

CHSA is a forum for scholars and professionals to meet and exchange ideas and research. Membership is open to a wide range of construction related disciplines involved in the planning, development, design, construction, operation and preservation of buildings and engineering infrastructure.



CALL FOR
ABSTRACTS

OPEN!
see page 3 . . .

MARYLAND / DC !

CHSA 6th Biennial Meeting - May 24-26, 2018

Join us May 24 - 26, 2018 at the University of Maryland, hosted by the Department of Architecture. Easy to get to and jam-packed with top attractions like the Lincoln Memorial, Air and Space Museum, Vietnam Veterans Memorial, the Smithsonian, and Jefferson Memorial, Washington DC is just a short train ride away from College Park, MD.

The University of Maryland's Solar Decathlon team was just awarded first place (2017) in a competition to design the *House of the Future*, sponsored by the United States Department of Energy.

Come sit on a bench with the statue of Jim Henson (creator of the Muppets) and Kermit the Frog outside the Stamp building on campus.



SEE YOU IN MARYLAND!

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SEI pg 4,5,6

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6th Biennial Planning Committee

Brian Bowen
Jeff Beard
Ben Hays
Benjamin Ibarra Sevilla
Christopher Marston
Tom Leslie (Scientific
Committee Chair)
Tom Vitanza
Richard Etlin
Brian Kelly
James Shepherd
Melanie Feerst

Scientific Committee

Tom Leslie (chair) (Iowa State University)
Ahmed Ali (Texas A&M)
Robert Dermody (Roger Williams University)
Christopher Domin (University of Arizona)
Clifton Fordham (Temple University)
Matthew Hall (Auburn University)
Liane Hancock (Louisiana Tech)
Benjamin Ibarra-Sevilla (University of Texas)
Scott Murray (University of Illinois)
Joseph Siry (Wesleyan)
Tyler Sprague (University of Washington)
Marci Uihlein (University of Illinois)

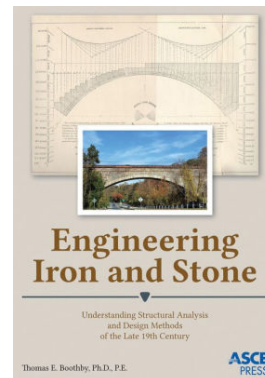


KEYNOTE JUST CONFIRMED!

Carl Lounsbury
Adjunct Associate
Professor of History
College of William and Mary
more info coming...

KEYNOTE CONFIRMED

Thomas E. Boothby
Professor of Architectural Engineering
Pennsylvania State University



*Engineering Iron and Stone: Understanding Structural Analysis
and Design Methods of the Late 19th Century*



**PROGRAM AND RECEPTION
CELEBRATING AGC'S 100TH ANNIVERSARY
JOIN US THE EVENING OF THURSDAY, MAY 24TH
SPONSORED BY THE AGC OF AMERICA
FREE AND OPEN TO THE PUBLIC
MORE INFORMATION COMING SOON**

CALL FOR ABSTRACTS

6th Biennial Meeting of the CHSA

School of Architecture, Planning & Preservation

University of Maryland; College Park, MD

May 24 – 26, 2018

DEADLINE - November 16, 2017



We invite researchers and practitioners from all aspects of the history of construction to submit presentation and paper abstracts on subjects relating to the Americas for the 2018 Biennial Meeting on Construction History, to be held in the city of College Park, MD. The meeting will be hosted by the Construction History Society of America and the School of Architecture, Planning & Preservation at the University of Maryland from May 24-26, 2018 and follows successful meetings of the CHSA held in Seattle, WA (10th Anniversary Members' Meeting 2017), Austin, TX (2016), Minneapolis MN (2014), Cambridge MA (2012), Philadelphia PA (2010), and Atlanta GA (2008).

All presentations must be in English and related to Construction in North, Central and South America.

Abstracts will be compiled in a hard-copy catalogue to be distributed at the meeting. Abstracts for presentation imply that the author(s) intent is to present the subject within a 20-minute slideshow.

