



Vancouver, Canada

May 31 – June 3, 2017/ *Mai 31 – Juin 3, 2017*

Presentation Schedule for the General Conference

Technical Program co-Chairs

Scheduling the paper presentations:

Markus R. Dann

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Scheduling the session chairs (moderators):

Gord Lovegrove P.Eng., M.B.A., Ph.D., FITE, MCSCE, MASCE

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Wednesday, May 31, 2017

Topic: Infrastructure management and renewal

Time: 13:00 – 14:30

Room: Oak 1

Chair: Gary St Michel

GEN-102	Decision-making framework for integrated asset management <i>Abu-Samra, S. A., Mohammed, A. and Zayed, T.</i>
GEN-099	Unleashing the cost savings of optimized road asset management to municipalities <i>Rashedi, R., Maher, M., Roberts, N. and Konarski K.</i>
GEN-038	Renewable energy technology selection for community energy systems: A case study for British Columbia <i>Karunathilake, H., Hewage, K. and Sadiq, R.</i>
GEN-156	A Case study on improving standardization in the conception phase by developing tools and protocols <i>Michaud M., Forgues, D. and Ouellet-Plamondon, C.</i>

Topic: Bridges

Time: 15:00 – 16:30

Room: Stanley Park Ballroom 2

Chair: Roozbeh Rashedi

GEN-005	Bridge engineering and construction with ultra-high performance concrete <i>White, P.</i>
GEN-064	A Landmark cable-stayed bridge along with alternative designs for a two-span bridge in urban area <i>Jabr R., Bou Doumit, P., Agaybi M., Shafiei, R., Riad, M., S. Salib and K. Sennah</i>
GEN-239	Case study on the design and construction of Deltaport Causeway overpass <i>Culpan, S. and Jiang., J.</i>
GEN-240	The use of orthotropic steel deck for short span movable bridges <i>Lévesque, É., Ampleman, M. and Raff, B.</i>
GEN-241	Philip Avenue Overpass Project <i>Banerjee, A. and Aiouch, R.</i>

Topic: Infrastructure management and renewal

Time: 15:00 – 16:30

Room: Oak 1

Chair: Soliman Abu-Samra

GEN-128	Resilient infrastructure planning - Risk-based analysis procedure <i>St Michel, G., Reggin, A. and Leung, A.</i>
GEN-058	Designing buildings for post-disaster resilience with thermos-active radiant air conditioning system <i>Laken, J. and Burak, R.</i>
GEN-057	Improving disaster resilience of power distribution network using photogrammetry technology <i>Safa, M., Hwang, S. and Tokqoz, B.</i>
GEN-221	Surviving the earthquakes of New Zealand - How advanced composite retrofit techniques provided resilient infrastructure <i>Arnold, S.</i>
GEN-059	APEGBC Professional Practice Guidelines – Developing climate change resilient designs for highway infrastructure in British Columbia (Interim) <i>Radhakrishnan, H., Zachary, G. and MacLatchy, M.</i>

Thursday, June 1, 2017

Topic: Infrastructure management and renewal

Time: 9:30 – 10:30

Room: Stanley Park Ballroom 2

Chair: Alan Perks

GEN-091	Comprehensive sustainability assessment of water and wastewater infrastructure systems <i>Mohammadifardi, H., Knight, Mark A. and Unger, A.</i>
GEN-236	Climate change vulnerability and risk assessment of Akwesasne water and waste water infrastructure <i>Félio, G., Lickers, E., Lickers, H. and Benedict, J.</i>
GEN-145	The role of coastal engineering and innovation for sustainable adaption of our coastal defence against sea level rise <i>Readshaw, J., Lamont, G., Lim, S., St-Germain, P. and Wilson, J.</i>
GEN-056	Sustainability solutions to underground dry utilities for infrastructure projects <i>Shamon, W. P. and Kornblum, D.</i>

