



Second International Conference on Timber Bridges ICTB

Las Vegas, Nevada

September 30 – October 3, 2013

Conference programme

Publication Reference Information [PDF](#)

Plenary Sessions

- **Timber Bridges in the USA: Past, Present, and Future**
Michael Ritter, USDA Forest Products Laboratory
[Oral Presentation](#)
- **Development of Timber Bridges in Brazil: Current Emphasis Areas**
Carlito Calil, Junior, University of Sao Paulo
[Oral Presentation](#)
- **Norwegian Timber Bridges: Current Trends and Future Directions**
Erik Aasheim, Norwegian Institute of Wood Technology
[Oral Presentation](#)

Technical Sessions

Session 1 – Bridge Inspection I

- **Field Performance of US Timber Bridges: A National Study**
Brian Brashaw, James Wacker
[Technical Paper](#) | [Oral Presentation](#)

- **Inspection of Louisiana’s Timber Bridges**
Vijaya Gopu, James Wacker
[Technical Paper](#) | [Oral Presentation](#)
- **Condition Assessment of Iowa Timber Bridges Using Advanced Inspection Tools**
Travis Hosteng, Brent Phares
[Technical Paper](#) | [Oral Presentation](#)
- **Inspection of Timber Bridges in the Pacific West**
Tom Williamson, Lola Coombe, David Strahl
[Technical Paper](#) | [Oral Presentation](#)
- **Inspection of Timber Bridges in the Southern US**
P. David Jones, Joseph Dahlen, Rubin Shmulsky
[Technical Paper](#) | [Oral Presentation](#)

Session 2 – Wood/Concrete Bridges

- **Wood-Concrete Composite Beams Under Low-to-High Cycle Loading**
Jeno Balogh, Massimo Fragiaco, Richard Gutkowski, Rebecca Atadero
[Technical Paper](#) | [Oral Presentation](#)
- **Fatigue Performance of Single Span Wood-Concrete Composite Bridges**
Leander Bathon, Oliver Bletz-Maldorfer
[Technical Paper](#) | [Oral Presentation](#)
- **Influence of Concrete Cracking on Wood-Concrete Composite Bridges**
Frank Schanack, Juan Patricio Reyes, Oscar Ramon Ramos
[Technical Paper](#) | [Oral Presentation](#)
- **The Durability of Wood-Concrete Composite Bridges**
Lauri Salokangas, Arne Jutila
[Technical Paper](#) | [Oral Presentation](#)
- **Development of a Slab-on-Girder Wood-Concrete Composite Highway Bridge**
Andrew Lehan, David Moses
[Technical Paper](#) | [Oral Presentation](#)

Session 3 – Case Studies I

- **Stretching the Limits – Timber Bridge Case Studies Part I**
Paul Gilham
[Technical Paper](#) | [Oral Presentation](#)

- **Rehabilitation and Upgrading of a Heritage Listed Timber Truss Bridge**
Keith Crews
[Technical Paper](#) | [Oral Presentation](#)
- **186 Meter Footbridge in Kalmar, Sweden**
Rune Abrahamsen, Gunnar Veastad
[Technical Paper](#) | [Oral Presentation](#)
- **Challenges of the Superstructure “Alvsbacka Bridge”**
Peter Jacobsson, Frederik Eliasson, Thomas Darholm
[Technical Paper](#) | [Oral Presentation](#)
- **Timber Footbridge of the Bow River in Banff**
Gerald Epp, Adam Gerber, Lucas Epp
[Technical Paper](#) | [Oral Presentation](#)
- **Tohickon Adqueduct Rehabilitation**
William Collins, Habib Dagher, Ed Cesa
[Technical Paper](#) | [Oral Presentation](#)