ABSTRACT TOPICS MAY INCLUDE:

- History and construction of specific projects
- History of the building trades or specific builders
- Organization of construction work
- Wages and the economics of construction
- The development of building codes and regulations
- Trade unions and guilds
- Military or Army Corps of Engineers
- Structural analysis and the development of structural forms
- Development of construction tools, cranes, scaffolding, etc
- Building techniques in response to their environments
- Building materials, their history, production and use
- History of services (heating, lighting etc.) in buildings
- The changing role of the professions in construction
- Building archaeology
- Computer simulation, experimentation and reconstruction
- Use of construction history for dating of historic fabric
- Recording, preservation and conservation
- Construction in architectural writing
- The role of construction history in education
- The bibliography of construction history
- The theory and practice of construction history

IMPORTANT DATES

November 16, 2017	Abstract Deadline
January 1, 2018	Registration Open
January 15, 2018	Author Notification
May 24-26, 2018	Biennial

SUBMIT ABSTRACT

<https://easychair.org/conferences/?conf=6thbiennialchsa2018>

MORE INFORMATION

<http://www.constructionhistorysociety.org/events/>

MEMBERSHIP DRIVE

Tell a Friend!



MEMBERSHIP DRIVE / RECURRING PAYMENTS in 2018

CHSA encourages every Member to introduce a colleague or two to our organization and encourage them to join - and we'd like to send you an embossed journal as our way of saying thank you! Have the new member record your name under "*Name of Member Who Encouraged You to Join*". If you bring in TWO members, Jeff Beard promises to take you out to lunch at the 6th Biennial this May!

NEW in 2018! Sign up for recurring membership payments and make your life even easier!

CONFERENCE REPORT: ASCE / SEI Structures

Still in Use: Structural Engineering History & Contemporary Design Practice

In April 2017, four members of CHSA presented their research at the ASCE/SEI Structures Congress in Denver, Colorado in a session entitled "*Still in Use: Structural Engineering History & Contemporary Design Practice*." The session explored the relevance of structural engineering history from the perspectives of project design and licensure, and it reflected on the past to illustrate how these built works and defining concepts are still relevant in modern design practice. As modern structural engineers strive to design structures under ever more complex constraints, they can learn from successful designers of the past and understand how innovation occurs in differing periods of time.

The session was targeted at both structural engineering practitioners and educators. It provided perspectives on their own place within structural engineering, explored how past structural engineers managed risks to yield remarkable results, and revealed the ways in which structural engineers have worked to create their own professional identity. While the physical manifestations of the structural engineering profession vary over time and across cultures, certain fundamental principles and values of the profession remain applicable across centuries and worldwide. Through their presentations, the authors demonstrated how today's practicing engineer can be better prepared to confront the challenges of the present and to develop innovative solutions for the future by exploring the past.



