

CURRICULUM VITAE

1. **Full Name: Yıldız Arıkan**
2. **Date of Birth: 25-01-1944**
3. **Title: Assoc. Prof. Dr.**
4. **Qualifications:**

Degree	Field	Institution	Year
BSc	Electrical and Electronics Engineering	Middle East Technical University(METU)	1966
MSc	Electrical and Electronics Engineering	METU	1968
PhD	Operations Research	METU	1986

5. **AcademicTitles:**

Assistant Prof. Dr., Date: 1986
Associate Prof. Dr., Date: 1987
Professor: Date:

6. **Supervised Master's and PhD Theses**

- 6.1. **Master's Thesis:**

- Özcelik, M. D., "*Karbon Yakalama ve Depolama Teknolojilerinin Temiz Karbon Mekanizmaları İçerisindeki Rolünün İncelenmesi*" (The role of Carbon Capture and Storage technologies(CCS) in the Clean Development Mechanisms), April 2014 (in Turkish)
- Gokoglu, M., "*Enerji Verimliliği ve Tasarruf Çalışmaları*,"(Energy Efficiency and Conservation Applications in a Production Plant, Bahçeşehir University, September 2013 (in Turkish)
- Tekinalp, G., "*Türkiyede Elektrik Piyasası; Piyasanın Serbestleşme Süreci, Mevcut durum ve ileriye yönelik beklentiler*", (Turkish Electricity Market, the Process of Liberalization and the Current State and Expectations from the Market), Bahçeşehir University, February 2013 (in Turkish)
- Ağdere, E., "*Rüzgar Enerji Sistemlerinde Maliyet Analizi*", (Cost Analysis of Wind Energy Systems), September 2012. (in Turkish)
- Serhadlioğlu, Y. S., "*Bahçeşehir Üniversitesi Sürdürülebilirlik Raporu Altılığının Oluşturulması* (A Preliminary Study to lay down the Sustainability Report Format for Bahcesehir University)", Bahçeşehir Üniversitesi, January 2011(in Turkish)
- Yenilmez, M., "*Power System Expansion Planning for Turkey*," M.S. Thesis in Electrical Engineering, Middle East Technical University, Ankara, Turkey, 1999
- Çetin, F., "*Planning a Quality System for High Voltage Testing Laboratories*", M.S. Thesis in Electrical Engineering, Middle East Technical University, Ankara, Turkey, 1999
- Kılıç, C., "*A multi Objective Approach to Energy Planning Problem*", M.S. Thesis in Industrial Engineering, Middle East Technical University, Ankara, Turkey, 1996
- Kumbaroğlu, G. S., *An Energy Model for Turkey: Focus on Environmental Issues*, M.S. Thesis in Industrial Engineering, Middle East Technical University, Ankara, Turkey, January 1995
- Sarban, Ş. "*A Dynamic Programming Approach to Power System Planning Problem*", M.S. Thesis in Electrical Engineering, Middle East Technical University, Ankara, Turkey, 1992
- Toptaş, M., "*A Comparative Time Series Study for Short Term Electricity Demand Forecasting for Turkey*", Co-supervisor, M.S. Thesis in Electrical Engineering, Middle East Technical University, Ankara, Turkey, 1992
- Gümüştekin, A., "*Build Operate Transfer Model for Investment Projects: A Comparison with Social Benefit-Cost Analysis*", M.S. Thesis in Electrical Engineering, Middle East Technical University, Ankara, Turkey, 1992

- Dalkır, S., “*Project Appraisal Under Uncertainty*”, M.S. Thesis in Industrial Engineering, Middle East Technical University, Ankara, Turkey, 1990
- Fıçlalı, A., “*A comparison of Existing Methodologies for Public Sector Project Appraisal*”, M.S. Thesis in Industrial Engineering, Middle East Technical University, Ankara, Turkey, 1989
- Aday, M., “*Assessment of Wind Energy Conversion Systems within a Long Term Energy Investment Planning Model*”, M.S. Thesis in Electrical Engineering, Middle East Technical University, Ankara, Turkey, 1987

6.2. PhD Theses

Kumbaroğlu, G., K., “Energy Economy Environment Modeling for Turkey”, Middle East Technical University, 2001.

