

June 2014

C U R R I C U L U M V I T A E

Bengt H. Fellenius

Dr. Bengt H. Fellenius is a professional engineer specializing in foundation design and studies by participation in project teams, special investigations, instrumented field tests, etc. Services are also provided in regard to construction problems, claims, and litigation in collaboration with Consultants and Contractors, as well as Owners.

Dr. Fellenius, Professor of Civil Engineering at the University of Ottawa from 1979 through 1998, is an internationally recognized authority in the field of soil mechanics and foundation engineering, and, in particular, in deep foundations. He has gained a wealth of practical experience during more than 50 years of work at home and overseas through a variety of assignments that encompass foundation, embankment, and soil improvement design for water and sewage treatment plants, industrial plants, as well as bridges, highway, and airport projects, and marine structures and urban area development projects; some of which he has written up in 300+ technical journal and conference papers, articles, books, and book chapters. Copies of many of the papers are available for downloading from Dr. Fellenius' web site: [www.Fellenius.net]

Dr. Fellenius moved from his native Sweden to Canada in 1972 where he worked on foundation investigations and design and construction projects in North America and overseas. In 1973, he was one of the first to apply geotextile soil separation sheets to stabilize roadbeds and construction surfaces, investigating conventional carpet underlay (Celanese) for this purpose. He was active in promoting to the US market the splicing of prestressed concrete piles by means of mechanical full-strength splices, and he introduced to Canada and the USA ground improvement applications of lime column method for reducing soil compressibility and wick drains (the Geodrain and Alidrain) for accelerating consolidation and stabilizing landslides. He was one of the earliest (1977) to research and use dynamic testing and the Pile Driving Analyzer in actual project design and construction.

In 1984 he introduced the Janbu method of determining soil compressibility and analysis of settlement. He has also had a fundamental part of the development of commercial software for analysis of settlement from loads on natural soils and soils subjected to soil improvement methods, design of piled foundations, and other software. In 1984, he published the design and analysis method for foundation design known as the "Unified Method of Design for Capacity, Drag Load, Settlement, and Downdrag".

Dr. Fellenius is and has been an active participant in many national and international professional societies and research associations and in Canadian and US Codes and Standards Development. For example, Member of the subcommittee for the American Society for Testing and Materials D-4945 Standard for High-Strain Dynamic Testing of Piles; Chairman of the Canadian Geotechnical Society, CGS, Technical Committee on Foundations writing the 1985 Canadian Foundation Engineering Manual; Member of the Ministry of Transportation Committee for the Development of the 1983 and 1992 Ontario Bridge Design Code; Author of three Public Works Canada publications: Marine Division Master Specifications for Piling, Pile Design Guidelines, and Hammer Selection Guide; Past Overseas Correspondent Member to the Geotechnical Engineering Advisory Panel of the Institution of Civil Engineers, ICE (London); and Past Member of Editorial Board for the ASCE Geotechnical Engineering Journal.

Dr. Fellenius has given lectures and courses to several universities and been invited lecturer at international conferences throughout Europe, the Americas, and South-east Asia.

EDUCATION

1955 – 57 Swedish Army Service
 1962 M.Sc., Civil Engineering, Royal Institute of Technology, Stockholm
 1972 Doctor of Technology, Soil Mechanics and Foundation Engineering,
 Royal Institute of Technology, Stockholm

PROFESSIONAL ACTIVITIES

Canadian Geotechnical Society,

Past Chairman of the CGS Technical Committee on Foundations (1983-1985); Past Chairman of CGS Northern and Eastern Ontario Section (1982-1985; Past Chairman of CGS Montreal and Western Quebec Section (1974-1977); Canadian representative of International Geotechnical Society Committee on Drivability Penetrability of Piles (1985-1989); Chairman of the Third International Conference on the Application of Stress-Wave Theory to Piles, in Ottawa 1988.

