



"SUMMER COURSE ON EXERGY AND ITS APPLICATIONS"

(27-29 December 2021)
Gaziantep University, Gaziantep



Day 1: 27 December 2021 (Monday) (Gaziantep University-Online)

Zoom Link:

<https://zoom.us/j/9968924072?pwd=dXFicjJMMHhTcWNlWldTV0t1K0Vhdz09>

Hours	Lecturer	Title
08.00-09.00		Registration
09.00-09.15	Dr. R. Yumrutas	Welcoming Talks
09.15-10.00	Dr. I. Dincer	Energy and Exergy Dimensions
10.00-10.45	Dr. A. Hepbasli	Energy and Exergy Management System Standards
10.45-11.00		Break (Q & A)
11.00-11:45	Dr. Y.A. Cengel	Thermodynamic Concepts
11.45-12:30	Dr. Y.A. Cengel	Introduction to the 2 nd Law and Exergy
12.30-13.30		Lunch Break
13.30-14.15	Dr. A. Hepbasli	Exergetic Efficiencies and Indicators for Energy Systems
14.15-15.00	Dr. A. Midilli	Chemical Exergy Calculations: Examples
15.00-15.15		Break (Q & A)
15.15-16.00	Dr. I. Dincer	Energy and Exergy Analyses and Efficiency Assessments of Systems: A Problem Session-1
16.00-17:00	Dr. I. Dincer	Energy and Exergy Analyses and Efficiency Assessments of Systems: A Problem Session-2
17.00-18.15	Dr. I. Dincer	Special Talk: Research World
		Host: Dr. R. Yumrutas
18:15		End of the Day

Day 2: 28 December 2021 (Tuesday) (Gaziantep University-Online)

Zoom Link:

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Hours	Lecturer	Title
09.00-09.45	Dr. M. Karakilcik	Exergy Analyses of PV and PV/T Systems
09.45-10.30	Dr. A. Hepbasli	Exergetic Evaluation of Building Energy Systems
10.30-10.45		Break (Q & A)
10.45-11.30	Dr. Y.A. Cengel	Exergy of the cold (with LNG example)
11.30-12.15	Dr. Y.A. Cengel	Entropy and Information
12.15-13:15		Lunch Break
13.15-14.00	Dr. I. Dincer	Integrated Solutions with Exergy
14.00-14.45	Dr. C. Acar	Exergy Analysis of Hydrogen Production Processes
14.45-15:30	Dr. C.O. Colpan	Exergy Analysis and Optimization of Fuel Cells
15.30-15.45		Break (Q & A)
15.45-16.30	Dr. A. Midilli	Exergetic, Environmental and Sustainability Assessments of Energy Systems
16.30-17.15	Dr. A. Midilli	Exergy Analysis of Gasification Systems
17.15-18.15	Dr. Y.A. Cengel	Special Talk: Engineering Education
		Host: Dr. R. Yumrutas
18:15		End of the Day

Day 3: 29 December 2021 (Wednesday) (Gaziantep University-Online)

Zoom Link:

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Hours	Lecturer	Title
09.00-09.40	Dr. M.A. Ezan	Exergy Analysis and Optimization of Thermal Energy Storage Systems
09.40-10.20	Dr. M. Ozturk	Exergy Analysis of Liquefaction Systems
10.20-11.00	Dr. R. Yumrutas	Recent Progresses and Advanced Studies on Thermal Heat Storage Systems
11.00-11.15		Break (Q & A)
11.15-11:45	Dr. A. Atmaca	Industrial Applications of Exergoeconomics: A Case Study for a Real Scale Cement Factory
11.45-12:15	Dr. O. Kaska	Waste Heat Recovery Applications and Exergy Based Investigation of Organic Rankine Cycles
12.15-12.45	Dr. I. Dincer	Novel Energy Topics and Exergy Analysis, and Future Directions
12.45-13:15		Certificates and Awards Ceremony and Closing Remarks
13.15		Closure

PRINCIPAL LECTURERS

Prof. Dr. Ibrahim Dincer	Ontario Tech University, Canada & Yildiz Technical University, Turkey
Prof. Dr. Yunus A. Cengel	University of Nevada at Reno, USA
Prof. Dr. Arif Hepbasli	Yaşar University, Turkey
Prof. Dr. Adnan Midilli	Yildiz Technical University, Turkey

CONTRIBUTORS

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Dr. M. Akif Ezan	Dokuz Eylul University, Turkey
Prof. Dr. Mehmet Karakilcik	Cukurova University, Turkey
Prof. Dr. Murat Ozturk	ISUBU, Turkey
Prof. Dr. Recep Yumrutas	Gaziantep University, Turkey
Prof. Dr. Onder Kaska	Osmaniye Korkut Ata University, Turkey
Dr. Adem Atmaca	Gaziantep University, Turkey

Location: Gaziantep University – Mâvera Congress and Art Center, Gaziantep, Turkey (www.gantep.edu.tr)

Notes: Although the course language is Turkish, course notes and presentation documents will be available in English.

Organizing Committee: Recep Yumrutas (Coordinator), Mehmet Sait Söylemez, Hüseyin Yağlı, Adem Atmaca and Emrullah Kocaman.

Contact Information:

For registration forms submission, contact:

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Info on Course Details: Please visit <http://ekserjikursu.gantep.edu.tr/>