7. Publications

7.1. International Peer-Reviewed Journal Papers (SCI & SSCI & Arts and Humanities)

- Uctug , F., Agrali, S., Arıkan, Y., Avcioglu, E., Deciding between carbon trading and carbon capture and sequestration: An optimization-based case study for methanol synthesis from syngas, *Journal of Environmental Management* 132 (2014) 1-8.
- Uctug , F., G., Tacer, E., Ozerdem, B., Arıkan, Y., Eren, L., Ertis, I., F., Aslan, A., “Current Status of Energy Systems Engineering Education in Turkey”, *Energy Educational Studies*, Vol. (Special Issue), 1080-1085, (December 2012)
- Kumbaroğlu, G., Sarıca K., Or I., Arıkan Y., Karali, N., ”Energy Use, CO2 Emissions and Emission Reduction Costs: Results from the Turkish MARKAL Model”, *Energy Policy*, JEPO_5388_Inpress (November 2011)
- Kumbaroğlu, G., S., Karali, N., Arıkan, Y., “CO2, GDP and RET: An Aggregate Economic Equilibrium Analysis for Turkey”, *Energy Policy*, Vol.36 (7), .2694-2708. (2008).
- Arıkan Y., Kumbaroğlu G., "Endogenizing Emission Taxes: A General Equilibrium Type Optimization Model Applied for Turkey”, *Energy Policy*, Volume 29, Number 12, 1045-1057, (2001)

7.2. Other International Journals

7.3. International Conference Papers (full text in the “Proceedings”)

- Arıkan, Y., Kumbaroğlu, G.(2007) Short- and Long- Run Elasticities of oil products in Turkey, The 9th IAEE European Energy Conference, June 12, 2007, Florence, Italy
- Kumbaroğlu, G., Arıkan, Y. and Sunam, A. (2004). The Clean Development Mechanism as a Useful Initiative to Promote the Development of Sustainable Environment Projects with Public-Private Participation: Experiences from Turkey, *Proceedings of the 1st UN Global Compact Academic Conference*, Wharton, PA, October 2004.
- D. Cetindamar, Y. Arıkan, (2004) “A Synopsis of Global Compact Applications in Turkey”, 12th International Conference of the Greening of Industry Network, Partnership for Sustainable Development, Hong Kong, November 2004

- Denizel, M. Arıkan, Y., Ulusoy, G., Çatay, B., (2002). “Conceptual Design of an E-Market for Small and Medium Enterprises in the Turkish Machinery Industry”, the Fifth International Conference on Electronic Commerce Research (ICECR-5), Montreal, Canada, October 2002.
- Y.Arıkan, G. Kumbaroğlu, “*Macroeconomic Impacts of Reducing Energy Related Gas Emissions*”, The 14th Triennial Conference, Vancouver, B.C., Canada, July 8-12, 1996
- Y.Arıkan, C.Kılıç, “*A multi Objective Approach to Energy Environment Planning Problem*”, 8 th Mediterranean Electro-technical Conference Proceedings, Vol. 2., pp. 746-749, May 1996
- Arıkan, Y. and Kumbaroğlu, G. (1995). *Energy-Economy-Environment Interactions in Turkey*, Proceedings of the International Conference ECOS'95: Efficiency, Costs, Optimization, Simulation and Environmental Impact of Energy Systems, Vol.2 pp.598-607, Istanbul, July 1995.
- Y. Arıkan, “Build Operate Transfer Model for New Power Plants for Turkey” IEEE Melecon 94 Conference, Antalya, Turkey, Proc.pp.1089-1092, April 1994
- Y. Arıkan, “Efficiency Measures in the Supply, Transmission Distribution, Storage, End-Use, of Energy and Energy Resources, Studies for the Realization of Future Projections” Black Sea Economic Cooperation 1.st International Energy Congress, Country Report Part IV, Pp.IV.1-IV.4, Ankara, Turkey, November 1993,
- Y.Arıkan, “*Financial, Technical, Legal and Administrative Problems Faced and Solution Proposals in the Energy Sector*”, Black Sea Economic Cooperation 1.st International Energy Congress, Country Report Part III, pp. III.1-III.8, Ankara, Turkey, November 1993,

