

- DATE:** Tuesday, September 11, 2018
- TIME:** Breakfast & Registration: 7:00 AM  
General Meeting: 7:30 - 8:00 AM  
Presentation & Discussion: 8:00 – 9:15 AM
- LOCATION:** [Marriott Minneapolis West](#) 952-544-4400 (Courtyard - Westport Room)  
9960 Wayzata Blvd.; St. Louis Park, MN 55426  
Located north and west of I-394 and Hwy 169 (Previously the Holiday Inn)
- Please RSVP to:** David Oxley via email: [doxley@acecmn.org](mailto:doxley@acecmn.org) or fax to ACEC/MN: 952-593-5552
- FORMAT:** Breakfast meeting – cost is **\$25 for members**, \$40 for non-members; \$15 for unemployed members and \$10 for Students & those in YMG.
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## MEETING AGENDA:

### I. INTRODUCTIONS - Andrew Agosto

- Andrew introduced himself as “Supreme Leader” 😡.
- Andrew mentioned Friday Steering Committee meeting.
- Walked through the MNSEA seminars for the new year.
- Did something different with introductions: “What would you do for a profession in a paralleled life?” Stephanie would be a ballerina, for example.

### II. TREASURER’S REPORT / AND ACEC UPDATE - Dave Oxley

- MNSEA has about \$8,000 in the bank.
- Elections are coming up in 53 days. ACEC PAC generates about \$50,000 every 2 years and use that money to contribute to candidates running for state offices, essentially opens doors to legislators. Members can donate online.
- Elections: fall kickoff on October 10 is the chance to meet Governor candidates.

### III. COMMITTEE UPDATES

#### A. MNSEA Steering Committee – Andrew Agosto

##### i MNSEER Committee – Douglas Fell

- The committee is up and running.
- The committee got good members.
- Integrating with National SEER committee and getting up to speed with what they are doing.
- Giving an all-day presentation in January to the Institute of Building Officials.
- Hoping to bring the same seminar to MNSEA.

- Doug is speaking in December at ACEC on the business side.
- ii MNSEA YMG – Ricky Kirchner
  - Defined by events they do. Some are:
    - Kickball team with ACEC
    - Site tour of MSP Parking ramp on September 28; all of MNSEA are invited.
    - Event with ICRI, looking at 394, 94 Interchange.
    - Outreach activities as well: presentation at Mary’s Place
    - Andy Rauch to talk about CASE Site Visit article.
    - Doug Woolf to do Family Feud.
    - A list of YMG is available from Ricky for anyone interested.
  - Hope for increase in budget; will be voted on next month.
  - Teamed up with ACEC EP group for a softball tournament.
  - Camping trip every summer.
  - NCSEA Trivia night
  - Get young engineers in your firm in contact with Ricky to get on the email list.
  - Putting together “EP Champion list”, engineers who would like to be advocates for the YMG.
- iii MNSEA Annual Seminar and Trade Show – Greg McCool
  - Trying to find a topic for the May seminar and looking for suggestions.
- iv MNSEA Dues – Andrew Agosto
  - Invoices for MNSEA dues are out. Please try to get those in earlier.
  - Get the spreadsheet (MNSEA members) updated and sent to Doug Woolf.

#### IV. LIAISON UPDATES:

##### A. NCSEA Delegate Update – Doug Woolf

- The National SE3 group: survey of salary, gender-related difference in salary and status. Want to do it on state level. Talk to Doug Woolf if interested.
- Please send the Excel list mentioned above to Doug by September 14. Doug needs to be done September 21.
- There is good info on national website. Get on MNSEA portal. Contact Doug if you need login info.



B. 2018 Structural Engineering Summit - October 24th - October 27th, 2018 - Chicago, IL

- Good turnout from Minnesota this year (7 to 9 attendees).
- Will get different perspectives because no one can attend all the seminars. Hope to get good ideas on how to improve our local organization in addition to engineering curriculum.