Topic: Infrastructure management and renewal

Time: 9:30 – 10:30

Room: Coquitlam

Chair: Mike Mustafa Berber

GEN-070	Stadium Vibration Assessment for Serviceability Considering the Vibration Duration <i>Do, T. N., Gül, M., Abdeljaber, O., and Avcı, O.</i>
GEN-014	A proactive approach to pipeline management: City of Vancouver case study <i>Hebner, J. , Garaci, M. and Hildebrandt, B.</i>
GEN-055	Pump Stations Condition Assessment and Rehabilitation Plan in Edmonton <i>Lodewyk, S., Kurac, L. and Wang, H.</i>
GEN-080	A sensor clustering based damage detection framework for structural health monitoring of railway bridges using bridge acceleration response <i>Md Riasat, A. and Gül, M.</i>

Topic: History

Time: 9:30 – 10:30

Room: Cyprus 2

Chair:

GEN-051	Crystal to Iqaluit – 75 Years of Planning Engineering and Building <i>Johnson, K.</i>
GEN-052	Ode to the Road – the Alaska Highway at 75 Years Old <i>Johnson, K.</i>
	Mosquito Creek Bridge <i>Murray, R.</i>
	Wind Wizard <i>Roberts, S.</i>

Topic: History
 Time: 11:00 – 12:00
 Room: Cyprus 2
 Chair:

	Two Canadian Civil Engineers in World War 1 <i>Wright, P.</i>
GEN-233	Civil Engineers and Canada's Sesquicentennial - Building Canada's infrastructure for more than 150 years <i>MacKenzie, A.</i>
	Tragedy of Second Narrows <i>Jamieson, E.</i>
GEN-024	The uOttawa Capstone experience <i>Perks, A. R., Rennie, C. and Dimitrova, R.</i>

Topic: Sustainable Development
 Time: 16:00 – 17:30
 Room: Stanley Park Ballroom 2
 Chair: Stephanie Dalo

GEN-199	Engineering Sustainable Communities <i>Dalo, S., Pucchio, J. and Lovegrove, G.</i>
GEN-085	Innovative solution for sustainable road construction <i>Norouzi, M., Pokharel, S., Breault, M. and Breault, D.</i>
GEN-071	System dynamics model for the valuation real options in public-private partnerships <i>Fitch, G. J., Odeh, I. and Kautz, F.</i>
GEN-151	Early adopters: Their journey towards designing sustainable infrastructure using the Envision Rating System <i>Swanepoel, L., Radu, C., Costanzo, R. and Dunford, E.</i>
GEN-245	Sharing the experience of exploring Envision: A Case Study of The North East False Creek Project <i>Grover, R. and Pate, M.</i>

Friday, June 2, 2017

Topic: Hydrotechnical Session

Time: 09:00 – 10:30

Room: Stanley Park Ballroom 1

Chair: Jeremy Enarson

GEN-184	A stochastic modeling approach for risk management of water resources systems <i>Li, Z., Baetz, B. and Ghaith, M.</i>
GEN-090	Mitigation of erosion impacts from 30 Avenue storm sewer overflow to Whitemud Creek <i>Jones, C. R., Aryal, A., Robertson, C. B., Yaremko, E., Rajaratnam, N. and Tippett, G.</i>
GEN-042	Response of stream temperature to precipitation (a case study of the Chestnut Branch, New Jersey, United States) <i>Amponsah A. and Daraio, J. A.</i>
GEN-114	Groundwater vulnerability assessment using GIS based modified DRASTIC model in agriculture areas <i>Gheisari, N., Sartaj, M. and Daneshfar, B.</i>
GEN-054	<i>Kimmirut, Nunavut - Wastewater planning study</i> <i>Johnson, K. and Ali, S.</i>

Topic: Structures

Time: 09:00 – 10:30

Room: Cowichan

Chair: Fletcher Griffis

GEN-025	Three important wind-resistant design lessons from two visits to areas devastated by one super typhoon <i>Aquino, R. E. and Tamura, Y.</i>
GEN-133	Residual capacity of blast-damaged reinforced concrete columns <i>Kwaffo, I. and Braimah, A.</i>
GEN-227	Shelter in place design for toxic and flammable hazards <i>Anay, R.</i>
GEN-187	Impact load effects on corroded reinforced concrete beams <i>Muralidharan, J. S., Braimah, A. and Burkan, I.</i>
GEN-237	Structural upgrade of deficient steel structure using an integrated reliability-based approach <i>Rajic, M., Oudah, F., Polujan, P., Norlander, G., Bagga, J., Paunovic, Z. and Chen, J.</i>