7.4. Books or Book Chapters

- Arıkan,Y., Güven, Ç. and Kumbaroğlu, G. *Energy-Economy-Environmental Interactions in a General Equilibrium Framework: The Case of Turkey*, in: D. Bunn and E. Larsen (Editors), *Systems Modeling for Energy Policy*, Chp.8, pp.117-139, J. Wiley & Sons (ISBN 0-471-95794-1), (1997).

7.5. National Peer-Reviewed Journal Papers

7.6. National Conference Papers (full text in the “Proceedings”)

- Arıkan, Y. and Kumbaroğlu, G. (2000). *Geçmişten Günümüze Enerji Modelleri (Energy Models from past to present)*, Proceedings of the 8th Turkish Energy Congress: Energy and Technology for Sustainable Development in the 21st Century, WEC Turkish National Committee, pp.9-20, Ankara, May 2000.
- Arıkan, Y. and Kumbaroğlu, G. *Enerji-Ekonomi-Çevre Entegre Planlaması ve Türkiye’de SO₂ Emisyonlarının Kısıtlanması (Integrated Energy-economy–environment Planning and Limiting SO₂ emissions: Case of Turkey)*, Proceedings of the 2nd Turkish Energy Symposium: National Energy Policies in the New Millennium; published by the Turkish Chamber of Electrical Engineers, pp.265-274, Ankara, December 1999.

- Arıkan, Y. and Kumbaroğlu, G. (1997). *Çevre Kısıtları Altında Enerji Politikaları ve Ekonomik Büyüme (Energy Policies and Economic Growth under Environmental Constraints)*, Proceedings of the Environment and Energy First National Congress, Turkish Chamber of Mechanical Engineers publication No:192, pp.243-255, Ankara, June 1997.
- Y. Arıkan, G.Kumbaroğlu, “*S02-Nox Emisyonları ve Nükleer Enerji*”, Yöneylem Araştırması ve Endüstri Mühendisliği XVII Ulusal Kongresi Bildiriler Kitabı sayfa 140-143, September 1996
- Y. Arıkan, G.Kumbaroğlu, “*S02-Nox Emisyonları ve Nükleer Enerji*”, Yöneylem Araştırması ve Endüstri Mühendisliği XVIII Ulusal Kongresi Bildiriler Kitabı sayfa 140-143, September 1996
- Y. Arıkan, C.Güven, “*An Evaluation of the Methodologies Used in Solving Energy-Environment Interaction Problem*”, Fifteenth National Conference on Operation Research and Industrial Engineering, Istanbul, Turkey, July 1993 (in Turkish)
- Y.Arıkan, “*Energy Conservation, Planning and the Economy*”, Energy Management Economics and Technical Issues Conference, Atatürk University, Erzurum, Turkey, Conference Proceedings. Pp.29-55, May 1991.

