Dr. Durmus Kaya

Assistant Professor, Department of Industrial Engineering, King Abdulaziz University

| Education | | | | |
|-----------|------------------------|--------------------|-----------|--|
| Degree | Field of Study | Institution | Year | |
| PhD | Mechanical Engineering | Sakarya University | 1996-2001 | |
| MS | Mechanical Engineering | Kocaeli University | 1994-1996 | |
| BS | Mechanical Engineering | Yildiz University | 1987-1991 | |

Academic Experience

| From | To | Institution | Rank | Title (Chair, Coordinator, etc.) | Full or Part Time |
|------|---------|------------------------------------|----------------------|-------------------------------------|----------------------|
| 2013 | present | King Abdulaziz University | Prof. | . , | Full time |
| 2010 | 2013 | Karabuk University, | Prof. | | Full time |
| 2000 | 2010 | TUBITAK Marmara Research Center | Senior Researcher | | Full time |
| 1999 | 2000 | Arizona State University, | Researcher. | | Full time |

Non Academic Industrial Experience (including Consultations)

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|------|------|------------------------|---------|----------------------|-----------|
| From | To | Company/Entity | Title | Position Description | Full or |
| | | | | (Brief) | Part Time |
| 1993 | 1999 | TUPRAS Izmit Refinery, | Project | Manager | Full time |
| | | TURKEY | | | |

Funded Research Projects and Patents from the Past Five Years

- 1. Sustainable and Environmentally Friendly Livestock Management: Synthesis of Animal Wastes Bioenergy and Bioproduct, TUBITAK TEYDEB, Ertan Tarım Hayvancılık ve Enerji İşletmeleri Tic. A.Ş. 2011-2013, (R&D Coordinator).
- 2. Annealing Furnace Fuel Optimization in Rail Profile Rolling Mill, Design of a New Recuperator and Economizer in order to Make Maximum Use of Waste Heat, and their System Integration, Kardemir&TÜBİTAK TEYDEB, 2011-2012.
- 3. VE-CA Kurşunlu Energy Plant Efficiency, Determination of Conservation Facilities, VE-CA Dış Ticaret A.Ş, 2011-2012.
- 4. Performance Measurement and Evaluation Study in Mill Annealing Furnace Efficiency, Kayıkçı Demir Çelik Sanayi, 2012.
- 5. Efficiency, Performance Measurement and Evaluation Study in KARDEMİR Rail Profile Rolling Mill and Continuous Annealing Furnaces Rolling Mills, Karabük Demir Çelik San. Tic. A.S. 2011.
- 6. KARDEMİR Energy Efficiency Study in 4. High Furnace and Determination of Conservation Facilities, Karabük Demir Çelik San. Tic. A.Ş. (2011-Devam)
- 7. Energy Efficiency and Evaluation Study in Compressed Air System, Karabük Demir Çelik San. Tic. A.S. (2011)
- 8. KARDEMİR Energy Efficiency and Evaluation Study in Pumps, Karabük Demir Çelik San. Tic. A.Ş. 2010-2011.

Certifications and Professional Registrations

Current Membership in Professional Societies and Organizations

| Society/organization Rank Member Sind |
|---------------------------------------|
|---------------------------------------|

1. The Turkish Chamber of Mechanical Engineers 1994

Honours and Awards

- TUBITAK MRC Research Scholarship, Arizona State University, Industrial Assessment Cente Tepme-Arizona, USA, 23 March 2000-23 September 2000 (Selected by the Exam).
- MRC Incentive Award, "Exploitation of Agricultural Residues in Turkey" project, 2005.
- MRC Achievement Award, "Vehicles Integration" project, 2001Shield of Excellence from the Chairman of IE Department, KAU for the contribution of the year 2007.
- TUPRAS Izmit Refinery Achievement Award, TUPRAS Izmit Refinery Burning of waste project and Plant 19-21st unit improvement studies, 1998.

Institutional and Professional Services (administration, committees, units, etc.)

Principal Publications/Presentations from the Past Five Years

- Kaya D., Eyidogan M., Ozkaymak M., Turhan F., Kilinc E., Kayabasi E., Sahin Z., Sonverdi E., Selimli S., Energy-Exergy Efficiencies and Environmental Effects of A Mized Fuel (Solid +Gas) Industrial Facility Steam Boiler, Journal of the Energy Institute, 2013; Number: 4, Volume: 8, 194-201
- 2. Kaya, D., Eyidogan, M. 2010. Energy Conservation Opportunities in an Industrial Boiler System, J. Energy Engineering. 136(1), 18-25.
- Yaldiz, O., Sozer, S., Caglayan, N., Ertekin, C., Kaya, D, 2011. Methane Production from Plant Wastes and Chicken Manure at Different Working Conditions of One-Stage Anaerobic Digester, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 33:19, 1802-1813. 3.
- Kaya, D., Eyidogan, M. 2009. Energy Conservation Opportunity in Boiler Systems, J. Energy 4. Resources Technology, 131(3), 032401.

 Kaya, D., Eyidoğan, M., Polat, R., Çanka Kılıç F., Technical and Economic Feasibility Analysis of
- 5. Municipal Solid Waste Recovery and Power Generation Plant, Journal of Agricultural Machinery Science, (Accepted).
- 6. Kılıçaslan İ., Kaya D., Sapmaz S., Waste Heat Recovery In Galvanising Industry, Engineering Science and Technology, An International Journal, Accepted. JESTECH, 15(3), 135-139, (2012).
- Yanmaz M., Kaya D., Ultra-Low Carbon Dioxide (CO2) Steelmaking, Engineering Science and 7.
- Technology, An International Journal, JESTECH, 15(2), 71-76, (2012).

 Kaya D., Çanka Kılıc F., Renewable Energies, Clean Energy Generation And Their Subsidies In Turkey And Eu Countries, Engineering Science and Technology, An International Journal, JESTECH, 15(3), 113-122, (2012).

 Kaya D, Kilic F.C, 2012, Renewable Energies and Their Subsidies in Turkey and some EU countries-Germany as a Special Example, J. Int. Environmental Application & Science, V:7 (1):114-127 8.
- 9. (2012).
- Kaya D., Eyidoğan M, 2011., Technological Developments in Biogas Production and Energy Conversion Systems, Atık Teknolojileri Dergisi, Sayı 19. Sayfa: 58-63.
- Yiğit K.S., Kaya D., Yağmur A., Eren A.S., Energy Efficiency of Centrifugal Pumps Industrial, Otomasyon Dergisi, Motor ve Sürücüler, Sayfa 154-162, 2011

Recent Professional Development Activities (Workshops, training, etc.)

- Project Proposal Preparation and Submission and Project Management Training Programme, 28-29 September 2011 The Central Palace Hotel, Lamartin Caddesi 18, 34437, Taksim, Istanbul.
- 2. International Biogas Training Course, IBBK, 2009
- 3. TS EN ISO/IEC 17025Standard General Requirements for the Competence of Calibration and Testing Laboratories, TÜBİTAK MAM, 2008