

Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

04 -08 December 2017

Istanbul Technical University, Taskısla

Organised by



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**Recent Advances in Energy Conservation Techniques for
Buildings Workshop:
From Micro Scale to Urban Level**

CONTENT

About Workshop_____	1
About the Newton Fund _____	1
Workshop Venue _____	2
Workshop Shedule _____	4
Workshop Programme _____	5
Social Programme _____	10
General Information about Istanbul_____	11
Workshop Participant List _____	12

Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 Istanbul Technical University, Taskısla

About Workshop

Partner countries, UK and Turkey, seek to improve energy efficiency and sustainability of the existing and new built environment. This can only be achieved by introducing novel technologies, low carbon solutions, renewable energy integration and better urban planning. The UK have well established urban planning infrastructure, whereas Turkey has a heritage of architectural design, cultural aspects, and diverse urban planning. The aim of this workshop is to address recent advances in energy conservation techniques for buildings: from Micro scale to Urban level. The workshop will place an emphasis on setting up future objectives for research, networking, sharing knowledge about what works in the UK and Turkey, and planning for improved measures for energy and resource efficient infrastructure.

Workshop objective of energy conservation in the built environment is visualised through four key components, Renewable Energy application, New Technologies, ICT and smarter households and smarter cities, Human behaviour.

These aspects will be covered through setting strategies in four main areas: Building and community level (neighbourhood design) energy conservation potential; Low carbon sustainable technologies innovations alternative building materials and energy conservation techniques; Transforming building envelopes for building greenery - health and psychological impact and Early stage urban planning for Renewable Energy Integration.

Under the Researcher Links scheme offered within the Newton Fund and the British Council a workshop on the above theme will be held in Istanbul Technical University, Turkey, between December 4th and 8th .

The workshop is being coordinated by Prof. Shuli Liu (Coventry University, UK) and Dr. Kerem Yavuz Arslanli (Istanbul Technical University, Turkey) and will have contributions from other leading researchers Dr. Ashish Shukla (Coventry University, UK), Dr. Anil Kashyap (Bristol University, UK), Dr. Ulas Akin (Istanbul Technical University, Turkey) and Assoc. Prof. Dr. Begum Sertyesilisik (Istanbul Technical University, Turkey).

A number of sessions during the workshop will focus on five main topics; Knowledge Exchange and Information Sharing; Current and Potential Technological Solutions (Smarter Houses and Smarter Cities, Green Infrastructure, Low Carbon Urban Infrastructure Solution); Building Envelopes and Renewable Energy; Case Studies from both sides on Policy, Urban Planning and potential solutions and Future collaborations. During the workshop we will create a working group of participants and develop a dedicated blog, to share their relevant research findings.

All participants will have access to a mentor during and after the workshop.

About the Newton Fund

The Newton Fund builds scientific and innovation partnerships with 16 partner countries to support their economic development and social welfare, and to develop their research and innovation capacity for long-term sustainable growth. It has a total UK Government investment of £735 million up until 2021, with matched resources from the partner countries. The Newton Fund is managed by the UK Department for Business, Energy and Industrial Strategy (BEIS), and delivered through 15 UK Delivery Partners, which include the Research Councils, the UK Academies, the British Council, Innovate UK and the Met Office.

For further information visit the Newton Fund website (www.newtonfund.ac.uk) and follow via Twitter: @NewtonFund.

Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 Istanbul Technical University, Taskısla