Session 4 – CLT and Glulam

- **The Applicability of CLT Beams in Bridges**
Lauri Salokangas, Robin Garnier
[Oral Presentation](#)
- **New Timber Bridges: Inventive Design by Bloc-Glueing**
Frank Miebach, Juergen Schaffitzel
[Technical Paper](#) | [Oral Presentation](#)
- **Carney Mill Road Bridge**
Murray Johnson
[Oral Presentation](#)
- **Investigation of Glulam Girder Bridges Constructed Prior to 1970**
J. Scott Groenier, David Strahl, James Wacker
[Technical Paper](#) | [Oral Presentation](#)
- **Overview of the Placer River Timber Bridge Project in Alaska**
Eleanor Oman, Rod Dell’Andrea
[Oral Presentation](#)
- **Rehabilitation of St. Marys Wycliffe Bridge in British Columbia, CA**
Murray Johnson
[Oral Presentation](#)

Session 5 – Covered Bridges I

- **National Historic Covered Bridge Preservation Program**
Sheila Rimal Duwadi
[Technical Paper](#) | [Oral Presentation](#)
- **Simplified Analytical Model for a Queen-Post Covered Timber Bridge**
Fouad Fanous, Terry Wipf, Douglas Rammer
[Technical Paper](#) | [Oral Presentation](#)
- **Live Load Testing of Historic Covered Timber Bridges**
Travis Hosteng, Brent Phares, James Wacker
[Technical Paper](#) | [Oral Presentation](#)
- **McKenzie River (Goodpasture Road) Covered Bridge Rehabilitation**
Gregory Ausland, Tony LaMorticella
[Technical Paper](#) | [Oral Presentation](#)

Session 6 – Bridge Inspection II

- **Opportunities for Timber Bridges in North America**
Marshall Leslie, Jasmine Wang
[Oral Presentation](#)
- **From Damage Maps to Condition Inventories**
Frank Rinn
[Technical Paper](#) | [Oral Presentation](#)
- **In-Depth Timber Bridge Inspection and Load Rating**
J. Scott Groenier, David Strahl
[Technical Paper](#) | [Oral Presentation](#)
- **Evolution of a Smart Timber Bridge Concept**
Travis Hosteng, Brent Phares, James Wacker
[Oral Presentation](#)

Session 7 – Covered Bridges II

- **The Bartonville Covered Bridge Replacement**
Phillip Pierce
[Technical Paper](#) | [Oral Presentation](#)
- **Chambers Covered Railroad Bridge Emergency Salvage, Rehabilitation, and Development of Interpretive Center**
Gregory Ausland, Tony LaMorticella
[Technical Paper](#) | [Oral Presentation](#)

- **Kings Covered Bridge Rehabilitation Somerset County PA**
William Collins, Samer Petro
[Technical Paper](#) | [Oral Presentation](#)
- **Simplified Analytical Model of a Covered Burr-Arch-Truss Timber Bridge**
Fouad Fanous, Terry Wipf, Douglas Rammer
[Technical Paper](#) | [Oral Presentation](#)

Session 8 – Load Testing

- **Vibration Response of Long Cable-Stayed Timber Footbridge: Case Study**
Robert Kliger, Hanna Jansson, Isak Svensson, Tomas Svensson
[Technical Paper](#) | [Oral Presentation](#)
- **Field Load Testing of the First Vehicular Timber Bridge in Korea**
Wonsuk Park, Ji-Woon Yi, Hyun-Moo Koh, Sang-Joon Lee, Chul-Young Park
[Technical Paper](#) | [Oral Presentation](#)
- **Dynamic Response of a Timber Pedestrian Bridge**
Fabio Casciati, Sara Casciati, Lucia Faravelli, Daniele Bortoluzzi
[Technical Paper](#) | [Oral Presentation](#)
- **Stress-Laminated Timber Bridge Decks: Non-Linear Effects in Ultimate and Serviceability Limit States**
Mats Ekevad, Peter Jacobsson, Robert Kliger
[Technical Paper](#) | [Oral Presentation](#)

