



Civil Engineer, M.Sc., Ph.D. (Dr.Techn.Science, Suma cum Laude), Licensed Masterbuilder, Government Counsellor, appointed by President of Austrian Republic, Chartered Expert at Court, Consultant to the World Bank.

An international well-recognized Consultant for Underground Infrastructures with more than 40 years of Professional Experience in Tunnel Design, Construction and Consultancy. Consultant to the World Bank for more than 15 years.

A former Assistant Professor at Technical University Graz in Austria on Soil Mechanics & Foundation Engineering for Architects, a Vice President of ITA (International Tunnelling and Underground Space Association). An Expert Member of ITA's Executive Council, who has worked throughout his career as a designer and consultant in more than 35 countries around the world.

Professional Highlights

- 1985 Founder and Chairman of Consulting Company with focus on Underground Structures in Research/Development /Design & Engineering.
- 1986 Designed of WMATA's Fort Totten Station. First mined soft ground Metro Station on North American Continent using Conventional Tunnelling Method (NATM).
- 1987 Designed Dowelled Precast Concrete Segments for Railway TBM Tunnel Passante Milano, Italy.
- 1988 Designed 4 NATM Metro Stations for Los Angeles Metro under Hollywood Boulevard, California, USA.
- 1988 Start of Izmir Ringroad-Aydin Motorway Project Construction Supervision for KGM, Turkey.
- 1989 Designed first Universal Concrete Segments for Boston Outfall TBM Tunnel with Controlled Kinematic, Boston, Massachusetts, USA.
- 1991 Designed Buenavista Tunnel in Colombia, longest Highway Tunnel in Latin America (using NATM).
- 1993 Designed 92km WYRDPC Wanjiazhai Yellow River Hydro TBM Tunnels, Shanxi Province, PR of China.
- 1995 Transformed Consulting Company into Partnership, with focus on Design, Engineering & Project Management.
- 1997 Underground Infrastructure Consultancies, Transportation (Railways, Roads), Mass Rapid Transit Systems, Hydro Power Structures, etc.
- 2009 Terminated his Partnership in the Consulting Company to become an Independent Consulting Engineer specialized in Global Underground Infrastructures.

Achievements

2002- 2007 Acting Vice President of ITA, Tutor of Working Group 2 "Research". Contributed to the completion of "Guidelines for the Design of Tunnel Lining Segments", "Risk Management Guidelines", Report on "Long Tunnels at Great Depth", Report on "Conventional Tunnelling", etc.

2007 - date Expert and Special Advisor to the Executive Council of ITA-AITES Lausanne. Work for ITA CET includes initiative and concept development for Short Course on "Tunnel Design", and Short Course on "Advanced Application of Soft Ware in Tunnelling".

Published and edited "TBM Tunnelling Trends" (1996), "Tunnels for Tomorrow, in Rock, Soil and Water" (2006), together with more than 150 scientific papers and made more than 300 presentations on every aspect of Underground Structures. He is also a Member of the Editorial Board of TUST (Tunnels and Underground Space Technology).

Lectured at Universities in Austria (TU Graz and Vienna), Italy (Politecnico Torino), Colombia (Javeriana, Universidad de los Andes, Bogota), Germany (TU Dresden, Braunschweig), USA (Austin, Texas), Thailand (KMITL), etc.

Professional Awards

- Austrian Federal President (Baurat h.c.) for Advancement in Austrian Tunnelling
- Awards for Experts in both Conventional and TBM Tunnelling
- Russian Tunnelling Association
- Egyptian Tunnelling Society
- Korean Tunnelling Association
- