



association  
de l'aluminium  
du canada



# CAN/CSA-S6-06

## Design of Aluminum Bridges and Footbridges

### The Content

This course presents the contents of Section 17 – *Aluminum Structures* of CAN/CSA-S6-06, *Canadian Highway Bridge Design Code* in force since October 2011 to engineers, professionals, technicians, teachers and students. The course starts with a detailed presentation of the main characteristics of structural aluminum and covers all the recommendations of Section 17. Additional material and application examples are also provided.

More and more aluminum highway bridges and footbridges are built around the world as engineers and decision makers discover the many advantages of aluminum. Canadian engineers can follow suit now that a code allows them to use this “new material” in an informed and secure way in applications that are still underused. Use of this material in the construction of bridges has specific technical advantages in Canada, the world’s third largest producer of aluminum, since it is located in a northern region.

For a copy of *Section 17*: [www.shop.csa.ca](http://www.shop.csa.ca) and a copy of D Beaulieu’s *Design of Aluminum Structures*: [www.pral.ca](http://www.pral.ca).

### The Instructor

**Denis Beaulieu, Ph.D., Ing.**, was a professor of structural engineering and research chair in the Civil Engineering Department of Université Laval for 32 years. He has carried out numerous research projects on steel and aluminum structures and authored several well known books on structural steel and aluminum used by practitioners as well as teaching staff. Denis Beaulieu was also Research and Technology Development Vice-Dean at the Science and Engineering Faculty of Université Laval for five years and Technology Transfer Vice-President at the Quebec Industrial Research Centre for four years. Denis Beaulieu is a CSCE past president.



### Course Outline

- Introduction
- Characteristics of Structural Aluminum
- Overview of Section 17
- Buckling of Thin Walls
- Traction Members
- Compression Members
- Flexural Members
- Webs in Shear
- Torsional Members
- Members Subjected to Combined
  - Axial Force and Bending
- Built-up Members
- Composite Aluminum-Concrete Beams
- Trusses and Arch Bridges
- Decks
- Fatigue
- Splices and Connections
  - Bolted Connections
  - Welded Connections
- Pins, Rollers and Rockers
- Construction Requirements

# VENUE

**FREDERICTON** – April 22, 2014  
**Wu Conference Centre**  
Room 217  
6 Duffie Drive  
Fredericton, NB E3B 5A3  
506-453-4836

*This course is endorsed by*



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## REGISTRATION

Please register online : <https://csce.ca/product/s17nb>

7:45 Registration – 8:30 Start of Session – 10:00 Coffee Break – 12:00 Lunch – 15:00 Coffee Break – 16:30 End of Session

	<b>By March 31, 2014</b>	<b>After March 31, 2014</b>
CSCE Members	\$450 + Tax = <b>\$508.50</b>	\$500 + Tax = <b>\$565.00</b>
New Members	\$470 + \$95 + Tax = <b>\$638.45</b>	\$520 + \$95 + Tax = <b>\$694.95</b>
Non-members	\$550 + Tax = <b>\$621.50</b>	\$600 + Tax = <b>\$678.00</b>
Students	\$100 + Tax = <b>\$113.00</b>	\$100 + Tax = <b>\$113.00</b>

- ▶ **GROUP RATES** (5 and more) are available upon request.
- ▶ **NEWLY ENROLLING MEMBERS** pay a special introductory membership fee of \$95 plus tax and obtain a discount on all future CSCE events.

**Cancellation & Substitution** Cancellation requests received more than 14 calendar days before the start of the course will receive a full refund minus a \$50 administration fee.  
Cancellation requests received within 14 days prior to the start of the course will be non-refundable.  
CSCE reserves the right to cancel any course and will, in such event, fully refund all registration fees.  
Any registrant may substitute another person eligible for the same fee at any time prior to the start of the course.

**For group rates and any additional information, please contact:**

Mahmoud Lardjane mahmoud@csce.ca 514-933-2634 ext. 4

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