

MISTI

**MIT - BOUN - ITU
WORKSHOP**

**Istanbul, Turkey
10-15 July 2017**

**ENERGY-BASED
STRUCTURAL
ANALYSIS AND
SENSING**



Massachusetts Institute of Technology

A collaborative research in earthquake engineering and sensing

MISTI Principal Investigators
Prof. Oral Büyüköztürk
Assoc. Prof. Cem Yalçın

ITU Principal Investigator
Assoc. Prof. Ercan Yüksel

Day-1 : Monday, 10/07/2017

Location: BOUN Rectorate

09:30 - 10:00	Registration
10:00 - 10:15	Introduction by BOUN Rector Prof. Mehmed Özkan
10:15 - 10:30	Prof. Taner Bilgiç - MISTI Coordinator
10:30 - 10:45	Prof. Hilmi Luş - BOUN CE Chair
10:45 - 11:00	Assoc. Prof. Cem Yalçın - BOUN
11:00 - 11:30	Prof. Oral Büyüköztürk - MIT <i>"Innovations in Structural Sensing and Characterization"</i>
11:30 - 12:00	Dr. Hao Sun - MIT <i>"Harnessing Computational Models and Data Analytics in Structural Monitoring"</i>
12:00 - 13:30	Lunch
13:30 - 14:00	Dr. Justin Chen - MIT <i>"Smaller Than the Eye Can See: Remote Sensing with Cameras"</i>
14:00 - 14:30	James Long - MIT <i>"Intelligent and Interactive Wireless Sensing for Structural Health Monitoring"</i>
14:30 - 15:00	Break
15:00 - 15:30	Murat Uzun - MIT <i>"Fusing Seismic Interferometry with Bayesian Inference for Structural Identification and Damage Detection"</i>
15:30 - 16:00	Steven D. Palkovic - MIT <i>"Multiscale Modelling for Sustainable and Durable Cementitious Materials"</i>
16:00 - 16:30	Break
16:30 - 16:45	Assoc. Prof. Cem Yalçın - BOUN
16:45 - 17:00	Seyhan Okuyan - BOUN
17:00 - 17:15	Ferit Yardımcı - BOUN
17:15 - 17:45	Closing remarks

Day-2 : Tuesday, 11/07/2017

Location: ITU Civil Engineering Conference Hall

09:30 - 10:00	Registration
10:00 - 10:15	Introduction by ITU Rector Prof. Mehmet Karaca
10:15 - 10:30	Prof. Ünal Akdemir - ITU CE Faculty Dean
10:30 - 10:45	Prof. Kadir Güler - ITU CE Chair
10:45 - 11:00	Assoc. Prof. Ercan Yüksel - ITU
11:00 - 11:30	Prof. Oral Büyükoztürk - MIT
	<i>"Innovations in Structural Sensing and Characterization"</i>
11:30 - 12:00	Dr. Hao Sun - MIT
	<i>"Harnessing Computational Models and Data Analytics in Structural Monitoring"</i>
12:00 - 13:30	Lunch
13:30 - 14:00	Dr. Justin Chen - MIT
	<i>"Smaller Than the Eye Can See: Remote Sensing with Cameras"</i>
14:00 - 14:30	James Long - MIT
	<i>"Intelligent and Interactive Wireless Sensing for Structural Health Monitoring"</i>
14:30 - 15:00	Break
15:00 - 15:30	Murat Uzun - MIT
	<i>"Fusing Seismic Interferometry with Bayesian Inference for Structural Identification and Damage Detection"</i>
15:30 - 16:00	Steven D. Palkovic - MIT
	<i>"Multiscale Modelling for Sustainable and Durable Cementitious Materials"</i>
16:00 - 16:30	Break
16:30 - 16:45	Assoc. Prof. Ercan Yüksel - ITU
16:45 - 17:00	Ahmet Güllü - ITU
17:00 - 17:15	Asst. Prof. Oğuz Güneş - ITU
17:15 - 17:30	Asst. Prof. Burcu Güneş - ITU
17:30 - 17:45	Asst. Prof. Hasan Özkaynak - BU
17:45 - 18:00	Asst. Prof. Ahmet A. Dindar - GTU
18:00 - 18:30	Closing remarks

Day-3 : Wednesday, 12/07/2017

Location: ITU STEELab

09:30 - 12:30	Experimental studies, instrumentation and data acquisition
12:30 - 14:00	Lunch
14:30 - 17:30	Data analysis, evaluation and discussion

Day-4: Thursday, 13/07/2017

Location: ITU STEELab / ITU Civil Engineering Conference Hall

09:30 - 12:30	Experimental studies, instrumentation and data acquisition
12:30 - 14:00	Lunch
14:30 - 15:30	Presentation by Prof. Sassan Mohasseb Dr. sc.techn. ETHZ <i>"Retrofitting of a Unique Tall Building in Zurich for Earthquake Resistance"</i>
15:30 - 17:30	Data analysis, evaluation and discussion
18:30 - 20:30	Dinner at IU Baltalimani Recreational Facilities

Day-5 : Friday, 14/07/2017

Location: BOUN Engineering Building Vedat Yerlici Conference Hall

09:30 - 12:30	Discussion of preliminary results and future works
12:30 - 14:00	Lunch
14:30 - 17:30	Free time

Day-6 : Saturday, 15/07/2017

Location: TBD

09:30 - 12:30	Video measurements of Fatih Sultan Mehmet Bridge
12:30 - 14:00	Lunch
14:30 - 17:30	Preliminary processing of the video data