C. NCSEA Code Advisory Committee – Wind Engineering – Doug Woolf

- Will be meeting at Engineering summit.
- A couple of people from that committee will present. Covers things such as proper wind loads for screen walls, canopies, solar panels, irregular building shapes, snow drift, etc.
- Chair of NCSEA’s wind committee is also the chair for ASCE 7’s Wind Committee. NCSEA gives recommendations that are often followed by the ASCE 7’s committee.
- Working on proposals for the IBC 2021 publication. Any suggestion for that committee can go to Doug.

V. OLD BUSINESS:

None.

VI. NEW BUSINESS:

A. 2018-2019 MNSEA Budget Discussion

- Budget: not many changes except for a slight increase to YMG.
- Andrew will send out the information to the MO.
- Will vote on the budget next month.
- Dan Larson – AET, President of ACEC:
  - New 3-year strategic plan.
  - Encouraging people look for other committees within ACEC,
  - Looking for participation in Risk Management group, Business Practice group, Legislative group, etc. Push envelope. Put the old one aside.
  - Looking at 3 things:
    - Leadership: continue to lead by advocacy. Want to be part of the business community, being at the table for non-engineering issues when they are being discussed.
    - Value: elevate the value of engineering, showing the public the value they get from the engineers.
    - Transformation: diversity inclusion, workforce issues as well as how technology disrupts what we do and how we can use it to our advantage. Stat: new Gen Z, 50% is non Caucasian.



PRESENTATION:

10201 Wayzata Boulevard, Suite 240, Minnetonka, MN 55305 952/593-5533



A Coalition of the  
American Council of Engineering Companies of Minnesota

## Riveted Connections in Historical Metal Structures (1840-1940): Technology, Design and Experiments

Quentin Collette, PhD

Waiting for a train at London St Pancras railway station or reading a book on the Berlin underground are simple everyday actions. Conversely, preserving the service life of such historical metal structures enabling those routine actions is a challenge. The overall safety and stability of historical iron and steel structures and, more in particular, the state of their connections, are of concern to engineers, architects and heritage care specialists. Rivets were the primary fastener used to fabricate these connections through a technique called hot riveting. Although well developed in the nineteenth century, hot riveting fell into disuse when the welding technique was invented. Nowadays, the appraisal of riveted connections raises numerous theoretical and practical issues that remain to be solved. Therefore, I reviewed international historical literature and carried out experiments. This study unravels the technology and design of historical riveted connections built in France and Belgium (1840s-1940s).

Major evolutions occurred at the turn of the 20th century. The material iron was replaced by steel, rivets were not installed by hand anymore but with machines, and the design of riveted connections relied on a scientific approach. The appraisal of riveted structures of that period thus calls for additional care. The knowledge of past techniques and design methods can help engineers apprehend the assessment of riveted connections with more confidence. The study supports decisions-makers and workmen for inspection, structural assessment and intervention purposes. We should strive to preserve both the service life and the heritage value of historical metal structures belonging to the city's landscape for the decades and hopefully centuries to come.



Quentin Collette graduated from the University of Brussels (Belgium) with a Master in Architectural Engineering (2009) and Business Management (2011), and a PhD in Architectural Engineering (2014). His project experience includes international and National Historic Landmark sites. Since 2018, he is a Project Director at Preservation Design Works (PVN) and develops strategies to valorize and reuse heritage buildings and sites. He is also a part-time post-doctoral researcher at the University of Brussels. His research interests focus on historic masonry, reinforced-concrete and metal structures. He is an active member of American and European preservation and construction history networks.