Ministry of Transportation and Communications, Ontario,

Member of the Committee appointed to develop the 1983 and 1992 Highway Bridge Design Code

Deep Foundations Institute,

Charter Member; Past Board Member; Past Technical Editor of the DFI Journal (1977-1983); Member of the Technical Advisory Committee (2001 - to date)

Royal Swedish Academy of Engineering Sciences,

Member of the Commission on Pile Research (1973 to date)

Peer Referee of Papers

Canadian Geotechnical Journal
 Canadian Journal of Civil Engineering
 ASCE Journal of the Geotechnical Engineering Division; ASCE GeoInstitute
 ASTM Geotechnical Testing Journal
 U.S. Transportation Research Board, Records
 Deep Foundation Institute Journal
 Geotechnique, UK
 Proceedings of the Institution of Civil Engineers, Geotechnical Engineering Journal
 Journal of Applied Mathematics, Korea
 Scientia Iranica, Iran

PROFESSIONAL ASSOCIATION REGISTRATION AND MEMBERSHIPS

Canadian Geotechnical Society and Engineering Institute of Canada
 Association of Professional Engineers of Alberta, APEGGA
 American Society of Civil Engineers, ASCE, Life Member
 Deep Foundations Institute, DFI
 Swedish Commission on Pile Research
 Swedish Geotechnical Society, SGF, Honorary Member

AWARDS

John Mitchell Lecturer for the May 2014 DFI-EFFC International Conference on Deep Foundation, Stockholm, Sweden

ASCE Georgia Section, 2012, Sowers Lecturer at the 15th Annual George F. Sowers Symposium, Atlanta, GA

Swedish Geotechnical Society, 2012, Awarded honorary membership

The American Society of Civil Engineers, the GeoInstitute, 2012
Geotechnical Special Publication Honoring Bengt H. Fellenius "Role of Full-Scale Testing in Foundation Design"

The Deep Foundations Institute, 2010, Osterberg Lecturer at the 2nd Annual Osterberg Memorial Lecture and Dinner, Boston, MA

The Engineering Institute of Canada, 2002
Conferred the Distinction of Fellow in "Recognition of Excellence In Engineering and for Services to the Profession and to Society"

American Society of Civil Engineers, ASCE, 2002
Designation as Life Member

Canadian Geotechnical Society, 1997
The G. Geoffrey Meyerhof Award "for Outstanding and Significant Contributions to the Art and Science of Foundation Engineering"

Deep Foundation Institute, 1993
The Distinguished Services Award "for Exceptionally Valuable Contributions to the State-of-the-Art in Deep Foundations"

American Society for Testing and Materials, 1990
Award "for Service in Standards Development"

Canadian Geotechnical Society, 1985
Plaque "for Services to the Canadian Geotechnical Community"

Canadian Geotechnical Society
Trans Canada Lecturer for 1985/1986

EXPERIENCE

1977 - 2009 **Bengt Fellenius Consultants Inc.**

President. Bengt Fellenius Consultants Inc. provides geotechnical engineering consulting services

1990 - 2009 **UniSoft Ltd.**

President. UniSoft Ltd. specializes in software development for foundation design and analysis

1979 - 1998 **University of Ottawa**

Professor of Civil Engineering, Specialty: Foundation Engineering

1995 - 2002 **Urkkada Technology Ltd., Ottawa**

Principal. Urkkada Technology Ltd. is a dynamic testing company

1985 - 1994 **Anna Geodynamics Inc, Ottawa**

Principal. Anna Geodynamics Inc. is a company specializing in foundation testing and analysis

1973 - 1981 **Burcan Industries Ltd, Toronto**

Principal. Burcan Industries is a company specializing in ground improvement techniques

1973 - 1977 Terratech Ltd., Montreal

Supervising Engineer, and special consultant for foundation studies. Terratech Ltd., a division of Lavallin-SNC, specializes in geotechnical consulting

1972 - 1973 The Engineering Group of Agra Industries, Montreal

Western Caisson Ltd., Montreal, and Torchinsky Consulting Ltd., Saskatoon. Special Consultant

1965 - 1972 Swedish Geotechnical Institute, Stockholm

Research work in the field of deep foundations and consulting work dealing with foundation problems in connection with industrial and town area planning, roads, bridges, and slope stability

1966 - 1971 Royal Institute of Technology, Stockholm

Assistant Teacher at the Civil Engineering Department

1966 - 1971 Royal Swedish Academy of Engineering Sciences

Technical Secretary to the Commission on Pile Research

1963 - 1965 Scandiaconsult, Stockholm

Geotechnical Engineer. General consulting work with particular reference to planning for industrial and urban development

1962 - 1963 Swedish National Railways, Structural Division

Bridge Engineer. Structural design of concrete and steel bridges