



SHÁTIS'17

4TH INTERNATIONAL CONFERENCE ON
**STRUCTURAL HEALTH ASSESSMENT
OF TIMBER STRUCTURES**

FINAL PROGRAM

September 20 - 22, 2017 Istanbul, Turkey

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TUESDAY
SEPTEMBER 19, 2017
09:00 – 17:50

Seminar on Timber Structures

Yıldız Technical University, Beşiktaş Campus Auditorium

8.30-09.30	Registration	
9.30-11.20	Inspection and Diagnosis of the failures (problems) in Timber Structures - <i>Eleftheria Tsakanika</i>	
11.30-13.20	Structural analysis and member verification (including software use, simple representation of seismic loads, ULS and SLS from software results) - <i>Roberto Tomasi</i>	
13.20-14.30	Lunch in YTU Çatı Restaurant	
14.30-16.20	Connection assessment and design (including traditional ones) - <i>Elisa Poletti</i>	SHATIS'17 Registration
16.30- 18.20	Repair and strengthening techniques - <i>Jorge Branco</i>	
18.30-19.00	Transfer to the reception area Bus to Çadır Köşk will start in front of the YTU auditorium	
19.00-22.00	Welcome Reception in Çadır Köşk, Yıldız Park	

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**WEDNESDAY
SEPTEMBER 20, 2017**

Yıldız Technical University, Beşiktaş Campus Auditorium

08.30-09.30	Registration
09.30-10.00	Opening Session
10.0 10.40	Keynote Lecture: Structural Development of Earthquake-Resistant Timber Buildings in the Light of Archaeological Findings in Anatolia – <i>Hülya Dışkaya</i>
10:40 – 11:10	Coffee Break
11.10-12.50	Session 1.1–Timber framed structures - Cultural Identity and Resilience Chairperson: Deniz Mazlum
11.10-11.50	Keynote Lecture: Timber 2.0: Resilience and Vulnerability of Wood Construction in Earthquakes and Fires - <i>Randolph Langenbach</i>
11.50-12.10	Insight into the Traditional Timber Frame Walls: Herculeaneum Evidence versus Braced Frame Structures in Portugal and in Italy - <i>Stefania Stellacci</i>
12.10-12.30	Historic Timber Frame Structures: A Comparison of Different Constructive Systems and Their Resistance to Seismic Actions - <i>Elisa Poletti, Andreea Dutu, Nicola Ruggieri, Florent Vieux-Champagne</i>
12.30-12.50	Seismic analysis of timber frames and various infills in Romania - <i>Eliza Bulimar, Andreea Dutu, Daniel Ioan Dima, Razvan Ietan</i>
12.50-13.10	Construction Systems of Timber Structures in China and Italy: A First Comparison of Conservation Approaches - <i>Shiruo Wang, Maria Rosa Valluzzi, Claudio Modena</i>
13.10-13.30	An Eighteenth Century Postal Palace of August III in Kutno – Its Original Architecture and Half-Timbered Frame Construction - <i>Ulrich Schaaf</i>
13.30-13.50	Timber Structures in Georgian Cultural Heritage (For Case of Southern Georgia, Region Samtskhe-Javakheti) - <i>A. Tamar Khoshtaria, B. Nino Chachava, C. Malkhaz Lekveishvili</i>
13.50-14.50	Lunch in YTU Çatı Restaurant
14.50-15.30	Session 1.2 – Historic Timber Structures Chairperson : Ünal Akkemik
14.50-15.30	Keynote Lecture: Yenikapı Byzantine Shipwrecks, Istanbul, Turkey- <i>Ufuk Kocabaş</i>
15.45- 18.00	Visit Laboratory of “Sunken Ships of Byzantine” Bus will depart at 15.45 from YTU Auditorium

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**THURSDAY
SEPTEMBER 21, 2017**

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09.00–11.00	Session 2.1 – Historic Timber Structures Chairperson : Zeynep Ahunbay
09.00-09.40	Keynote Lecture: Persian Wooden Structures: Challenges in Repair, Strengthening and Restoration – <i>Mehrdad Hejazi</i>
09.40-10.00	The Expansion of Mansard Roofs Accross Europe in 18th Century - <i>Krzysztof Atykow, Magdalena Napiórkowska-Atykow</i>
10.00-10.20	The timber roof of the Aula Magna of the University of Pavia - <i>Marco Morandotti, Emanuele Zamperini, Valentina Cinieri, Simone Lucenti</i>
10.20-10.40	The Typology of the Historical Timber Bridges of Turkey - <i>Süheyla Yılmaz, Halide Sert, N. Apaydın</i>
10.40-11.00	Structural and Ornamental Use of Timber in Hagia Triada Church, Ayvalık - <i>Gökhan Okumuş, Nurşah Cabbar, Merve Öztürk, Azime Aladağ, Cansu Ekici, Merve Gökçü, Miray Kısaer, Fuat Gökçe, Nimet Özgönül, Özgün Özçakır</i>
11.00-11.30	Coffee Break
11.30-13.30	Session 2.2 – Traditional Practices Chairperson: Mehrdad Hejazi
11.30-11.50	The Ottoman House / Evaluation of Structure and Form - <i>Ibrahim Canbulat</i>
11.50-12.10	Sacred Architecture in Montenegro - Case Study: Dobrilovina Monastery - Church of Saint George (1609) and Kučanska Mosque (1797) - <i>Igbala Šabović Kerović, Biljana Šćepanović</i>
12.10-12.30	Rapid In-site Survey and Assessment Method for Structural Members in Traditional Chinese Timber Structure - <i>Chao Gao, Juan Wang, Y. Qing Shan</i>
12.30-12.50	Reconstruction of a Wooden "Polish Manor" with the Use of Solid Wood Layered Floors - <i>Anna Rozanska, Anna Policinska - Serwa, Wojciech Korycinski, Piotr Beer</i>
12.50-13.10	A Complex Assessment of Historic Roof Structures - <i>Alexandra-Iasmina Keller, Marius Mosoarca</i>
13.10-13.30	Surface Coatings of Exposed Timber Elements in the Second Half of the Nineteenth Century in Ottoman Istanbul - <i>Damla Acar</i>
13.30-14.30	Lunch in YTU Çatı Restaurant

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14.30-16.30	Session 2.3 – Experimental Methods and Tests Chairperson: <i>Marius Mosoarca</i>
14.30-15.10	Keynote Lecture: Assessment of Timber Structures. Looking to the past to plan the future - <i>Jose Saporiti Machado</i>
15.10-15.30	Estimation of Timber Members' Properties Combining Direct and Indirect Information: Two Applications - <i>Dulce Henriques, Ana Cândido</i>
15.30-15.50	Monitoring Method Analysis for Effective Measure of Wooden Architectural Heritage - <i>Ha Na Lee, A. Dai Whan, K. Hwan Chol, Y. Hyun Woo, K. Dong Yeol</i>
15.50-16.10	Characteristics and Evaluation of Termite Damage to Historical Wooden Buildings in South Korea - <i>Kim Si Hyun</i>
16.10-16.30	Damage Evolution in Wood under Tensile Loading Monitored by Acoustic Emission - <i>Imen Yahyaoui, Marianne Perrin, Xiaojing Gong, Hang Li</i>
16.30-17.00	Coffee Break
17.00-18.20	Session 2.4 – Experimental Methods and Tests Chairperson : <i>Stephen Kelley</i>
17.00-17.20	Assessment of the Jupiter Joint's In-plane and Out-of-plane Mechanical Behaviour under Combined Actions - <i>Elena Perris, Martin Kessel, Michele Paradiso, Mike Seiders</i>
17.20-17.40	Indirect Sonic Stress Waves Method to Predict the Cross-Sectional Variation of Bending Modulus of Elasticity of a Timber Member - <i>Maria Jesus Morales Conde, Jose Saporiti Machado</i>
17.40-18.00	Moisture Content Monitoring in Glulam Structures by Embedded Sensors - <i>Hang Li, Marianne Perrin, Florent Erma, Xavier Jacob, Vincent Gaybait</i>
18.00-18.20	The Analysis of the Long-Term Structural Health Monitoring of a Typical Ancient Tibetan Building - <i>Tin Guo, Na Yang,</i>
18.20-18.40	Strengthening of Traditional Buildings with Slim Panels of Cross-Laminated Timber (CLT) - <i>Anders Bruno, Francesco Boggier, Anders Steamship Nygård, Roberto Tomasi</i>
18.40-19.00	Numerical Study on the In-plane Behaviour of Existing Timber Diaphragms Strengthened with Diagonal Sheathing - <i>Ermes Rizzi, Mirko Capovilla, Ivan Giongo, Maurizio Piazza</i>
19.00-19.30	Walk to Beşiktaş Port for Boat Tekne 14
19.30-23.00	Gala Dinner- on Boat Tekne 14

