



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 Alykow, Magdalena Napiórkowska-Alykow</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 Perria, Martin Kessel, Michele Paradiso, Mike Sieder</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 Eyma, Xavier Jacob, Vincent Gibiat</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 Bjørnfot, Francesco Boggian, Anders Steinsvik 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

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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
14.30-16.30	Keynote Lecture: In Progress Restoration of the Golden Palace Monastery in Mandalay, Myanmar - <i>Stephen J. Kelley</i>
15.10-15.30	Restoration Principles, Design and Practice – a Case Study from Safranbolu, the UNESCO World Heritage City - <i>Ibrahim Canbulat</i>
15.30-15.50	Recent Developments in Remedial and Non-Pressure Wood Protection Systems: Boron-based Compounds - <i>S. Nami Kartal, Evren Terzi</i>
15.50-16.10	The Venetian Floor of the “Bailo Building” in Chalcis, Greece; Deciphering Its Lost Construction Details - <i>Yorgos Kourmadas, Eleftheria Tsakanika, Panagiota Taxiarchi</i>
16.10-16.30	Single Step Joint Design and Reinforcement with Self-Tapping Screws - <i>Maxime Verbist, Jorge Branco, Elisa Poletti, Thierry Descamps, Paulo Lourenço</i>
16.30-17.00	Coffee Break
17.00-17.30	Closing Session

SATURDAY

SEPTEMBER 23, 2017

Meet at Beşiktaş IDO Port at 07.00