7.7. Other Publications

- Kumbaroğlu, G., Or, I., Arıkan.Y., Karali, N., Ulusal İklim Değişikliği Stratejisi Senaryo Çalışması, Rapor, Çevre ve Orman Bakanlığı, Mart 2011
- Kumbaroğlu, G., Or, I., Arıkan.Y., Sarica, K., Karali, N., Küresel Isınma Alanında Ulusal Düzeyde Rasyonel Adımların Tespiti Raporu Projesi, Proje Nihai Raporu, DPT, Mart 2010
- Kumbaroğlu, G., Arıkan,(2009), CO2 Salımları Araştırması Güncelleme Projesi Rapor Kitabı, “Farkındalık ve Fark Yaratmak: Türkiye'nin CO2 Salımları”, Açık Toplum Vakfı, İstanbul, Türkiye, ISBN 978-605-5659-05-9, Ağustos 2009
- Kumbaroğlu, G., Arıkan, Y, Karali N., (2008), “*CO₂ Salımları Araştırması:Türkiye Küresel İklim Değişiminin Neresinde? Hangimiz Ne Kadar Sera Gazı Salıyoruz? Çok Geç Olmadan Bireysel Ölçekte Neler Yapabiliriz?*”, Rapor Kitabı, Açık Toplum Vakfı, İstanbul, Türkiye, Ocak 2008.
- Arıkan Y.,(2006), *Short- and Long- Run Elasticities of oil products in Turkey*, Part of Project Report - Demand Forecasting for Petroleum Products, Petrol Ofisi A.Ş., 02/2006-12/2006.
- Ulusoy, G., Çatay, B., Arıkan, Y., Denizel, M., “Makina İmalatı Sektöründe İş Mükemmelliği ve Elektronik İş Stratejileri, Rapor, Yayın No. TÜSİAD-T/2002-10/327, Ekim 2002
- Arıkan, Y., Güven, Ç., Kumbaroğlu, G., “Ulusal Enerji Üretim ve Tüketim Politikalarının Ekonomik ve Çevresel Etkilerini Araştırma Projesi”, TÜBİTAK Project No.: EEEAG-50, Final Report, June 1995
- Arıkan, Y., Güven, Ç., Kumbaroğlu, G., “Calculation of unit production costs for a selected group of electricity generating plants of Turkey”, Project Report, Ministry of Energy and Natural Resources, METU, December 1994 (in Turkish)
- Project Team Report “Distribution System Automation Project”, Turkish Electricity Authority and METU, 1992

- Project Team Report, “Computer Network Feasibility Study Project”, Ministry of Agriculture, Forestry and Rural Affairs, Supported by World Bank, METU-BİLKENT University 1990-1991
- Project Team Report, “Electricity Tariffs using Marginal Cost Pricing”, Joint Project by Turkish Electricity Authority and ODTÜ supported by World Bank, 1976
- Y. Arıkan (Edt.) “Türkiye İçin Elektronik Ticarete Geçiş Durum Değerlendirmesi ve Pilot Uygulaması Proje Raporu”, TÜBİTAK BİLTEN, Mayıs, 1999
- Y. Arıkan (Edt.) “Elektronik Ticaret Koordinasyon Kurulu Teknik Komite Raporu”, June 1998

7.8. International Citations

Arıkan Y., Kumbaroğlu G., Energy Policy, Volume 29, Number 12, 1045-1057, 2001 **8 Citations**

Kumbaroğlu, G., S., Karali, N., Arıkan, Y., *Energy Policy*, Vol.36 (7), and pp. 2694-2708. 2008). **5 Citations**

8. Projects

- Kumbaroğlu, G., Or, I., Arıkan.Y., Karali, N., Ulusal İklim Değişikliği Stratejisi Senaryo Çalışması, Çevre ve Orman Bakanlığı, 2010- Mart 2011
- Arıkan. Y., Baburoğlu. O., Erasmus Euronet- PBL Project, 2009-2010
- Kumbaroğlu, G., Or, I., Arıkan.Y., Sarıca, K., Karali, N., *Küresel Isınma Alanında Ulusal Düzeyde Rasyonel Adımların Tespiti Raporu Projesi*, DPT, 2010.
- Kumbaroğlu, G., Arıkan,(2009), CO2 Salımları Araştırması Güncelleme Projesi, Açık Toplum Vakfı, İstanbul, Türkiye, Aralık 2009
- Kumbaroğlu, G., Arıkan, Y., Karali N., (2008), “CO₂ Salımları Araştırması (CO₂ Emission Research)”, Open Society Institute Assistance Foundation Turkey, İstanbul, January 2008.
- Arıkan Y.,(2006), “Petrol Ürünleri Talep Tahmin Modellemesi Projesi”, - Demand Forecasting for Petroleum Products, Petrol Ofisi A.Ş., 02/2006-12/2006.
- Ulusoy, G., Çatay, B., Arıkan, Y., Denizel, M., “Makina İmalatı Sektöründe İş Mükemmelliği ve Elektronik İş Stratejileri, Rapor, Yayın No. TÜSİAD-T/2002-10/327, Ekim 2002
- Y. Arıkan, İlhan Or, “Euro- Mediterranean Energy Policy Training Network Project”, Supporting Institution: MEDA Program, the European Commission, 2001.
- Arıkan, Y., Güven, Ç., Kumbaroğlu, G., “Ulusal Enerji Üretim ve Tüketim Politikalarının Ekonomik ve Çevresel Etkilerini Araştırma Projesi”, TÜBİTAK Project No.: EEEAG-50, Final Report, June 1995
- Arıkan, Y., Güven, Ç., Kumbaroğlu, G., “Calculation of unit production costs for a selected group of electricity generating plants of Turkey”, Project Report, Ministry of Energy and Natural Resources, METU, December 1994 (in Turkish)
- Project Team Member, “Distribution System Automation Project”, Turkish Electricity Authority and METU, 1992