Session 9 – Case Studies II

- **Case Study of the Longest Single Span Timber Bridge for Highway Loads in Sweden**
Kristoffer Ekholm, Peter Nilsson, Erik Johansson
[Technical Paper](#) | [Oral Presentation](#)
- **Steien Network Arch Bridge**
Johannes Veie, Rune Abrahamsen, Egil Rannekleiv
[Technical Paper](#) | [Oral Presentation](#)
- **A Timber Bridge Across Lake Mjosa in Norway**
Per Meaas, Svein Erik Jakobsen, Trond Arne Stensby, Widar Mikkelsen, Yngve Artun
[Technical Paper](#) | [Oral Presentation](#)
- **100 Kilometers of Timber Bridge Development**
Yngve Aartun, Trond Arne Stensby, Rune Abrahamsen, Widar Mikkelsen
[Oral Presentation](#)

- **Tretten Bridge: Timber and Steel in Harmony**
John Are Harstad-Evjen, Hilde Rannem Isaksen, Bjorn Olav Vik, Per Kristian Ekeberg
[Technical Paper](#) | [Oral Presentation](#)
- **Stretching the Limits: Timber Bridge Case Studies Part II**
Paul Gilham
[Technical Paper](#) | [Oral Presentation](#)

Session 10 – Bridge Durability

- **Contribution to Structural Details on Timber Bridges**
Otto Kleppe, Hauke Kepp, Tormod Dyken
[Technical Paper](#) | [Oral Presentation](#)
- **Two Bridges Built Using Black Locust Wood**
Ryan Woodward, Theodore Zoli
[Technical Paper](#) | [Oral Presentation](#)
- **Glulam Beams & Columns After 5 Years Exposure to Outdoor Climate**
Anna Pousette, Karin Sanderg
[Technical Paper](#) | [Oral Presentation](#)
- **On Development of Network Arch Timber Bridges in Timber**
Kjell Malo, Runa Barli, Idun Hakvag
[Technical Paper](#) | [Oral Presentation](#)
- **Wood Preservative Solutions for Creative and Sustainable Bridge Design and Construction**
Ted LaDoux
[Technical Paper](#) | [Oral Presentation](#)
- **Timber Abutment Piling and Back Wall Rehabilitation & Repair**
Justin Dahlberg, Brent Phares, F. Wayne Klaiber
[Technical Paper](#) | [Oral Presentation](#)

Session 11 – Field Monitoring

- **Assessment & Monitoring of Moisture Content of Timber Bridges**
Bettina Franke, Andreas Mueller, Thomas Tannert, Robert Widman
[Technical Paper](#) | [Oral Presentation](#)
- **Alvsbacka Bridge – A Timber Bridge in Cold Climate**
Niclas Bjorngrim, Alice Wang, Olle Hagman
[Technical Paper](#) | [Oral Presentation](#)

- **Cable-Stayed Timber Footbridge with Two Towers**
Pedro Gutemberg de Alcantara Segundinho, Francisco Antonio Rocco Lahr,
Carlito Calil Junior, Antonio Alves Dias
[Technical Paper](#) | [Oral Presentation](#)
- **Short-term Monitoring of a Cable-Stayed Timber Footbridge**
Erhan Saracoglu, Anders Gustafsson, Per-Anders Fjellstrom
[Technical Paper](#) | [Oral Presentation](#)

Session 12 – Wood Composites

- **Fiberglass Composite Bridges**
Crawford Dewar, Josh Dewar, Ben Dewar
[Technical Paper](#) | [Oral Presentation](#)
- **Case Study: Design of pedestrian timber bridges in an AE Studio**
Mikhail Gershfeld, Judith Sheine
[Technical Paper](#) | [Oral Presentation](#)
- **Combination of Timber, CFRP and GFRP for the Design and Construction of a Bowstring Arch Bridge**
Robert Widman, Rolf Broennimann
[Technical Paper](#) | [Oral Presentation](#)
- **Mile Long Boardwalk Enhances Estuary Restoration**
Paul Gilham
[Technical Paper](#) | [Oral Presentation](#)

Conference Photos

- ICTB Slide Show Summary
[PPT](#) or [PDF](#)