







## **KERPIC'05 - Scientific Program**

## July 6' 2005 Wednesday

08.30 – 09.15 Registration at Süleyman Demirel Cultural Centre, ITU Campus.

09.15 - 10.00 Opening Ceremony

Speakers:

Faruk Karadoğan, Rector of Istanbul Technical University

Hugo Houben, President of CRATerre

Bilge Işık, Chair of Conference

10.00 -11.30 Session 1: SEISMIC

Moderator: Hasan Boduroğlu, Istanbul Technical University, Turkey

1147 Marcial BLONDET, Julio Vargas, Nicola Tarque, Catholic University of Peru, Peru

Building codes for earthen buildings in seismic areas: the Peruvian experience

1250 Göknil GÜRBÜZ, Gülser Çelebi, Gen. Directorate of The Bank of Provinces Dep. of Construction Affairs, Turkey

Consideration of earth construction techniques in the context of earthquake resistance

1310 Daniel TORREALVA, José Acero , Pontificia University of Peru.

Reinforcing Adobe Buildings with Exterior Compatible Mesh

1451 Serra Zerrin Korkmaz, Nazım Kocu, Ahmet Turer, Hasan Hüsnü KORKMAZ,

Selcuk University, Konya, Turkey

Earthquake Damage Characteristics of Earthen-Adobe Houses

Discussion

11.30 - 11.45 Coffee Break

11.45 -13.00 Session 2: HERITAGE

Moderator: Hugo Houben, CRATerre, School of Architecture, Grenoble, France

Keynote Speaker: Cengiz BEKTAŞ, Architect, Turkey

Using adobe in contemporary construction

2104 Zeynep ERES, Istanbul Technical University, Turkey

Mud - Brick Domed construction tradition in the Suruc Plain

2218 Hideo IZUMIDA, Toyohashi University of Technology, Japan

A Study on weight balance of Japanese timber framed house with Clay-wall, Clay bedded tile roof

2329 Giovanni Fontana ANTONELLI, Pietro M. Apollonj Ghetti, Mauro Bertagnin, UNESCO Consultant, Italy

TIMBUKTU From a world heritage site to a living city: Conservation practices and rehabilitation programs for the preservation of the earthen built heritage

2457 Özlem ATALAN, Maltepe University, Turkey

Traditional Sığacık Houses

Discussion

13.00 - 14.00 Lunch at Süleyman Demirel Cultural Centre Restaurant.









14.00 - 15.30 Session 3: MATERIALS & TECHNOLOGY (1)

Moderator: Gregory Moor, University of Technology, Sydney-Australia

Keynote Speaker: Gregory Moor

3101 David Gelard, Laetitia Fontaine, Sandrine Maximilien, Christian Olagnon, Jean-Paul Laurent, Hugo Houben, Henri Van DAMM, Ecole Supérieure de Physique et Chimie Industrielles (ESPCI), France

Water and the cohesion mechanisms of earthen materials: Towards optimum water content for earthquake resistance

3219 Horst SCHROEDER, Thomas Schnellert, Thomas Heller, Thomas Sowoidnich, Bauhaus University, Weimar, Germany

Moisture transfer and change in strength during the construction of rammed earth walls

3326 Georgia BEI, Aristotle University of Thessaloniki, Greece

Structural elements of earth masonry: Physical and mechanical properties of earth bricks and mortars

3433 Abdulkabil TULAGANOV, H.H. Kamilov, S.S.Kasimova, B.A. Tulaganov, *Tashkent Architectural - Building Institute, Republic of Uzbekistan* 

Housing Construction with use of Clay Materials

Discussion

15.30 - 15.45 Coffee Break

## 15.45 - 17.00 Session 4: MATERIALS & TECHNOLOGY (2)

Moderator: Horst Schroeder DVL, Bauhaus-University Weimar, Germany

### 4139 Dicle AYDIN, Kerim Çınar, Selçuk University, Konya, Turkey

Using earth and Flora as a building material in Konya plain rural settlements-Adobe & Grassy Earth

4245 Jan RUZICKA, CTU Prague, Czech Republic

Influence of way of stabilization of unburned bricks on mechanical properties

4352 Ruhi KAFESÇIOĞLU, Bilge Işık, Istanbul Technical University, Turkey

Relevance of Earth Construction for Contemporary World and Alker -Gypsum Stabilized Earth **4459 Zerrin YILMAZ**, Gülten Manioğlu, *Istanbul Technical University, Turkey* 

Evaluation of Thermal Performance of Gypsum Stabilized Adobe (Alker) for a School Building in ISTANBUL

Discussion

17.00 - 17.15 Coffee Break

#### 17.15 - 18.45 Session 5: CODES & ECOLOGY

Moderator: Marcial Blondet, Catholic University of Peru

### 5131 Maddalena ACHENZA, University of Cagliari, Italy

National law for earthen architecture in Italy. Difficulties and expectances.