- Project Team Member, “Computer Network Feasibility Study Project”, Ministry of Agriculture, Forestry and Rural Affairs, Supported by World Bank, METU-BİLKENT University 1990-1991
- Project Team Member, “Electricity Tariffs using Marginal Cost Pricing”, Joint Project by Turkish Electricity Authority and ODTÜ supported by World Bank, 1976

9. Administrative Duties

- 1990-1991 Vice Chairmen, Electrical and Electronics Engineering Department, METU, Ankara
- February, 2000 - October, 2000 Change Management and Quality Assurance Coordinator, TÜBİTAK/Marmara Research Center (MAM), Gebze
- January, 1996 - February, 2000 Assistant Director – Technical, TÜBİTAK/BİLTEN (Information Technologies and Electronics Research Institute), Ankara
- February 1998 – December 1998 Project Coordinator, “Electronic Commerce: An Assessment from Turkey’s Perspective and a Pilot Application”, BİLTEN/İGEME joint Strategic Project supported by Turkish Technology Development Foundation (TTGV), TÜBİTAK/BİLTEN
- February 1998- February 2000 Group Leader, Technical Working Group, Electronic Commerce Coordinating Committee, Formed by Supreme Council of Science and Technology
- October 1998 Turkish Delegate, represented Turkey in the OECD Ministerial Conference on Electronic Commerce, Ottawa, Canada
- 1969-1970 Professional Engineer, Central Electricity Generating Board of England

10. Scientific and Professional Memberships

- 1995- present Founder Member and Vice Chairman of Turkish Association for Energy Economics
- 1993 - present Member of Turkish Operation Research
- 1989 – present Member of World Energy Council, Turkish National Committee
- 1966 – present Member of Chamber of Electrical Engineers

11. Awards

12. Courses offered within the last two academic years

Academic Year	Term	Name of the Course	Weekly Hours		Number of Students
			Theoretical	Practical	
2012-2013	Fall	ESE 4011 Energy Economics	3	0	35

		ESE 5012 Güç Sistemleri Ekonomisi (MSc)	3	0	4	
		ESE 4997 Capstone Projects I	3	0	7	
		ESE 4101 Sustainable Energy	3	0	28	
		ESYS 5888 MSc. Thesis			3	
Academic Year 2012-2013	Spring	ESE 3008 Energy Utility and Management	3	0	52	
		ESE 5006 Energy Policy and Planning (MSc)	3	0	7	
		ESYS 5888 MSc. Thesis	-	-	2	
		ESE 5999 Master's Degree Project	-	-	1	
		ESE 4998 Capstone Projects II	-	-	7	
Academic Year 2013-2014	Fall	ESE 4011 Energy Economics	3	0	31	
		ESE 4101 Sustainable Energy	3	0	39	
		ESE 4997 Capstone Projects I	-	-	8	
		ESE 5888 MSc. Thesis	-	-	1	
	2013-2014	Spring	ESE 3008 Energy Utility and Management	3	0	25
			ESE 5502 Sustainable Energy Systems (MSc)	3	0	8
			ESE 4998 Capstone Projects II	-	-	8
			ESE 5888 MSc. Thesis	-	-	1