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10201 Wayzata Boulevard, Suite 240, Minnetonka, MN 55305 952/593-5533



A Coalition of the  
American Council of Engineering Companies of Minnesota

**Thank You for Attending the MNSEA Meeting**

Tuesday, September 11, 2018

**Riveted Connections in Historical Metal Structures (1840-1940): Technology, Design and Experiments**  
Presented By: Quentin Collette, PhD  
PVN



*To the best of our knowledge, this educational program meets the requirements of the Board of AELSLAGID for continuing education. MNSEA makes no warranty, directly or indirectly, that this program meets the standard established by the Board of AELSLAGID for continuing education.*

**Continuing Education – 1.0 Professional Development Hour**

A handwritten signature in black ink, appearing to read 'A. Agosto', positioned above a horizontal line.

Andrew P. Agosto, President – MNSEA

**MNSEA Meeting Receipt**

**Breakfast Meeting:**

<b>Student &amp; YMG Cost</b>	<b>=</b>	<b>\$10.00</b>	<input type="checkbox"/>
<b>Member Cost</b>	<b>=</b>	<b>\$25.00</b>	<input type="checkbox"/>
<b>Non Member Cost</b>	<b>=</b>	<b>\$40.00</b>	<input type="checkbox"/>
<b>Unemployed Member Cost</b>	<b>=</b>	<b>\$15.00</b>	<input type="checkbox"/>

# MNSEA Monthly Meeting - September 11, 2018

Signing in below provides you understand the following antitrust statement:

Discussions during ACEC/MN (incl. MNSEA) meetings should relate solely to the legitimate purposes of the organization. For a more detailed explanation of this statement, please see the ACEC/MN Antitrust Policy.

Student & YMG Cost	\$10.00
Member Cost	\$25.00
Non-Member Cost	\$40.00
Unemployed Member Cost	\$15.00

Note: Membership is by firm - Contact David Oxley for questions about membership. (doxley@acecmn.org)

	Name	Company	Member (y/n)	email (same if it has not changed)	Amount Paid
1.	ANDREW AGOSTO	UNI-SYSTEMS ENG	Y	- SAME -	\$25
2.	QUENTIN COLETTE (SPEAKER)	PVN	N	COLLETTE@PVNWORKS.COM	PAID
3.	RUOC LE	LEO A DALY	Y	SAME	\$25
4.	CRAIG KUSKE	ENCOMPASS	Y	SAME	\$25
5.	JOHN WOLFS	OPUS	Y	SAME	\$25
6.	Charles Allgood	Ground Improv. Eng.	Y	callgood@groundimprovementeng.com	\$25
7.	Doug Wolf	OPUS	Y	same	\$25
8.	Brad Severson	Kimley Horn	Y	"	\$25
9.	John Ellingson	Opus	Y	"	\$25
10.	GREG Durr	STRUCTURAL DESIGN ASSOC.	Y	"	\$25
11.	BRAD BRIMHALL	BRAUN INTERTEC	Y	SAME	\$25
12.	DEKER PHILLIPS	SAFE HAVEN SE	Y	"	\$25
13.	Wayne Linderman	Structural Design Associates	Y	wlinderman@sdaeng.com	\$25
14.	STEPHANIE YOUNG	MMY	Y	SAME	\$25
15.	Ken Green	MMY	Y	"	\$25
16.	Doug Fell	Walker Consultants	Y	Dfell@walkerconsultants.com	\$25
17.	JOHN PAUL GILIE	PAULSON & CLARK	Y	"	\$25
18.	NOEL VOGEN	VOGEN CONSULTING	N		\$40
19.	Garrett Brunell	DLR Group	Y	gbrunell@dlrgroup.com	\$10 YMG \$30 \$40
20.	Tim Strehle	Walker Consultants	Y	"	\$10 YMG
21.	GREG MCCOOL	ERA	Y	SAME	\$25
22.	Marie DesHarnais	BKBM	Y	mdesharnais@bkbm.com	\$10 YMG
23.	Noah Morrison	MITEK (USP)	N	noahnmorrison@mii.com	\$10 YMG
24.	Richard Kirchner	BKBM	Y	rkirchner@bkbm.com	\$10 YMG
25.	DAN LARSON	AET	Y	dlarson@amengtest.com	0
26.					
27.					