Workshop Venue

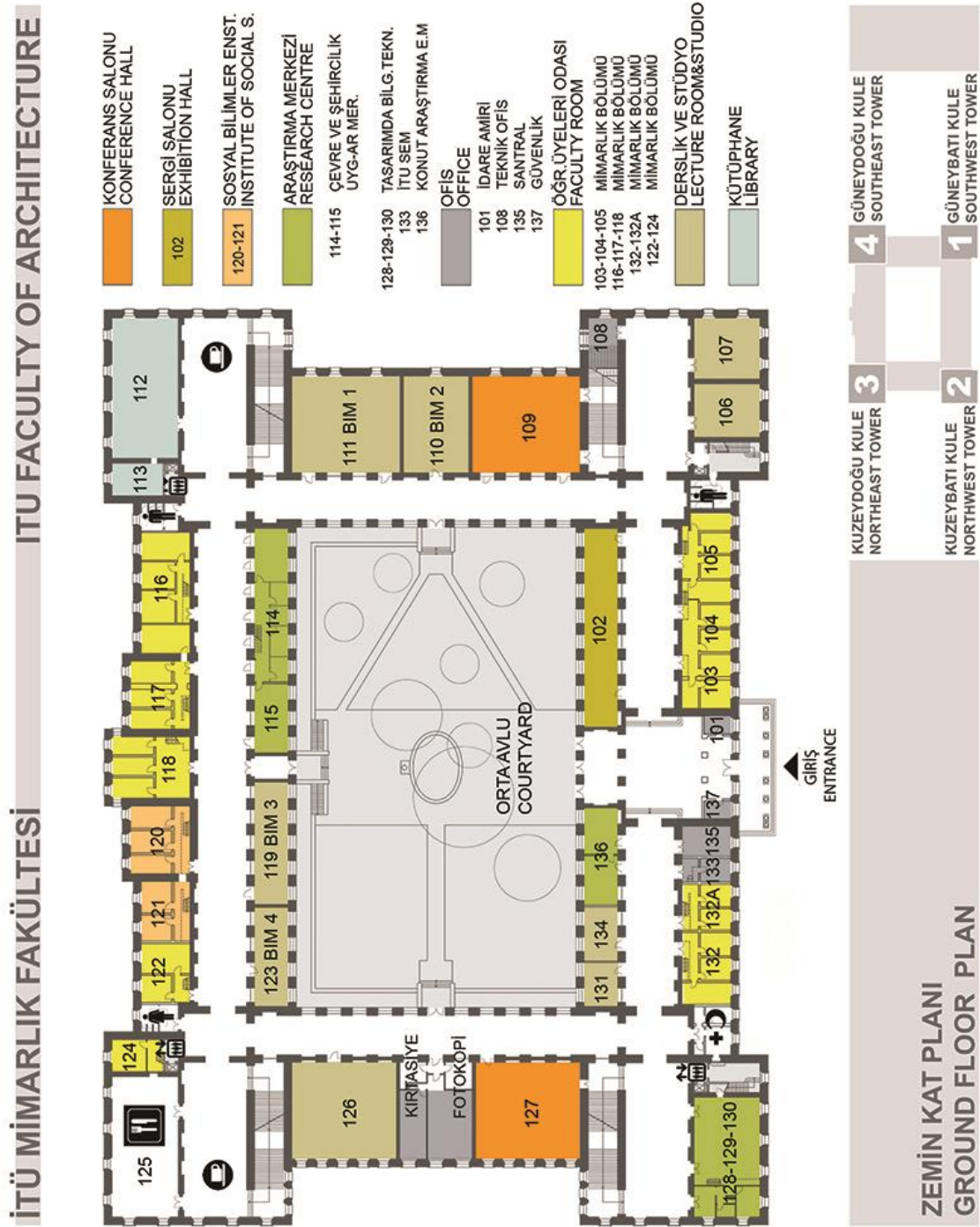
Taskısla building was constructed all in structural masonry between 1848 and 1853 as a military medicine academy for the Ottoman Army. The building plans drawn by W. James Smith were modified and the building's function was changed to the military barracks in 1849. This modification was part of a construction plan that were to ensure the safety of the imperial domain around the Dolmabahçe Palace. The building sustained some damage in the earthquake of 1894, and was restored by architect Raimondo D'Aronco. In 1944, the building was handed over to the İTÜ and restored by architects Paul Bonatz and Emin Onat. Teaching was started in 1950, with the Civil Engineering and Architecture Faculties. In 1983, it was classified as a first degree historical monument.



