Canadian Association for Earthquake Engineering (CAEE)
L'Association Canadienne du Génie Parasismique (ACGP)

NEWSLETTER

July 2020
Volume 5, Issue 3

http://caee.ca/

From the Editor's Desk

by Tuna Onur

In early June, we lost Ron DeVall, past Chair of the National Building Code (NBC) of Canada's Standing Committee on Earthquake Design (SC-ED). Ron's passing is a big loss to the earthquake engineering community in Canada. In these pages, you will find a tribute to him by Perry Adebar, the current Chair of SC-ED; and Jeff Corbett, the managing principal of Read Jones Christoffersen Ltd., where Ron worked as a structural engineer.

As COVID-19 continues to impact the globe, many conferences have gone fully or partially online. We provide, in this special issue, links to a variety of online conferences, courses, and webinars.

We hope everyone is staying healthy while enjoying the summer, and as always, we encourage you to share short articles, news or other items. Please send your contributions to secretary@caee-acgp.ca

Inside This Issue

A Tribute to Ron DeVall

by Perry Adebar[1] and Jeff Corbett[2]

Dr. Ron DeVall spent his career and the years after retirement improving the seismic safety of buildings in Canada. He did that as a design engineer, the technical lead for a prominent structural engineering firm, and through his enormous contributions to building codes, standards and guidelines.

After completing his civil engineering degrees at the University of British Columbia, Ron spent his entire career of over 40 years at Read Jones Christoffersen (RJC) in Vancouver. He was the Engineer of Record on a number of notable projects that utilized innovative structural solutions such as Vancouver Library Square and Park Place (office tower). As RJC's structural engineering technical lead, he developed technical standards, quality control guidelines and training protocols, many of which are still in use today. In addition, Ron mentored generations of structural engineers at RJC.

Ron DeVall served as Chair of the Canadian National Committee on Earthquake Engineering (CANCEE), which wrote the seismic design provisions in the National Building Code (NBC) from 1985 to 2009. That committee subsequently became the Standing Committee on Earthquake Design (SC-ED). Even after stepping down as a voting member of SC-ED, Ron remained one of the most active contributors to the work of the Committee up until about one year ago.

Ron also contributed to other parts of NBC as a member of the Standing Committee on Structural Design (1989 to 2011), Task Group on Structural Evaluation and Upgrading of Existing Buildings (1988 to 1997), and the Canadian Commission on Building and Fire Codes (2009 to 2012).

A Tribute to Ron DeVall... *Continued from Page 1*

Ron DeVall made enormous contributions to the seismic design provisions in the Canadian Standard for concrete buildings CSA A23.3. Together with his friend and colleague Jim Mutrie, who also passed away recently, Ron played a very important role in the development of the state-of-the-art seismic design provisions for concrete shear wall buildings in the 1984 edition of CSA A23.3. He also made significant impact on Clause 21 of the 1994, 2004, 2014, and 2019 editions of CSA A23.3.

In 2006, Ron was appointed by Engineers and Geoscientists of British Columbia (EGBC) to the Seismic Peer Review Committee for the development and implementation of the Seismic Retrofit Guidelines for BC Schools. For the past 14 years, Ron played the crucial role of challenging his peers to ensure the innovative performance based approach was defensible and well documented.

After hearing of Ron's passing, current and former members of CANCEE and SC-ED from across Canada paid tribute. Here is some of what they wrote:

"During my 25 years on the Standing Committee for Structural Design, Ron DeVall was the voice of knowledge, wisdom and integrity in earthquake engineering. His sense of humour and warmth also made him a great pleasure to spend time with."

"Ron had a wonderful ability to express himself clearly and with humour. As a seismologist often struggling to keep up with the engineering concepts, I always appreciated his insight."

"Ron had a way of taking complex issues and breaking them down in a way that could be understood and appreciated."

"My involvement with SC-ED began while Ron was still the Chair, and he continued to contribute so much after he stepped down that it is hard for me to imagine a SC-ED meeting without him."