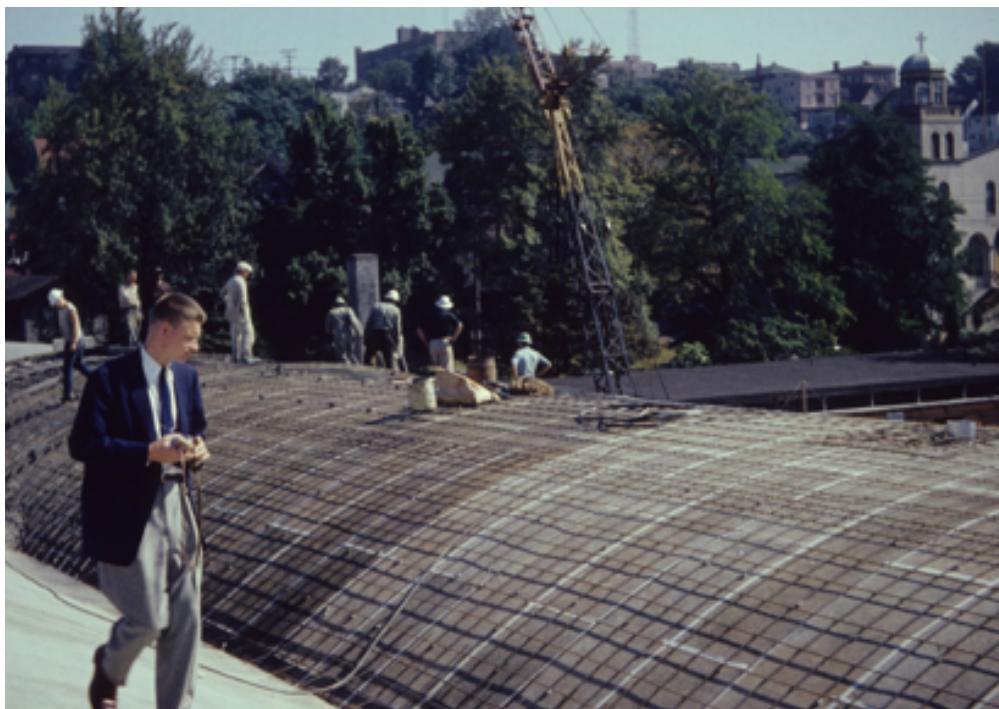
Henry Jackson Burt was awarded the first license as a Structural Engineer in the State of Illinois (1918)

CONFERENCE REPORT (continued)

Marci Uihlein (Univ. Of Illinois) spoke on past efforts to create professional licensure for structural engineers, as distinct from civil engineers. Structural engineers have long sought to make their work distinct from that of architects and create a separate identity in the eye of the public. Illinois granted the first structural engineering license nearly 100 years ago in 1918. Yet today, only about one-fifth of states grant structural engineering licenses and the profession continues to debate the need for separate licensure. Prof. Uihlein placed the ongoing effort on structural engineering licensing in an historical context to demonstrate its importance in the professional identity, values, and jurisdiction of the structural engineer.

Tyler Sprague (Univ. of Washington) spoke on the material efficiency of thin-shell concrete construction. Thin-shell concrete construction was developed in mid-20th century Europe, influenced by a shortage of steel. Through highly efficient structural forms, thin-shells carry their loads almost entirely through membrane action, thus achieving extreme material efficiency. Interest in thin-shells waned by the 1970s; however, thin-shell construction has experienced a resurgence of use, fueled once again by an appreciation of material efficiency and expression through form. The long history of thin-shell design can serve as a resource to contemporary engineers, providing varied examples of problem solving and ingenuity that continue to have relevance today. Prof. Sprague argued that today's engineer may find new insights and inspirations through the solutions of the past, as contemporary design criteria continue evolve to include a balance of material, labor, performance, sustainability.

Stephen Buonopane (Bucknell Univ.) traced the development of John A. Roebling's design principles through both on published and archival sources. Roebling's suspension bridges were amongst the longest bridges and most complex structures built during the 19th century. As complex structural systems, Roebling's bridges far exceeded his ability to analyze them, in the modern sense of non-linear, indeterminate analysis. Instead, Roebling simplified the analysis by relying on basic principles of strength, redundancy and ductility to achieve safe, serviceable and innovative structures. As modern structural engineers seek to design ever more complex structures and consider ever more complex loading scenarios, the profession is moving towards performance based design, which has at its core some of the same fundamental design principles that Roebling used.



Structural engineer Jack Christiansen inspects the construction of a thin-shell roof at the Seattle School District Warehouse in 1954

Robert Dermody (Roger Williams Univ.) spoke on the bridges and career of David Steinman, one of the greatest suspension bridge designers of the 20th century. Of particular interest in this session was Steinman's keen interest in the history of the profession and engineering broadly defined. Prof. Dermody showed how Steinman's crowning achievement, the Mackinac Straits Bridge, was directly influenced by Steinman's extensive research and his experiences on prior bridge projects. David Steinman was a diligent student of history, and one of the most significant contributors to developments in the design and construction of long span bridges in the 20th century. His careful study of previous bridge designs served him well throughout his career and provides valuable lessons for today's engineers as well.