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FRIDAY

SEPTEMBER 22, 2017

Yıldız Technical University, Beşiktaş Campus Auditorium

09.00–11.00	Session 3.1 – Safety Assessment of Timber Structures Chairperson: <i>Meltem Vatan Kaptan</i>
09.00-09.40	Keynote Lecture: Safety Assessment and Strengthening of Ica Cathedral in Peru: The Hidden Timber Skeleton - <i>Paulo B. Lourenço, Maria Pia Ciocci, and Satyadhrik Sharma</i>
09.40-10.00	Experimental and Numerical Investigations on Timber-Concrete Connections with Inclined Screws - <i>Beatrice Berardinucci, Simona Di Nino, Amedeo Gregori, Massimo Fragiaco, Franco Moar</i>
10.00-10.20	Assessment of the Structural Performance of a Norwegian Historic Timber Structure: Værnes Church - <i>Filippo Frontini, Jan Siem, Dag Nilsen</i>
10.20-10.40	Problems of Durability of Timber Structures Under Use Class 2 - <i>Alfonso Lozano, David Lorenzo, M. Alonso, Josu Benito</i>
10.40-11.00	Load-Bearing Capacity of Historic Timber with Focus on the Wood Corrosion - <i>Wolfgang Rug, Gunter Linke</i>
11.00-11:30	Coffee Break
11.30-13.30	Session 3.2 – Structural Evaluation of Timber Structures Chairperson : <i>Gülay Altay</i>
11.30-11.50	Effect of Queti-Inclination on Mechanical Properties of Typical Tibetan Timber Beam-Column Joint - <i>Qin Shujie, Yang Na</i>
11.50-12.10	Predicting Mechanical Properties of Timber Elements by Regression Analysis Considering Multicollinearity of Non-Destructive Test Results - <i>Hélder S. Sousa, Jorge M. Branco, José S. Machado and Paulo B. Lourenço</i>
12.10-12.30	Numerical Modelling of the Cyclic Behaviour of Timber-Framed Structures using OpenSees - <i>Relja Lukic, Elisa Poletti, Graça Vasconcelos, Hugo Rodrigues</i>
12.30-12.50	Structural Assessment of Timber Hanging Truss in Salt Magazines in Pag - <i>Juraj Pojatina, David Anđić, Hrvoje Turkulin, Marin Hasan</i>
12.50-13.10	Residual Life Prediction of Ancient Timber Components Based on Cumulative Damage Model: A Literature Review - <i>Wang Zhongcheng, Yang Na</i>
13.10-13.30	Determination of Bearing Strength of Wood Peg Connection - <i>Gi Young Jeong, Jin Hyuk Kong</i>

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13.30-14.30	Lunch
14.30-16.30	Session 3.3 – Intervention, Restoration and Prevention Chairperson: Paulo Lourenço
14.:30-15.00	Keynote Lecture: In Progress Restoration of the Golden Palace Monastery in Mandalay, Myanmar - <i>Stephen J. Kelley</i>
15.00-15.30	Keynote Lecture: “Damage and Restoration of Heritage Structures of Timber, Great East Japan Earthquake of 2011 and Kumamoto Earthquake of 2016” <i>Toshikazu Hanazato</i>
15.30-15.50	Restoration Principles, Design and Practice – a Case Study from Safranbolu, the UNESCO World Heritage City - <i>Ibrahim Canbulat</i>
15.50-16.10	Recent Developments in Remedial and Non-Pressure Wood Protection Systems: Boron-based Compounds - <i>S. Nami Kartal, Evren Terzi</i>
16.10-16.30	The Venetian Floor of the “Bailo Building” in Chalcis, Greece; Deciphering Its Lost Construction Details - <i>Yorgos Kourmadas, Eleftheria Tsakanika, Panagiota Taxiarchi</i>
16.30-16.50	Single Step Joint Design and Reinforcement with Self-Tapping Screws - <i>Maxime Verbist, Jorge Branco, Elisa Poletti, Thierry Descamps, Paulo Lourenço</i>
16.50-17.20	Coffee Break
17.20-18.00	Closing Session

SATURDAY

SEPTEMBER 23, 2017

Meet at Beşiktaş IDO Port at 07.00

Sponsors



TÜBİTAK

TÜRKİYE BİLİMSEL VE TEKNOLOJİK ARAŞTIRMA KURUMU
THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TURKEY



Institutional Supports



TMMOB

Chamber of Architects of Istanbul Turkey



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IASS

International Association for Shell and Spatial Structures



ICOMOS- Turkey

International Council on Monuments and Sites



ICOMOS-ISCARSAH

International Scientific Committee on Analysis and Restoration of Structures of Architectural Heritage



ICOMOS-IWC

International Wood Committee



SEWC

Structural Engineering World Congress