5238 Belgin TERIM, İzmir Institute of Technology, IYTE, Turkey

The Future of Earthen Materials in Turkey in the EU (European Union) Adaptation Period **5358 S. Mujdem VURAL**, Ayse Balanlı, Gökçe Tuna Taygun, *Yildiz Technical University*, *Turkey* 

Health effects of earthen building products

#### 5465 And AKMAN, Germany

Building biology and one bioclimatic - diagnostic examination

5570 Philip KULLMANN, Hiss Reet EK, Germany

Reed and clay – modern construction materials with a traditional relationship **Discussion** 

18.45 - 19.00 free time

19.00 –23.30 Transfer to Kuruçesme, Bebek & Cruise Diner at Bosphorus









# July 7' 2005 Thursday

09.00 - 09.15 Registration

09.15 -10.45 Session 6: QUALITY & SUSTAINABILITY (1)

Moderator: Hossein Ayatollahi, School of Architecture, Yazd University, Iran

6124 Toshimasa KONISHI, Lingzhi Liu. *Utsunomiya University. Japan*A Study on the design flexibility of Yao Dong underground welling in China
6237 Parisa SHAHMOHAMADI. *Qazvin Islamic Azad University, Iran*Mud Brick as a sustainable material in traditional architecture of IRAN
6342 Farzaneh SOFLAEE, Mehdi Shokuhian, *Islamshahr Azad University, Iran* 

Environmental analyzes of courtyard in the sustainable architecture of hot-aired region **6443 K.S. JAGADISH,** *Indian Institute of Science, India* 

Experiments in earth construction in India

6544 Quentin WILSON, Kirk Higbee, Northern New Mexico College, USA

New Mexico USA: Where adobe is the premium building material

Discussion

10.45 - 11.00 Coffee Break

## 11.00 - 12.15 Session 7: QUALITY & SUSTAINABILITY (2)

Moderator: Bilge Isik, Istanbul Technical University, Turkey

## 7148 Faraz SOLEYMANI, Azad University, Iran

Bricks as Achilles' heel of Iran's contemporary architecture

7261 Zafer Akdemir, Dilek Ekşi AKBULUT, Sevgül Limoncu, Müjdem Vural, Gökçe Tuna Taygun, Yildiz Technical University, Turkey

The effects of adobe material on architectural forms of Anatolian vernacular houses, West Black Sea Region

7363 Nahid MOHAJERI, Islamic Azad University, Tehran South Branch, Iran Environmental Impacts and compatible urban design (Case Study Of Bam Citadel)

7468 S. M. Hossein AYATOLLAHI, Yazd University, Yazd, Iran.

Preserving the traditional "Wind Catchers" to preserve the urban identity (Yazd – Iran) **Discussion** 

12.15 – 13.15 Lunch at Süleyman Demirel Cultural Centre Restaurant.

### 13.15 – 14.45 Session 8: CONSERVATION & RENOVATION

Moderator: Abdolrasool Vatandoust, Director, Research Center for Conservation of Cultural Relics (RCCCR), Tehran, Iran

Keynote Speaker: Abdolrasool VATANDOUST

**8111 Syhrul Nizam KAMARUZZAMAN**, R. E. Edwards, *University of Manchester, England* Current Situation of Heritage Buildings In Malaysia

8212 Ivana ŽABIČKOVÁ, Brno University of Technology, Czech Republic

Earthen Architecture in Czech Republic 2005

8346 Shohre SHAHNOORI, Technical University of Delft, Netherlands

Reconstruction and restoration of the desert city of Bam in respect to seismic aspects

**8462** Zafer Akdemir, **Sevgül LİMONCU**, Dilek Ekşi Akbulut, *Yildiz Technical University, Turkey* Application of adobe materials according to regional differences in Anatolian Settlement

Discussion

14.45 - 15.00 Coffee Break









## 15.00 - 17.00 Workshop\*

15:00 – 15:15	Meeting at Alker Pilot Building Istanbul Technical University, Ayazağa Campus
15:15 – 15:30	Opening Remarks, Objective of the Workshop Documents delivery Prof. Dr. Hasan BODUROGLU, ITU Asistant Prof. Dr. Pinar OZDEMİR, ITU Earthquake response of the building
15:30 – 15:45	Alker stabilization Technology Assoc. Prof. Dr. Bilge ISIK, Project Coordinator, ITU
15:45 – 16:30	<b>Production of Alker</b> Omer KURT, <i>Civil engineer, NUROL Construction</i> Hakan ALTAN, <i>Civil engineer, OMSA Construction</i>
16:30 – 16:45	Refreshment
16:45 – 17:00	Outlining and Concluding Remarks
17:00 – 17:30	Questions and Contribution
17.30 – 18.00	Transfer to venue
18.00 – 18.30	Transfer to Sultanahmet Square, the old city part of Istanbul
18.30 – 20.00	Free time at Sultanahmet Square
20.00 – 24.00	Diner at Blue House Restaurant

<sup>\*</sup>Workshop is open to public.

<u>The official language of the conference is English. Simultaneous translation will be available from English to Turkish.</u>