Truss Delivery by Barge. June 20, 1957. www.mackinacbridge.org/history/historical-construction-album/. Accessed October 30, 2017.

MEMBER NEWS

Peter Hilger and **Brian Bowen** are presenting their research *Ethics Past, Present and Future: Tales from the Grey Zone* at the AIA MN Conference November 14th. Covering the history and origin of the AIA code of ethics, this two hour session meets the HSW Continuing Education criteria for AIA.

<http://www.aia-mn.org/events/conference/save-date-2017/>

Peter Hilger hosts the 54th ASC Conference April 18-21, 2018 in Minneapolis, MN. Check it out!

<https://cceeevents.umn.edu/54th-annual-asc-international-conference>

BOOK REVIEW - Brian Bowen

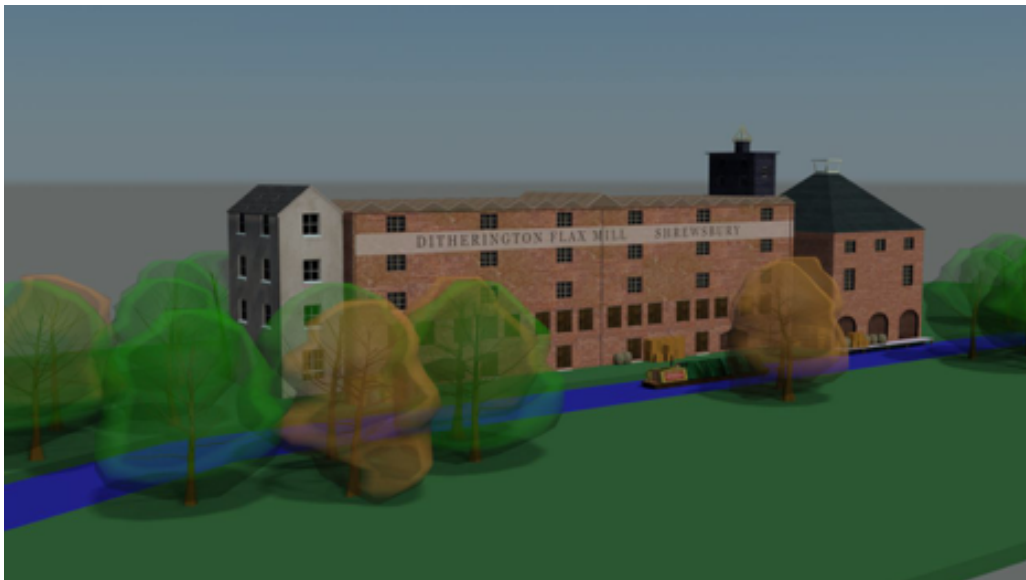
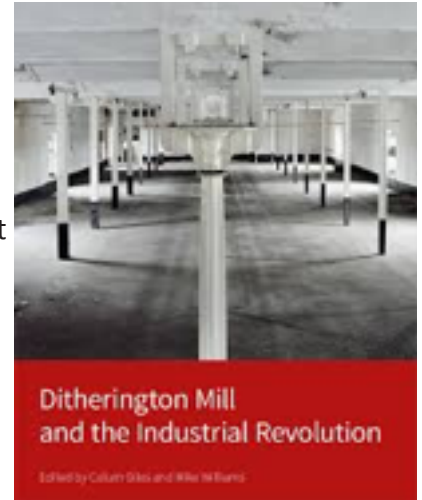
Ditherington Mill and the Industrial Revolution, edited by Colum Giles and Mike Williams, published by Historic England, 2015, 159 pages.
ISBN: 9781848021181

Ditherington Mill located just outside Shrewsbury in Shropshire, England, is celebrated as the first mill in the world to have been built with a full internal fire-proof iron frame in 1796-1800. Earlier mills had used cast iron columns but with wooden beams and floor structures. In this flax mill the beams were iron and the floor structures masonry; the exterior walls were load-bearing.

