



Canada's 5th Generation Seismic Hazard Model for the 2015 National Building Code of Canada

By:
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Dr. Adams graduated with a PhD in Geology from Victoria University of Wellington, New Zealand in 1978. He has been employed by the Geological Survey of Canada for 34 years, and has been involved with all aspects of the earthquake program, from running field aftershock surveys to managing the program and from creating national seismic hazard maps to participating in post-earthquake engineering reconnaissance visits. John's research interests include the seismotectonics of Canadian earthquakes, evidence for paleo-earthquakes, and the crustal stresses driving the neotectonics and geomorphology, and how these can, and can not, be used for improving seismic hazard estimates. He has been the lead seismologist in the development of the seismic hazard maps used in the latest editions of the National Building Code of Canada, including the maps used for the 2015 Code. Dr. Adams is an active member of the Standing Committee for Earthquake Design for the National Building Code of Canada, as well as numerous other technical committees of the Canadian Standards Association dealing with seismic hazards.



Seismic Response of Steel Buildings: Design Provisions and Remaining Challenges

By:
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Dr. Robert Tremblay is a renowned expert in the area of seismic analysis and design of buildings and bridges. His expertise includes dynamic analysis and design of structures with an emphasis on steel infrastructure. He is a fellow of the Canadian Society for Civil Engineering and is the recipient of numerous research awards. Dr. Tremblay is an active member of technical committees for codes and standards. He is currently a member of the Standing Committee on Seismic Design for the National Building Code of Canada, a member of the Canadian Standards Association (CSA) Technical Committee S16 on Structural Steel Design, Chair of the Task Group of CSA-S16 on Seismic Design, and a member of the CSA-S6 Sub-Committee on Seismic Design of Bridges. Dr. Tremblay is also a member of the American Institute for Steel Construction (AISC) Task Committee 9 on Seismic Design Provisions for Structural Steel Buildings and the AISC ad hoc Committee on Industrial Buildings and Non-Building Structures.



Seismic Response of Bridges

By:

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Professor Buckle is a world-renowned expert on earthquake analysis and design of bridges with extensive experience in the area of seismic performance of transportation structures. He is the current Director of the Large-Scale Structures Laboratory at Reno, and is principal investigator for the UNR NEES Equipment Site, one of fifteen such sites established by the National Science Foundation in 2004 for earthquake engineering experimental research. In this regard, Dr. Buckle served two terms as the first president of the Board of Directors charged with setting up the nonprofit NEES Consortium to manage, operate, and maintain the NEES Network of Equipment Sites and related cyber infrastructure. He is currently vice chair of the Caltrans Seismic Advisory Board, and a member of the Board of Directors, Nevada Earthquake Safety Council. Professor Buckle previously served as the deputy director of the National Center for Earthquake Engineering Research, University at Buffalo, New York and as the deputy vice-chancellor (research), University of Auckland, New Zealand.



Seismic Response as Affected by Site Soil Conditions

By:
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Dr. Upul Atukorala is a geotechnical engineer specializing in Earthquake Engineering, Soil-Structure Interaction, and Soil Dynamics. He has worked on projects involving seismic risk analysis, ground response analysis, soil-pipe and soil-cable interaction analysis, liquefaction assessment of soils, analysis of liquefaction-induced ground displacements and evaluation of mitigation measures for liquefaction. Upul is a member of S6-14 Seismic and Foundation subcommittees.



Engineering Significance and Lessons of the March 11, 2011 Tohoku Tsunami - Tsunami Impacts on Structures

By:
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Dr. Ioan Nistor is a Professor of Hydraulic and Coastal Engineering at the University of Ottawa. His expertise includes hazards associated with extreme hydrodynamic loading on infrastructure (tsunami impact on infrastructure, extreme wave and flood forces on structures, dam failure phenomena, etc.), coastal erosion, and hydrodynamics and impact of coastal disasters. Dr. Nistor is the Chair of the Maritime and Coastal Division of International Association for Hydro-Environment Engineering and Research (IAHR) and a member of the Board of Directors of the Canadian Coastal Science and Engineering Association. He is also a voting member of the ASCE7 Tsunami Loads and Effects Subcommittee for the elaboration of New Design Guidelines for Tsunami-Resistant Buildings. Professor Nistor is the recipient of numerous teaching and research awards.



Modeling societal impacts of earthquakes: Progress and challenges for Canada

By:
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Stephanie E. Chang is a professor at the University of British Columbia, with the School of Community and Regional Planning (SCARP) and the Institute for Resources, Environment, and Sustainability (IRES). She recently held a Tier 2 Canada Research Chair in Disaster Management and Urban Sustainability (2004-2013). Her specialty is in the socio-economic impact of natural disasters, particularly earthquakes. She has published extensively on economic impacts of disasters, modelling disaster losses, urban risk dynamics, critical infrastructure systems and their interdependencies, economic evaluation of disaster mitigations, and urban disaster recovery. She has served on the U.S. National Research Council's Committee on Disaster Research in the Social Sciences and its Committee on Earthquake Resilience – Research, Implementation, and Outreach. Dr. Chang has also served on the editorial board of *Earthquake Spectra*. She is a past recipient of two awards from the Earthquake Engineering Research Institute (EERI): the Shah Family Innovation Prize in 2001 and the Distinguished Lecturer award in 2011. Dr. Chang received her B.S.E. in Civil Engineering from Princeton University and M.S. and Ph.D. in Regional Science from Cornell University.