"Ron was the perfect gentleman, not only during committee deliberations; but also in general with everybody. He made exceptional contributions to the field of earthquake and structural engineering... It is a huge loss to the community."

"Ron had a prodigious intellect, an affable personality, and a sunny outlook. In his company, one experienced a sense of true affection and friendship. I had the privilege of working with Ron for over 20 years, during majority of which he served as the Chair of the Standing Committee on Earthquake Design. He has left a legacy that those who knew him, and indeed the entire community of engineers who benefitted from his work, will forever cherish."

When Ron DeVall passed away on June 8, Canada lost a talented structural engineer and a prolific code writer, and many of us lost a dear friend; but Ron's legacy will live on in the improved seismic safety of Canadian buildings because of the building codes, standards, and guidelines that he so strongly influenced during his career.

[1] *Perry Adebar, P.Eng., Chair of SC-ED, and Professor of Structural Engineering, University of British Columbia*

[2] *Jeff Corbett, P.Eng., Managing Principal, Read Jones Christoffersen Ltd.*

A memorial student award will honour the important accomplishments of two great structural engineers, Ron DeVall and Jim Mutrie. For more information, visit: *https://memorial.support.ubc.ca/devall-mutrie*

Conferences and Webinars Online

As COVID-19 continues to restrict travel and large gatherings, we present information on access to past conference materials; updates on various earthquake engineering related events; and a selection of live webinars online.

Presentations from Past Conferences:

The **NZSEE (New Zealand Society for Earthquake Engineering) Annual Conference 2020** went online. Sessions are posted as videos on YouTube. Here are four of them:

Building Resilience:

www.youtube.com/watch?v=yMgRmiJ52Gg

Infrastructure Session:

www.youtube.com/watch?v=xKAcwTHf3UE

Low-Damage Design:

www.youtube.com/watch?v=VT0q80mGFdY

Earthquake Insurance Lessons for Engineers:

www.youtube.com/watch?v=OCBgNqcPSQQ

The **2020 National Earthquake Conference** in the US, in conjunction with the **72nd EERI Annual Meeting** was held in San Diego in March 2020. Follow the link below to find a list of presentations that can be downloaded and viewed. Watch for the red "Download Presentation" box:

2020nec.eeri-events.org/

The **2020 PEER Annual Meeting: The Future of Performance-Based Natural Hazards Engineering** was held in Berkeley in January 2020. You can watch the videos of the presentations at:

peer.berkeley.edu/news-and-events/2020-peer-annual-meeting/program

Update on This Year's Conferences:

SSA (Seismological Society of America) 2021 Annual Meeting is replacing the 2020 Annual Meeting and is going to be held online 19-23 April 2021. Session Proposals are open until 1 October 2020.

www.seismosoc.org/annual-meeting/

Annual Meeting of the CGU (Canadian Geophysical Union) is postponed until next year and is now being held May 2nd through the 5th, 2021 at the Banff Park Lodge.

meeting2020.cgu-ugc.ca/

37th General Assembly of the European Seismological Commission also has new dates and will now be held on 19-24 September 2021 in Corfu, Greece. Abstract submission is open until 19 April 2021.

www.escgreece2020.eu/

17th World Conference on Earthquake Engineering (17WCEE) is now being held between September 27th and October 2nd, 2021. The venue, Sendai International Center at Sendai in Miyagi Prefecture in Japan, remains the same.

17wcee.jp/index.html

2020 AEES (Australian Earthquake Engineering Society) Conference was to be held in Adelaide, but will now be the first virtual AEES conference. It will be on 20-22 November 2020. The theme of the conference is "Disaster Preparedness - Are Earthquake Assessments critical to Heritage Structures?"

aees.org.au/2020-aees-conference/

Conferences and Webinars Online... *Continued from Page 3*

Update on This Year's Conferences (cont.):

2020 Understanding Risk Forum is now going to be held in a hybrid "in person (Singapore)/online (Global)" format between November 30th and December 23rd, 2020. Registration for the new hybrid format will open in September.