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4 - 8 December, 2017 Istanbul Technical University, Taskışla

Taşkışla Ground Plan



Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 Istanbul Technical University, Taskısla

Workshop Schedule

	December 3th SUNDAY	December 4th MONDAY	December 5th TUESDAY	December 6th WEDNESDAY	December 7th THURSDAY	December 8th FRIDAY
09.00 12.30		Welcome/Opening Speeches Keynote Lecturer Room 127	Presentation of Participants Room 127	Brokerage Workshops for EU/EC Research Programmes (H2020) Presentations for Further Co-publication Room 109	Technical Excursion – Local Government Research Centers Networking Meeting IBB	Presentation of the Preliminary Proposals Closing Sessions Room 109
12.30 13.30		LUNCH				
13.30 17.00	Check-in Point Hotel	Invited Keynote Speakers Room 127	Presentation of Participants Room 109	Preparation for Proposal Networking Session Room 109	Presentation of the Preliminary Proposals Room 109	Site Seeing and Cultural Visits
19.00 21.00		Ice Breaking Point Hotel			Dinner Feriye Palace	

Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 Istanbul Technical University, Taskısla

Programme

DAY 1	December 4th , 2017 MONDAY
8:45am–9:00am	Arrival and Registration (Tea/Coffee will be served)
9:00am–9.45am	Welcome and Opening Speeches Prof. Dr. Murat GÜL, Dean of ITU Faculty of Architecture Prof. Dr. Hayriye EŞBAH TUNÇAY, Director of UEPRC Round table introduction participants & coordinators/mentors
9:45am–10:45am	Keynote Speech: Prof.Dr. Beril Tuğrul " Energy Trilemma and Effects on Micro Scale to Urban"
10:45-11.00am	Coffee Break
11:00–12:00am	Workshop Coordinators Presentations Prof. Shuli Liu & Dr. Kerem Y.Arslanlı
12:00am–1:30pm	Lunch Break
1:30pm–3:00pm	Invited Keynote Speakers Dr. Erdal Aydın , Sabancı University Assist. Prof. Dr. Erkan Yönder , Özyeğin University
3:00pm–3:30pm	Tea/Coffee Break
3:30pm–5:00pm	Funding Opportunities in Built Environment- Mentors Roundtable Thematic roundtable discussions by the workshop mentors. Dr. Ashish Shukla Dr. Anil Kashyap Assoc. Prof. Dr. Begüm Sertyeşilışık Dr. Ulaş Akın Researchers participate in discussion sessions on their tables (5 or 6 per table), facilitated by the co-ordinators and the mentors. Each group presents its thoughts / views to the other groups.
7:30-9.30 pm	Ice Breaking Event Point Hotel

**Recent Advances in Energy Conservation Techniques for Buildings Workshop:
From Micro Scale to Urban Level**

4 - 8 December, 2017 Istanbul Technical University, Taskısla

DAY 2	December 5th , 2017 TUESDAY
8:45am–9:00am	Arrival (Tea/Coffee will be served)
9:00am–10:30am	<p>Presentation of Participants</p> <p>Researchers’ presentations on their research specialization: 10 minutes for each presenter plus 5 minutes question time (15 minutes x 6 presenters)</p> <p>Chair: Dr Kerem Yavuz Arslanli</p>
10:30am–11:00am	Tea/Coffee Break
11:00am–12:30am	<p>Presentation of Participants</p> <p>Researchers’ presentations on their research specialization: 10 minutes for each presenter plus 5 minutes question time (15 minutes x 6 presenters)</p> <p>Chair: Shuli Liu</p>
12:30am–1:30pm	Lunch Break
1:30pm–3:00pm	<p>Presentation of Participants</p> <p>Researchers’ presentations on their research specialization: 10 minutes for each presenter plus 5 minutes question time (15 minutes x 6 presenters)</p> <p>Chair: Ashish Shukla</p>
3:00pm–3:30pm	Tea/Coffee Break Summary and discussion of day 3 activities.
3:30pm–5:00pm	<p>Presentation of Participants</p> <p>Researchers’ presentations on their research specialization: 10 minutes for each presenter plus 5 minutes question time (15 minutes x 6 presenters)</p> <p>Chair: Anil Kashyap</p>