Charles Bage, who was a partner in the mill operation, also acted as engineer for the design and construction and went on to build other mills in the Midlands.

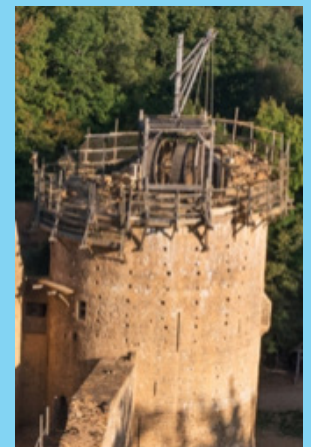
The losses incurred from fires were frequent and economically damaging. The loss of the huge Albion Mill in London in 1791 highlighted the need for new types of fireproof construction and here in Shrewsbury was the first step to this goal.

The book is well produced with multiple illustrations and explanations of each stage in the planning, design, construction and operation of the mill. Chapters cover the linen industry, the design and building of the mill, its steam power source, gas lighting, the workforce, and its subsequent history and restoration.



Guedelon Castle, a project begun in 1997 in Treigny, France and expected to last 25 years, is an authentic recreation of a 13th c Medieval castle using only period construction techniques, tools, locally sourced materials and costumes.

www.guedelon.fr/en/



APPOINTMENT

MIT Professor **John Ochsendorf** has been named as the 23rd director of the American Academy in Rome (AAR). Ochsendorf, a professor with dual appointments in the departments of Architecture and Civil and Environmental Engineering, began his three-year term this past July. Ochsendorf is a Professor of Architecture and Civil and Environmental Engineering at MIT. A structural engineer with multidisciplinary research interests including the history of construction, masonry mechanics, and sustainable design, Ochsendorf conducts research on the structural safety of historic monuments and the design of more sustainable infrastructure.



6th INTERNATIONAL CONGRESS ON CONSTRUCTION HISTORY

6ICCH sent notification of approved abstracts on September 15th, 2017.

If you are presenting at 6ICCH, send Melanie Feerst a quick email with the title of your presentation and I'll post in the January newsletter.

Deadline to submit full papers is December 1, 2017!

<http://www.6icch.org/index.html>

SUBMIT YOUR ABSTRACT to CHSA!

We're sorry if your abstract was not accepted to 6ICCH - and invite you to submit your abstract to our Biennial Meeting taking place May 24 - 26, 2018 at the University of Maryland, College Park (close to Washington DC!)

EXHIBITION

**Exhibition: Montréal et le rêve géodésique / Montreal's Geodesic Dreams
Centre de design de l'Université du Québec à Montréal, September 21-December 10, 2017.**

2017 marks the 50th anniversary of the inauguration of the most famous geodesic dome in the world: the US Pavilion at Expo 67, designed by R. Buckminster Fuller and Shoji Sadao. The exhibition Montreal's Geodesic Dreams returns to the "geodesic moment," revealing the much earlier role of the city in the development of this innovative structural system that captured the 20th-century architectural imagination. The core of the exhibition focuses on the pioneering work of the Montreal designer Jeffrey Lindsay (1924-84), founder and director of the Fuller Research Foundation Canadian Division. Working in Montreal between 1949 and 1956, Lindsay designed and built several domes, among them the 49' "Weatherbreak" (1949-50), the first large self-supporting geodesic dome built according to Fuller's concepts, and a 100' exhibition pavilion commissioned by the Canadian government in 1956. The exhibition also explores the diffusion of the geodesic dome in Quebec in the 1960s, ranging from a polar bear enclosure at the Granby Zoo (Paul O. Trépanier and Victor Prus; 1962-63) to the dome of the US Pavilion at Expo 67, and in the 1970s, when the geodesic dome became an icon of counter-culture.