understandrisk.org/event/ur2020_forum/

Similarly, an offshoot of the global Understanding Risk Forum, the **2020 Understanding Risk British Columbia** has also switched to a new format. It will be held as an online, collaborative symposium plus event series between August and November 2020.

www.urbc.ca/

Upcoming Live Webinars:

Webinars from Kinemetrics:

Aug 19: Deep Seismic Monitoring in Very Hard Rock Conditions for Swiss Nuclear Power Plants – Featuring Dr. Philippe Renault, Managing Director, swissnuclear (swissnuclear is the association of the Swiss nuclear power station operators)

us02web.zoom.us/webinar/register/8015970974765/WN_h3m4FilyQ7OSgWMju3M_uQ

Aug26: Analysis of TVA's Watts Bar NPP Strong-Motion Records from the 12 December 2018 M4.4 Decatur, TN Earthquake – Featuring Dr. Vladimir Graizer, Seismologist, Office of Nuclear Regulatory Research | U.S. Nuclear Regulatory Commission

us02web.zoom.us/webinar/register/7015972664141/WN_GBCBG75ASyuWTvEz6GODrA

ASCE Webinar:

Aug 25: Introduction to 2018 International Existing Building Code – UPDATED (8227W2020) – **fee**

mylearning.asce.org/diweb/catalog/item/id/4871311/q/c=79&t=2125&n=2&o=t

EERI Webinar:

Aug 26: A Multi-Disciplinary Approach to Improving Community Resilience to Natural Hazards

www.eeri.org/events/

NCSEA Webinar:

Sep 22: How to Design for Tsunamis: The ASCE 7-16 Tsunami Provisions and Project Examples – **fee**

www.pathlms.com/ncsea/courses/18604/webinars/9220

APA Webinar Series:

2018 IRC (International Residential Code) Wall Bracing

Sep 15: Part I – IRC Load Path, Lateral Forces and Limitations

Sep 22: Part II – Meeting the IRC Bracing Provisions for Wind and Seismic

Sep 29: Part III – Simplified Wall Bracing & APA Wall Bracing Calculator for the 2018 IRC

www.apawood.org/2018-irc-wall-bracing-webinars

CDA (Canadian Dam Association) Webinar Series:

CDA is preparing a technical webinar series, starting in mid-September. Abstracts of on-line presentations for consideration can be submitted no later than August 17.

cda.ca/EN/Announcements/Active/CDA-Webinar-Series---Call-for-Abstracts.aspx

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News

M9 Project: Cascadia Subduction Earthquake Simulations

The NSF funded M9 project wrapped up last year at the University of Washington, and the simulations for 50 different rupture scenarios for a great Cascadia earthquake were generated for a large number of grid coordinates that include the Greater Vancouver and Victoria areas.

The project results indicated that the rupture directivity plays a large role in the nature of shaking to be expected in southwest BC. If the rupture propagates towards Vancouver or Victoria, 0.5s or longer period ground motions are expected to be at least three times larger than if the rupture propagates away from these cities.

You can download simulation results from:

sites.uw.edu/pnet/m9-simulations/m9-download-tool/

News and Upcoming Events

Due to COVID-19 pandemic, many conferences and workshops have been cancelled or postponed globally. We provide information on events available as of beginning of July.

For a broader coverage of online events and past recorded presentations and proceedings, please see pages 3 and 4.

Upcoming events

2020 Understanding Risk BC
August - November 2020
Online
www.urbc.ca/

Building Innovation 2020 Conference & Expo
18-19 August 2020
Online
www.buildinginnovation.org/

IABSE Conference Christchurch 2020: Resilient Technologies for Sustainable Infrastructures
3-5 February 2021
Christchurch, New Zealand

37th General Assembly of the European Seismological Commission
19-24 September 2021
Corfu, Greece
www.escgreece2020.eu/

17th World Conference on Earthquake Engineering
27 September - 2 October 2021
Sendai, Japan
www.17wcee.jp/

3rd European Conference on Earthquake Engineering and Seismology
19 - 24 June 2022
Bucharest, Romania
3ecees.ro/