelerin Uzman Mühendis Yetiştirme Sorumluluğu- Uzman Mühendislik Öğretiminin Yerel Yönetimlere Yararı ve Üniversite- Sanayi-Yerel Yönetim İşbirliği”, ULYUSİS I. Uluslararası Yerel Yönetimler Üniversite ve Sanayi İşbirliği Sempozyumu, pp. 306-310, 23-24 Ekim 2003 Ankara.
28. Günay, E., **Sönmez, M.**, “Mechanical Behavior of Wood under Tensional and Tensile Loadings”, G.Ü. Journal of Science, ISSN 1303-9709, pp. 733-749, 2003.

29. **Sönmez, M.**, “A Study on the Combined Effect of Axle Friction and Rolling Resistance”, The International Journal of Mechanical Engineering Education, Vol.31, No.:2, Manchester University Press, <https://doi.org/10.7227%2FIJMEE.31.2.2>, April 2003.
30. **Sönmez, M.** “ İlköğretim 1. Kademe Matematik Eğitiminde Hangisi? Kütle mi, Ağırlık mı?” V. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, ODTÜ, Ankara, Vol. 2 pp. 1100-1106, 16-18 Eylül 2002
31. Saryal,N., **Sönmez, M.** “ Proposal for a Super hybrid Computer” , Proceedings, AMSE Confer., Modeling and Simulation, Vol.1D, pp. 147-162, 1988.
32. Yamalı, C., **Sönmez, M.**, “Döner Rejeneratif Tip bir Atık-Isı Isı Değiştiricinin Modellemesi”, TIBTD 6. Ulusal Kongresi Bildiri Kitabı, pp.588-599, 1987.
33. Ercan,Y., Durmaz,A., **Sönmez, M.**, “ Döner ve Reküperatif Tip Isı Değiştirgeçlerinin İklimlendirme ve Tekstilde Atık Isı Kazanımı için Uygulanması”, Türkiye Enerji Kongresi, WEC , , Türk Milli Komitesi Bildiri Kitabı, pp.77-89, 17-21 Kasım, İzmir Türkiye 1986.
34. Ercan,Y., Durmaz,A., **Sönmez, M.**, “ Akaryakıtlı Fırınlrın Enerji Ekonomisi Yönünden İncelenmesi”, TIBTD 4. Ulusal Kongresi Kitabı, pp.291-299, 1983.
35. Enerjide Tutumluluk Projesi Yayınları, ODTÜ ISILMAREN , Proje No: 1981-04-02-01-01, Yayın No: 1-5 , 1981-83.
36. Saryal,N., **Sönmez, M.**, “Doğal Taşınım İle Isı ve Kütle İletiminin Elektriksel Andırımı”, TÜBİTAK Projesi Raporu, No: MİSAG 13.