An accompanying bilingual book with essays by Carlo Carbone, Réjean Legault and Cammie McAtee, published by Dalhousie Architectural Press, will be available in November.

Centre de design, 1440, rue Sanguinet, Montréal. Metro Berri-UQAM

Hours: Wednesday-Sunday, 2-6. Free admission.

Further information: <http://www.centrededesign.com/>

Contact: Cammie McAtee (reve.geo.dream@gmail.com)

6ICCH

July 9-13, 2018

**Academy of Sciences
Brussels, Belgium**

PREVIEW Thematic Sessions

Building Maintenance in Ancient Times (up to early Modern)

Experts and Building Assessments. An International Comparison 13-20th Century

Architects and Bureaucrats: Centralised Governments and the Administrative Preconditions of Buildings before 1750

Economization Takes Command: Towards an Epistemic History of Building Economy since the French Revolution

Modernizing Timber - Regional Developments and Conceptual Transfers of Timber

Historic Pre-cast Concrete

Early Thin Concrete Shells - Players, Impulses, and Effects

The pursuit of Comfort by Design. Material History of Building Services in 19th / 20th c.

Modern 'Comfort' in Colonial / Postcolonial Settings Beyond the 'Centre/Periphery' Framework

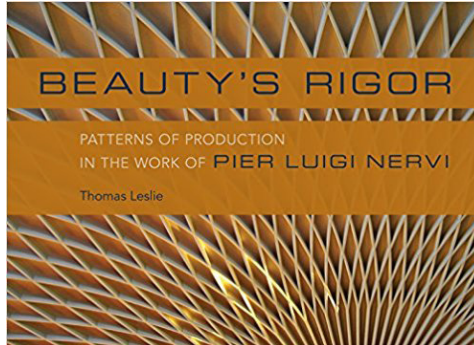
Transnational Exchange in the Construction Worlds of 19th / 20th c Asia: The Diffusion of Materials and Processes in the Global South

Little Planet. New Approaches to a Big Picture in Construction Histories, East Asia and Europe 19th / 20th c

NEW BOOK - Thomas Leslie

Beauty's Rigor: Patterns of Production in the Work of Pier Luigi Nervi by Thomas Leslie. University of Illinois Press, ISBN: 978-0-252-04112-9

Born in Sondrio, Italy, in 1891, Pier Luigi Nervi was a pioneer in the engineering and architecture of reinforced concrete. His buildings showed how the use of reinforced concrete expanded the possibilities of form and structure. His methods, meanwhile, ingrained his structures with patterns that came directly out of his economical, manual construction



processes. The results were buildings that matched awe-inspiring spans with surprisingly human scale. *Beauty's Rigor* offers a comprehensive overview of Nervi's long career. Drawing on the Nervi archives and a wealth of photographs and architectural drawings, Thomas Leslie explores celebrated buildings like Palazetto dello Sport built for the 1960 Rome Olympics, St. Mary's Cathedral in San Francisco, and the UNESCO headquarters in Paris. He also sheds new light on unbuilt projects such as the Pavilion of Italian Civilization for the Universal Exposition of Rome E42. What emerges is the first complete account of Nervi's contributions to modern architecture and his essential role in a revolution that realized concrete's potential to match grace with strength.

Thomas Leslie teaches building design, technology, and history as the Pickard Chilton Professor in Architecture at Iowa State University.

WHY RENEW YOUR CHSA MEMBERSHIP?

NEW FEATURES: Corporate Profiles, Travelogue

RESEARCH REPOSITORY - Construction History syllabi, books and articles, all located in one place on the website!

Memberships are valid January 1 - December 31 of a calendar year.

<http://chsamembership.wildapricot.org>

Read a good construction history book lately?

Send a short book review to CHSA and we'll feature in the Newsletter!
melaniefeerst@gmail.com

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www.constructionhistorysociety.org

Please send current research articles, books, opportunities, or travelogue pieces for future Newsletters

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