**Recent Advances in Energy Conservation Techniques for Buildings Workshop:
From Micro Scale to Urban Level**

4 - 8 December, 2017 Istanbul Technical University, Taskısla

DAY 3	December 6th , 2017 WEDNESDAY
8:45am–9:00am	Arrival (Tea/Coffee will be served)
9:00am–10:30am	<p>Chair: Prof. Shuli Liu Current opportunities an overview: Andy West (CU)</p> <p>Brokerage Workshops for EU/EC Research Programmes (H20202) Based around recent funding calls, researchers are divided into five groups of 6-7 (ensuring mix of researchers from the UK and Turkey) to discuss the relevant themes. Each group is allocated 1 or 2 of the co-ordinators or mentors as facilitators. Possible themes topics will emerge from the EU/EC calls, but may for example include:</p> <ul style="list-style-type: none"> ▪ Sustainable Built Environment and Low Carbon Buildings ▪ Barriers for Low Carbon Buildings ▪ Low Carbon Buildings and communities ▪ Integrating sustainable energy technologies in buildings ▪ Debate on the drivers of and barriers for renewable energy resources
10:30am–10:45am	Tea/Coffee Break
10:45am–12:30am	<p>Presentations for Further Co-publication Chair: Dr. Ashish Shukla (CU) and Assoc. Prof. Dr. Begüm Sertyeşilışık Delegate present about opportunities for joint publications. Group discussions around individual publications.</p>
12:30pm–1:30pm	Lunch Break
1:30pm–2:45pm	<p>Preparation for Proposal Chair: Dr. Andy West Participants, mentors and coordinators focus on preliminary research proposal.</p>
2:45pm–3:00pm	Tea/Coffee Break
3:00pm–4:15pm	<p>Preparation for Proposal Chair Dr. Ulas Akın and Dr. Anil Kashyap Participants, mentors and coordinators focus on preliminary research proposal.</p>
4:15pm–5:00pm	<p>Networking Session Chair: Prof. Shuli liu Participant researchers will interact and explore opportunities for collaboration.</p>
5:00pm–5:15pm	<p>Summary and Discussion Chair: Dr. Kerem Y.Arslanlı Participants summarize and discuss the Day 4 activities.</p>

Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 Istanbul Technical University, Taskısla

DAY 4	December 7th , 2017 THURSDAY
8:45am–09:00am	Meeting (ITU Faculty of Architecture and transfer)
9:00am–11:00am	Facilitated by Dr. Ulas Akin Technical Excursion – Local Government Research Centers IMP (Metropolitan Planning & Urban Design Center) and LTTM (LIDAR Technology Center) (Research centers of Istanbul Metropolitan Municipality’s technical consultancy company BIMTAS Inc.) Briefing about metropolitan planning and regeneration projects, advanced technology applications with LIDAR (3d city models, energy and infrastructure applications.
11:00am–12:00am	Networking Meeting Chair: Dr. Anil Kashyap After the briefing session networking meeting with IMP and LTTM of BIMTAS Inc. about further research collaboration.
12:00am–13:00am	Lunch Break
13:00am–13:30pm	Transfer to Workshop Venue
12:30pm–1:30pm	Tea/Coffee Break
1:30pm–3:00pm	Presentation of the Preliminary Proposals Chair: Dr. Kerem Y.Arslanlı Sessions facilitated by ITU and CU (10 min. for each preliminary proposal)
3:00pm–3:30pm	Tea/Coffee Break
3:30pm–5:00pm	Presentation of the Preliminary Proposals Chair: Prof. Shuli Liu Sessions facilitated by ITU and CU (10 min. for each preliminary proposal)
7:00-11:00 pm	Dinner: Feriye Palace

**Recent Advances in Energy Conservation Techniques for Buildings Workshop:
From Micro Scale to Urban Level****4 - 8 December, 2017 Istanbul Technical University, Taskısla**

DAY 5	December 8th , 2017 FRIDAY
8:45am–9:00am	Arrival (Tea/Coffee will be served)
9:00am–10:00am	Chair: Dr. Ashish Shukla Presentation of the Preliminary Proposals Sessions facilitated by ITU and CU (10 min. for each preliminary proposal))
10:00am–11:00am	Chair: Assoc. Prof Dr. Begüm Sertyeşilşik Presentation of the Preliminary Proposals Sessions facilitated by ITU and CU (10 min. for each preliminary proposal))
11:00am–11:15am	Tea/Coffee Break
12:00am–12:30pm	Vote of thanks Dr. Kerem Y.Arslanlı - Prof. Shuli Liu Closing speeches by the co-ordinators and mentors. Evaluation of the workshop and encouragement to participate in future collaborations.
12:30pm–1:30pm	Lunch Break
1:30pm–5:30pm	Site Seeing and Cultural Visits Possible routes and events (TBC) - Boat Tour (The Bosphorus: European and Asian urban development at a glance) - Commuting Asia (Tube tunnel experience and visit to Asian waterfronts) - The Sapphire Tower (The highest point of the city with roof terrace, provides a 360 degree perspective on entire metropolitan area)

Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 İstanbul Technical University, Taskısla

Social Programme

ICE BREAKING EVENT

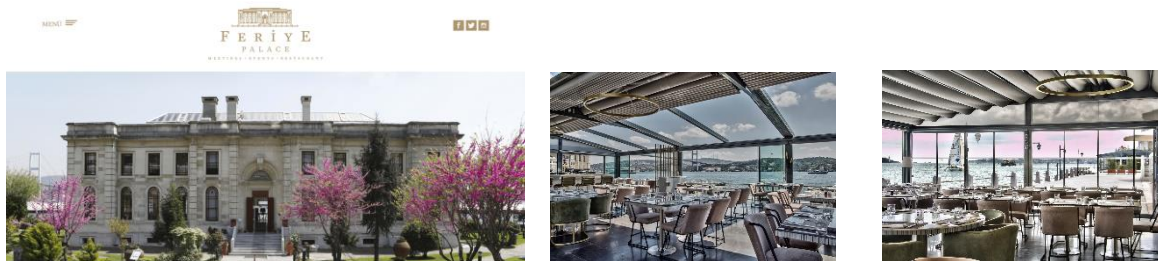
Monday , December 04, 2016, starting 19:30

Location: Point Hotel, Topçu Caddesi No.2 Taksim - İstanbul - TURKEY

DINNER

Thursday, December 07, 2017, 19:00 – 23:00

Location: Feriye Palace, Çırağan Caddesi No:44 34347 Ortaköy/İstanbul



Hotel Information

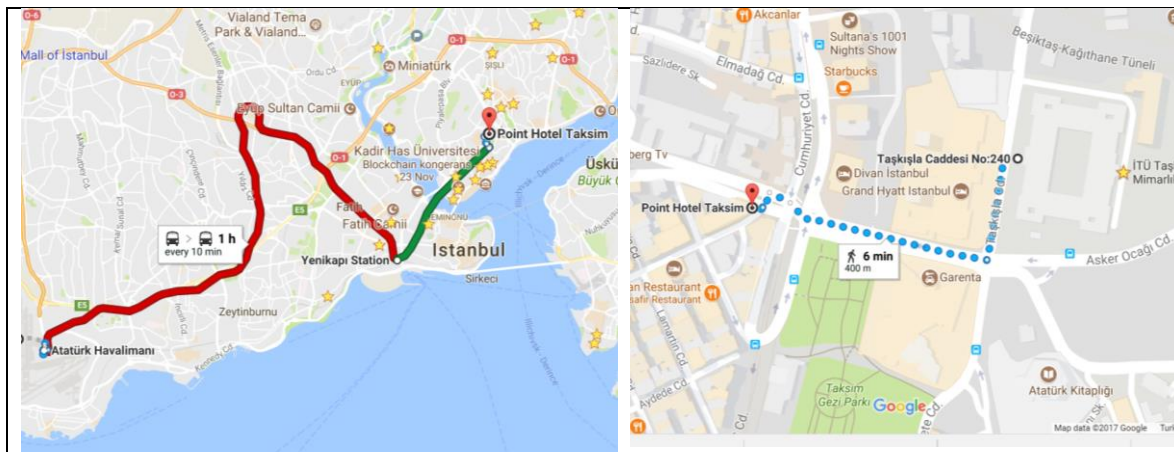
Point Hotel Taksim

Address: Topçu Caddesi No.2 Taksim - İstanbul - TURKEY

Phone: +90 212 313 50 00

E-mail: info@pointhotel.com

Arrival to the Point Hotel, You can take Havataş buses from the Atatürk Airport and the Sabiha Gökçen International Airport to Taksim Square. Another option from Ataturk Airport is to have Metro to Yenikapı Station and transfer to Taksim Green Line. From the Hotel to Our University Building Taskısla takes 6 min walking distance.



