

Curriculum Vitae

O.Univ.Prof.Dipl.-Ing.Dr.techn.Dr.h.c.mult. Heinz BRANDL

**President of the Austrian Society of Engineers and Architects (ÖIAV)
Vienna University of Technology (Vienna Technical University)**

Heinz Brandl was born on 29.06.1940 in Znaim (now Znojmo, Czech Republic). He graduated 1963 in Civil Engineering with a M.Sc. (Dipl.-Ing.) from the Technical University in Vienna, from where he also obtained the degree of Dr.techn. in Geotechnical Engineering with honours (summa cum laude) in 1966. From 1963 to 1966 he was Assistant at the Institute for Ground Engineering and Soil Mechanics at the Vienna Technical University, then Assistant Professor and Head of the Soil Mechanics Laboratory. In 1971 he was appointed Associate Professor (with habilitation) but left the University to pursue comprehensive practice and applied research as a freelance consulting engineer on various construction sites in Austria and abroad.

In 1977 H. Brandl was appointed Full Professor for Soil and Rock Mechanics and Foundation Engineering (including Tunnelling) at the Technical University of Graz. From 1978 to 1981 he was Head of the Geotechnical Institute in Graz, and since 01.03.1981 he has been Full Professor at the Technical University of Vienna chairing until 01.10.2008 the prestigious Institute for Soil Mechanics and Geotechnical Engineering, which was founded by Professor Karl Terzaghi in 1928.

Professor Brandl's creative work comprises about 500 scientific publications (including 21 books), some published in 18 languages. The subjects cover laboratory and field testing, soil and rock mechanics, foundation engineering, slope engineering, earthworks, tunnelling, urban undergrounds, restoration of historical buildings, road and railway engineering, hydro/hydraulic engineering and environmental engineering (landfills, brownfield remediation), geosynthetics, geothermal engineering ("energy foundations", "energy tunnels" etc.), natural disaster mitigation and rehabilitation, etc. He also published on philosophical aspects and on ethics in the profession (e.g. at the 1st International Conference on Geotechnical Engineering Education and Training in Sinaia 2000; in Canada, Germany, Russia, USA, etc.).

Numerous other publications include critical review papers, conference reports, editorials and popular science articles.

From the very outset of his professional work H. Brandl has been bridging the gap between theory and practice. He has been fully responsible for around 4000 projects of civil engineering, geotechnical and environmental engineering in Austria and elsewhere: e.g. retaining structures up to 70 m height, high motorway embankments (up to 135 m in Austria and Greece), risky slope stabilizations, bridges in unstable terrain, all Danube Bridges in Austria since 1976, Beska Danube Bridge in Serbia (2009), highways and high-speed railways, deep soil improvements, high-rise structures (e.g. Highland Towers in Kuala Lumpur, Millennium Tower in Vienna), waste disposal facilities, contaminated land rehabilitation, power plants, industrial buildings and buildings under difficult conditions (soft ground, seismic areas, areas of subsidence), flood protection, rockfall and avalanche protection, etc.

By creating a semi-empirical design method and taking calculated risks (contrary to dubious "Geopoker"), he achieved not only significant cost savings but could also

combine his engineering activities with many opportunities for comprehensive research work leading to numerous theoretical and practical innovations.

His innovations in geothermal geotechnics are an important contribution to environmental protection. For instance, all new Metro stations of Vienna are equipped with geothermal heating and cooling, which is not only environmentally friendly but also cost saving.

His practical experience comprises soil and rock investigations, general and detailed planning, design and calculation, construction work, engineering consulting, construction management and control, overall supervision, long-term monitoring and remedial works. This synergy between science and practice has significantly fostered basic research, innovations and applied sciences.

Professor Brandl has been active world-wide since 1968 as chairman, general reporter, state-of-the-art reporter, special lecturer, keynote lecturer, discussion leader and panellist at numerous international conferences on soil and rock mechanics, ground engineering, road and bridge engineering, environmental engineering, geosynthetics, etc. Up to now he delivered about 500 different invited lectures worldwide, covering the entire professional field.

Professor Brandl was First Vice-President of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) for the period 1997-2001. Since 1972 he has been Chairman of the Austrian Society for Soil Mechanics and Geotechnical Engineering. Furthermore he has been chairman and board or core member of numerous national and international technical committees for geotechnical engineering, road and transportation research, waste management and land remediation, hydropower, flood protection, natural disaster mitigation and rehabilitation, geosynthetics, and preservation/restoration of old buildings, etc. since the Seventies.

He has also been a member of advisory boards, scientific committees and paper review committees of numerous international conferences worldwide, and a member of editorial boards and peer review committees of international scientific journals.

H. Brandl has been the strongest promoter of the Danube-European Conferences for Soil Mechanics and Geotechnical Engineering since their beginning in Vienna, 1964.

Until now his international activities have covered 92 countries on all continents.

In 1992 Professor Brandl was appointed foreign member of the Royal Academy of Sciences of Belgium, and since 1997 he has been member of the New York Academy of Sciences. He received numerous national and international awards, five honorary doctorates and other honours (e.g. Austrian Cross of Honour 1st Class for Science and Arts; Honorary Professor of the State's University Perm/Russia).

He was the Rankine Lecturer of the year 2001 (London) and the Manuel Rocha Lecturer of the year 2008 (Lisbon). Moreover he was the first K. Széchy Lecturer in Hungary (1994), the first E. Nonveiller Lecturer in Croatia (2000), the L. Suklje Lecturer in Slovenia (2003), etc., and he created the prestigious "Vienna Terzaghi Lecture". The IGS (International Geosynthetics Society) appointed him Giroud Lecturer for the International Geosynthetics Conference (taking place in four years intervals) in 2010, Brazil.

Since June 2003 Prof. Brandl has been President of the Austrian Society of Engineers and Architects, which was founded already in 1848 and has been the "umbrella" organisation of Austria's Engineers and Architects since.