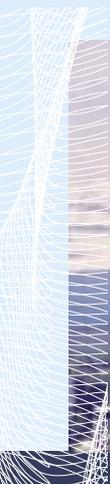


The Canadian Society for Civil Engineering

The society of choice for civil engineers in Canada

La Société canadienne de génie civil

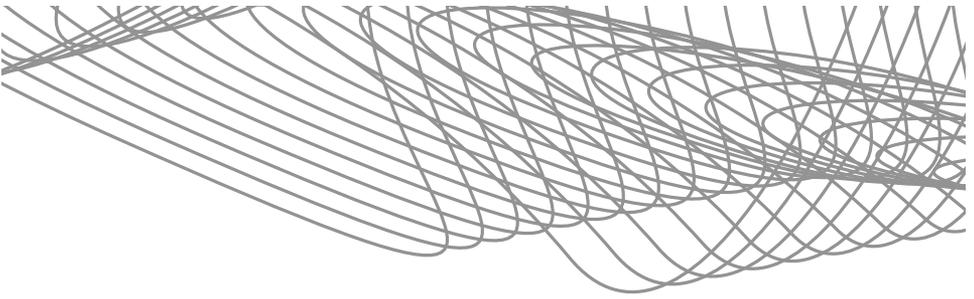
La société de choix pour l'ingénieur civil au Canada



Honours, Awards and Fellowships
Médailles, distinctions
honorifiques et fellowships



2005 | 2006



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The CSCE gratefully acknowledges the generous sponsorship of this Awards Booklet by Group Retirement Services.

La SCGC remercie Group Retirement Services pour sa contribution à la publication de cette brochure sur nos lauréats.

Foreword

The Canadian Society for Civil Engineering has a long standing tradition of recognizing members for their career achievements and for the excellence of their technical papers. This year, thirteen members are distinguished through their election as Fellows and seven are receiving awards for career achievements in their specialty areas of civil engineering. As well, the authors of three technical papers will be receiving awards, one of which, the Sir Casimir Gzowski Medal, is Canada's oldest engineering award.

This booklet summarizes the career achievements of the recipients of the various honours, awards and fellowships, recognizes special contributions to the Canadian Society for Civil Engineering, and lists many of the past winners of awards. On behalf of the Board of Directors and all members of the Society, I extend my heartiest congratulations to all the winners.

Alistair D. MacKenzie, P.Eng., FCSCE
President

Avant-propos

La Société canadienne de génie civil rend hommage une fois de plus à ses membres qui se sont distingués par l'ensemble de leur carrière ou par la qualité de leurs communications techniques. Cette année, treize membres ont été élus au rang de « Fellow » et sept recevront des prix pour leur apport, tout au long de leur carrière, dans des domaines précis du génie civil. De plus, les auteurs de trois communications recevront un prix. Un de ces prix, la médaille Sir Casimir Gzowski, est le prix le plus ancien décerné au Canada dans le domaine du génie.

Cette brochure résume les carrières de nos nouveaux « Fellows » et lauréats, souligne les contributions particulières à la Société canadienne de génie civil, et donne les noms de plusieurs anciens lauréats des divers prix. Au nom du conseil d'administration et de tous les membres de la société, j'offre mes félicitations les plus chaleureuses à tous les récipiendaires.

Alistair D. MacKenzie, ing., FSCGC
Président

Médaille Casimir Gzowski Medal



Kianoosh Hatami and Richard J. Bathurst

As superintendent of public works of the Province of Canada, Colonel Sir Casimir Stanislaus Gzowski (1813–1898) was responsible for improving waterways and canals and constructing roads, harbours and bridges. Later, he was involved in railroad construction and the design and construction of the international bridge at Fort Erie. A founder of the CSCE in 1887, he served as president from 1889 to 1891. Established by Sir Casimir in 1890, the Casimir Gzowski Medal is awarded annually for the best paper on a civil engineering subject in the area of surveying, structural engineering and heavy construction.

The 2005 Casimir Gzowski Medal is awarded to Kianoosh Hatami and Richard J. Bathurst for their paper “Development and verification of a numerical model for the analysis of geosynthetic-reinforced soil segmental walls under working stress conditions”, Canadian Geotechnical Journal, Volume 42, No. 4, pp. 1066–1085.



Abstract: The paper describes a numerical model that was developed to simulate the response of three instrumented, full-scale, geosynthetic-reinforced soil walls under working stress conditions. The walls were constructed with a fascia column of solid modular concrete units and clean, uniform sand backfill on a rigid foundation. The soil reinforcement comprised different arrangements of a weak biaxial polypropylene geogrid reinforcement material. The properties of backfill material, the method of construction, the wall geometry, and the boundary conditions were otherwise nominally the same for each structure. The performance of the test walls up to the end of construction was simulated with the finite-difference-based Fast Lagrangian Analysis of Continua (FLAC) program. The paper describes FLAC program implementation, material properties, constitutive models for component materials, and predicted results for the model walls. The results predicted with the use of nonlinear elastic-plastic models for the backfill soil and reinforcement layers are shown to be in good agreement with measured toe boundary forces, vertical foundation pressures, facing displacements, connection loads, and reinforcement strains. Numerical results using a linear elastic-plastic model for the soil also gave good agreement with measured wall displacements and boundary toe forces but gave a poorer prediction of the distribution of strain in the reinforcement layers.

Honourable Mention

The Honourable Mention is awarded to Jean Côté and Jean-Marie Konrad for their paper “Thermal conductivity of base-course materials”, Canadian Geotechnical Journal, Volume 42, No. 1, pp. 61–78.