Topic: Seismic Analysis and Assessment

Time: 09:00 – 10:30

Room: Chehalis

Chair: Lawrence Arcand

GEN-095	Seismic displacement demand estimation for fragility assessment of reinforced concrete frame buildings <i>Abo-El-Ezz, A., Nollet, M.-J. and Limousin, G.</i>
GEN-015	Sensitivity of transmission line towers to seismic effects <i>De Macedo, R. and Tirca, L.</i>
GEN-026	Seismic assessment of stone masonry building using the equivalent frame model <i>Hasan A., Lucia T. and Ashutosh, B.</i>
GEN-098	Assessment of post-earthquake functionality of acceleration-sensitive systems in hospitals <i>Abo-El-Ezz, A., Youance, S., Nollet, M.-J., McClure, G. and Assi, R.</i>

Topic: Sustainable Transportation

Time: 09:00 – 10:30

Room: Oak 1

Chair: Esraa Jamal

GEN-013	A method to estimate turn movement percentages using approach volumes and intersection characteristics <i>Van Hout, A. and Machemehl, R.</i>
GEN-019	Proposed passing collision warning system for two-lane highways <i>Hassein, U., Diachuk, M. and Easa, S.</i>
GEN-177	Vehicle dynamics-based circulatory width of single-lane roundabout <i>Diachuk, M. and Easa, S.</i>
GEN-131	Dynamic Artificial Neural Network to Improve Road Safety Studies <i>Faghihi, F. and Lovegrove, G.</i>
GEN-069	Low impact development practices for stormwater management for road reconstructions in Southern Ontario <i>Senior, M., Scheckenberger, R., Smith, N. and Stahl, J.</i>

Topic: Sustainable Development

Time: 11:00 – 12:00

Room: Stanley Park Ballroom 1

Chair: Isaac Kwaffo

GEN-180	Adaptation platform infrastructure and buildings working group - Canadian infrastructure and buildings adaptation state of play project <i>Nimmrichter, P., Zimmer, C., Tariq, A., Sandink, D., Kovacs, P. and Lapp, D.</i>
GEN-097	Risk assessment of sustainable buildings to improve energy performance: A review <i>Motaleb, O.</i>
GEN-203	Regenerative approach to building energy retrofit project development and construction <i>Safari, M., Riley, D., Asadi, S. and Shulock, L.</i>
GEN-204	Mapping potential of wind energy in New York City <i>Gholitabar, S. and Griffis, F. H.</i>

Topic: Sustainable Transportation

Time: 11:00 – 12:00

Room: Cowichan

Chair: Said Easa

GEN-155	Transportation Association of Canada's new document - Guideline for the coordination of utility relocation of utilities <i>Wainer, O. and Arcand, L.</i>
GEN-124	Extended decision making framework for sustainable pavement management <i>Zheng, X., Easa, S. and Ji, T.</i>
GEN-171	Conceptual design for a mechanistic rule based system for highway pavement integrity assessment <i>Mubaraki, M.</i>
GEN-137	Implementing performance-based analysis in supply chain management <i>Elgharably, N., Easa, S. and El-Damatty, A.</i>

Topic: Sustainable Development

Time: 11:00 – 12:00

Room: Chehalis

Chair: Zoe Li

GEN-118	Earl Bales Park stormwater management facility and water supply system <i>Van Haren, S.</i>
GEN-122	Hard and soft solutions for stormwater management <i>Battista, Y. and Kenny, G.</i>
GEN-219	Efficacy of an extensive green roof in combination with storage in runoff management from storms of varying intensities <i>Paudel, B., Seth, R. and Carpenter, D.</i>
GEN-228	Planning for and responding to water shortages using simple, in-house computer models - City of Camrose <i>Enarson, J.</i>

