

The 2003 John Adjeleian Lecture

The 2003 John Adjeleian Lecture, titled “**Reflections on 40 Years of Bridge Engineering**” will be delivered by **Dr. Roger A. Dorton**, C.M., Ph.D., DSc, FCAE, P.Eng. Bridge Engineer, Buckland and Taylor, Vancouver, B.C., Former Head Bridge Engineer, Ontario Ministry of Transportation on March 26, 2003 p.m. in the Senate Room, 6th Floor, Robertson Hall (RO).

“Reflections on 40 Years of Bridge Engineering”

Roger A. Dorton

Dr. Roger Dorton is currently a consultant with Buckland and Taylor Ltd., a Vancouver firm that provides specialized bridge engineering services to clients worldwide. He received his civil engineering degree from the University of Nottingham in 1951. From the same university, he received his Ph.D. in 1954 for his research on suspension bridges. He then entered the industry and was responsible for the innovative designs of several major sea way bridges with spans greater than 210m; one such bridge is the Champlain Bridge in Montreal. He has also been responsible for the design of a number of landmark bridges. For example, the A. Murray MacKay Suspension bridge in Halifax was the first suspension bridge in North America to use an orthotropic steel deck design. However, Dr. Dorton is most renowned for his work in the Ministry of Transportation of Ontario (MOT), where he worked from 1972 to 1993. During this time he worked his way from a Principal research Officer to the Chief Bridge Engineer (the manager of the ministry’s Structural office, now known as the Bridge Office). He was responsible for the design of such structures as the Twelve Mile Creek/Hwy 406 bridges to St. Catharine (2 continuous precast segmental concrete bridges), the Burlington Bay Skyway twinning project and the Hwy 400/407 Interchange (four levels of prestressed concrete bridges). These amazing structures, however, are not his claim to fame. During his time at the MOT he was a pioneer in bringing limit state philosophy to bridge design and played a pivotal figure in the development of the Ontario Highway Bridge Design Code (OHBDC), a world class document that is being used as a model for national bridge codes around the world (including the US, Australia and New Zealand). He continues to improve Canada’s highway infrastructure through his consulting work.

He has many prestigious awards, the highest being the Member of the Order of Canada in 2004 in recognition of his unique contribution in the field of bridge engineering. He is described in this award as follows:

One of Canada’s most distinguished civil engineers, Roger Dorton is renowned for his expertise in bridge design. Throughout his career, he has been involved in the design and refit of many famed Canadian bridges, including the A. Murray MacKay Suspension Bridge in Halifax and the Champlain Bridge in Montreal. While working at the Ontario Ministry of transportation, he was instrumental in introducing the first performance-based bridge code. Currently a sought-after consultant, he continues to improve Canada’s civil infrastructure.

He has also received awards from the Canadian Society for Civil Engineering (2002 Award for Outstanding Contributions to Bridge Engineering), the American Association of State Highway and Transportation Officials, the Association of Consulting Engineers of Canada and the Association of Professional Engineers. He holds honorary doctorate degrees from Queen’s University and the University of Waterloo. He is also a fellow of the Canadian Society for Civil Engineering, the American Concrete Institute, the Engineering Institute of Canada and the Canadian Academy of Engineering.