Recent Advances in Energy Conservation Techniques for Buildings Workshop: From Micro Scale to Urban Level

4 - 8 December, 2017 Istanbul Technical University, Taskısla

General Information about Istanbul

Visa and e-Visa

An e-Visa is an official document permitting entry into and travel within Turkey. The e-Visa is an alternative to visas issued at Turkish missions and at the ports of entry. Applicants obtain their visas electronically after entering required information and making payments by a credit or debit card (Mastercard or Visa).

The link to download your e-Visa is given on the final step where you will be informed that your application has been completed successfully. In addition, the same link to download your e-Visa will be emailed to you. Passport control officers at ports of entry can verify your e-Visa on their system. However, you are advised to keep your e-Visa with you either as a soft copy (tablet PC, smart phone, etc.) or as a hard copy in case of any failure on their system. <https://www.evisa.gov.tr/en/>

Banking & Currency

In Turkey the currency is the Turkish Lira (TL). Foreign currencies can be exchanged at the airport as well as at the private exchange offices throughout the city which are open from 8:30 to 20:00 hrs. Local banks, where Traveler's cheques and Eurocheques can be cashed, serve between 8:30 and 17:00 hrs. All major credit cards (such as Visa, MasterCard) are accepted in most of the Turkish restaurants, shops etc.

Credit Cards

Most major credit cards are accepted in hotels, restaurants and stores but visitors are always advised to check with the vendor before a purchase is made. Cash machines with 24-hour access are available in many convenient locations.

Electricity

The electric current is 220V AC with a frequency of 50 Hertz. European Standard Type C plugs with two round pins are used.

Insurance

The workshop not include the insurance of participants against personal accidents, sickness, cancellations by any party, theft, loss or damage to personal possessions. Participants are advised to take out adequate personal insurance to cover travel, accommodation, cancellation and personal effects.

Time Zones

Turkey is three hours ahead of Greenwich Mean Time and seven hours ahead of Eastern Standart Time.

Tipping

Tax and service charges are included in the cost of all goods and services. Although it is not mandatory, a small tip is expected for good service. As a guideline, add about 10 % to the total bill. Normally you are requested to leave a cash tip when paying by credit card.

Transportation in Istanbul

Transportation in Istanbul is provided via bus, ferry, taxi, minibus, subway, tram, light railway.
Bus: Public and private buses are very popular. Those buses operate frequently to different destinations in the city. You can read the name of the place you would like to go, on the sign on the side window in the front. Foreign currency is NOT accepted. You can purchase the tickets from the ticket offices next to the stations. Sometimes you can find tickets in little corner convenience shops. There are different types of tickets such as Akbil, Istanbul-Kart in the smart-ticket offices in return for a certain amount. For the long distance you may need to use the double-deckers buses with double tickets.

Ferry: The ferries work between European stations (Eminonu, Besiktas, Karakoy) and Asian Side (Kadikoy, Bostanci, Uskudar). If you like to see the Asian Side, you can simply take the ferry from Besiktas to Kadikoy every 30 minutes, 15 past and 15 to. For further info, you can ask for a brochure at the ferry stations.

Minibus (Dolmus): Minibuses are small buses which do not have a specific time table. They begin operating at 06:00 am in the morning and finish about 01:00 am You pay cash to the driver and the fee changes depending on the line.

Tram: Trams are new and very convenient in the touristic areas. There are ticket offices at the tram stations.

Subway: The "Istanbul Metro" is very convenient if you want to see the downtown and commercial centers in the city. You can purchase the tickets from the ticket offices next to the stations. There is metro station in the Ataturk Airport which takes you to the city.

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4 - 8 December, 2017 Istanbul Technical University, Taskısla

Participant List

Workshop Coordinators

Dr. Kerem Yavuz Arslanlı	Istanbul Technical University	arslanli@itu.edu.tr
Prof. Shuli Liu	Coventry University	aa6328@coventry.ac.uk

Workshop Mentors

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**Recent Advances in Energy Conservation Techniques for Buildings Workshop:
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4 - 8 December, 2017 Istanbul Technical University, Taskısla

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Dr. Ayşe Buket ÖNEM

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