

**"SUMMER COURSE ON EXERGY AND ITS APPLICATIONS"
(20-22 June 2013)
Karabuk University, Karabuk
~ PROGRAM ~**

Day 1: 20 June 2013 (Thursday)		
Hours	Lecturer	Title
08.30-09.00		Registration
09.00-09.30		Opening Speeches
09.30-10.15	Dr. I. Dincer	Why Exergy?
10.15-10.45		Coffee Break
10.45-11.45	Dr. Y.A. Cengel	Introduction to Thermodynamics and Violation of Thermodynamic Laws
11.45-12.30	Dr. Y.A. Cengel	Introduction to the 2 nd Law and Exergy
12.30-13.30		Lunch
13.30-14.00	Dr. A. Hepbasli	TS ISO 50001-Energy Management System Standard and Its Possible Exergetic Aspects
14.00-14.45	Dr. A. Hepbasli	Exergy Efficiencies for Various Energy Systems
14.45-15.15		Coffee Break
15.15-16.00	Dr. I. Dincer	Energy and Exergy Analyses and Efficiency Assessment of Systems: A Problem Session
16.00-16.45	Dr. A. Midilli	Chemical Exergy Calculations: Examples
16.45-17.30	Dr. A. Midilli	Exergetic and Environmental Assessments of Hydrocarbon Fuel Combustion
19.00-21.00		Welcoming Dinner

Day 2: 21 June 2013 (Friday)		
Hours	Lecturer	Title
09.00-09.45	Dr. Y.A. Cengel	New Developments in Energy and Exergy Technologies
09.45-10.30	Dr. I. Dincer	Exergetic Performance Assessment of Nuclear and Renewable-Based Hydrogen Production Systems
10.30-11.00		Coffee Break
11.00-11.45	Dr. U. Camdali	Energy and Exergy Efficiencies for Society
11.45-12.30	Dr. A. Midilli	Exergetic, Environmental and Sustainability Assessments of Fuel Cells
12.30-13.30		Lunch
13.30-14.00	Dr. A. Hepbasli	Exergetic Analysis of Various Greenhouse Heating Options
14.00-14.45	Dr. A. Hepbasli	Advanced Exergy Analysis of Heat Pump Drying Systems
14.45-15.15		Coffee Break
15.15-16:00	Dr. M. Karakilcik	Exergy Analysis of Integrated Solar Pond and PV/T Systems
16.00-18.00	Engineering Equation Solver (EES) Training Session with Examples Coordinator: Dr. I. Dincer Tutor: Dr. M.T. Balta	

Day 3: 22 June 2013 (Saturday)		
Hours	Lecturer	Title
09.00-09.45	Dr. Y.A. Cengel	Engineering , Exergy and Innovation
9.45-10.15	Dr. A. Midilli	Exergy Analysis of Hydrogen Compression and Storage Systems
10.15-10.45	Dr. I. Ekmekci	Optimum Charging Materials for Electric Arc Furnaces by Exergy Method
10.45-11.15		Coffee Break
11.15-12:30	Dr. U. Camdali	The Thermodynamic Laws in Economics
	Dr. D. Kaya	Fuel optimization in the Rail Rolling Mill and the Design of a Novel Recuperator and Economizer to Profit by the Most of Waste Heat
	Dr. D. Kaya	Energy Efficiency in Industrial Boilers
	C. Uysal	Thermoeconomic Analysis of a Power Plant: A MOPSA Application
12.30-13.05	Dr. I. Dincer	Novel Energy Topics and Exergy Analysis
13.05-14.15		Lunch
14.15-16.00	POSTER PRESENTATIONS & DISCUSSION AND CLOSING REMARKS	

PRINCIPAL LECTURERS	
Prof. Dr. Ibrahim Dincer	TUBITAK-Marmara Research Center, Turkey; University of Ontario, Institute of Technology (UOIT), Canada (Scientific Coordinator)
Prof. Dr. Yunus A. Cengel	Adnan Menderes University, Turkey
Prof. Dr. Arif Hepbasli	Yasar University, Turkey
Prof. Dr. Adnan Midilli	Recep Tayyip Erdogan University, Turkey
Contributors	
Prof.Dr. Ismail Ekmekci	Istanbul Commerce University, Turkey
Prof.Dr. Unal Camdali	Yildirim Beyazit University, Turkey
Prof.Dr. Durmus Kaya	Karabuk University, Turkey
Dr. Mehmet Karakilcik	Cukurova University, Turkey
Dr. M.Tolga Balta	Aksaray University, Turkey
Cuneyt Uysal	Karabuk University, Turkey

Location: Karabuk University – Fen Fakültesi, Konferans Salonu, Karabuk, Turkey.

Registration fee: 75 TL for students, 125 TL for regular participants and 150 TL industrial participants (including course notes, lunches and refreshments).

Notes: The deadline for registration is **24 May 2013**. Although the course language is Turkish, course notes and presentation documents will be available in English. Please fill in and submit the attached application form for registration.

Organizing Committee: Prof. Dr. Erol ARCAKLIOĞLU, Prof. Dr. Durmuş KAYA, Assoc. Prof. Dr. Yusuf ÇAY, Assoc. Prof. Dr. Mehmet ÖZKAYMAK, Assist. Prof. Dr. Yaşar YETİŞKEN, Assist. Prof. Dr. Engin GEDİK, Res. Assist. Cüneyt UYSAL, Res. Assist. Selçuk SELİMLİ.

The web site: <http://web.karabuk.edu.tr/ekserji>

Contact Information:

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