Topic: Sustainable Transportation

Time: 11:00 – 12:00

Room: Oak 1

Chair: Farhad Faghihi

GEN-216	Time-cost-environmental trade-off analysis for business commute systems <i>Abdallah, M., Tawfik, A. and Clevenger, C.</i>
GEN-089	Spatio-parametric rail risk assessment for developments near freight rail <i>Porter, N., Kostelyk, J., Tang, J. and Wolfe, C.</i>
GEN-036	The economic case for metro passenger rail in Kuwait <i>Jamal, E. and Lovegrove, G.</i>
GEN-242	City of Vancouver – Green Fleet Plan <i>Sidwell, A.</i>

Saturday, June 3, 2017

Topic: Other

Time: 09:00 – 10:30

Room: Stanley Park Ballroom 1

Chair: Peter Mikhailenko

GEN-049	Exploring fusing wearables and mobile technologies to optimize energy demand and occupant comfort <i>Abdallah, M., Clevenger, C. and Vu, T.</i>
GEN-158	A semi-automated approach for detecting building spaces with deteriorating performance using BIM and energy simulation <i>Shalabi, F. and Turkan, Y.</i>
GEN-167	Corporate-level risk analysis for industrial projects <i>Shahtaheri, M., Hanna, M. and Haas, C.</i>
GEN-246	Achieving organizational quality management: A municipal perspective <i>Barroqa, M. L., Doleman, D. and Brodie, J.</i>

Topic: Geotechnical Engineering

Time: 09:00 – 10:30

Room: Stanley Park Ballroom 2

Chair: Kadhim Hawraa

GEN-186	Prediction of impact force-time history in sandy soils <i>Ali, A. F. and Ahmed, B. A.</i>
GEN-127	Considerations for winter construction of mechanically stabilized earth (MSE) walls <i>Rrokaj, E., Vivas, C. and Calatrava, D.</i>
GEN-235	Deployment of a large-area geotechnical monitoring system in an arctic mine <i>Le Borgne, V. and Br��h��, J.-M.</i>
GEN-088	A proposed sandbag housing unit for poor and disadvantaged areas <i>Shaker, A., Medhat, H., Abou-elgheit, M., Nassar, M., Mahmoud, Y., Hamza, A., El Nahas, E., Fathy, A., Fahmy, E. and Abou-Zeid, M.</i>
GEN-211	Comparative study of different methods for noise reduction in the ambient vibration signal of structures for modal identification <i>Sabamehr, A., Khazaeli, S., Mirshafiei, M. and Bagchi, A.</i>

Topic: Materials

Time: 11:00 – 12:00

Room: Stanley Park Ballroom 1

Chair: Moatassem Abdallah

GEN-010	Effect of type and content of warm-mix additives on high-viscosity asphalt <i>Zheng, X., Ji, T., AbdEl Halim, A. O., Jiang, Z. and Easa, S.</i>
GEN-154	A simple doe-based replacement model for Penman's evaporation equation <i>Lye, L. M.</i>
GEN-181	The effect of the silo-storage on the rheological behavior of a surface course asphalt mix containing reclaimed asphalt pavement (RAP) <i>Kadhim, H., Mikhailenko, P., Baaj, H. and Tighe, S.</i>
GEN-123	Using feather fibers as a substitute to synthetic fibers in concrete reinforcement <i>Abdelshafy, A. O., Al-Kholy, O. and Breakah, T.</i>

Topic: Other

Time: 11:00 – 12:00

Room: Stanley Park Ballroom 2

Chair: Mohamed Abou-Zeid

GEN-008	Contribution of GLONASS Satellites to GNSS Solutions <i>Dorsey, M. and Berber, M.</i>
GEN-244	Water Transfer Project from Tajikistan to Iran and Iranian oil and gas from Iran to Tajikistan <i>Yarmand, S.</i>
GEN-030	Stream-flow forecasting using wavelet ensemble neural network models <i>Khalil, B., Elenany, M. and Adamowski, J.</i>
GEN-007	Investigation of ideal time period for kinematic surveys <i>Gil Mendoza, C. and Berber, M.</i>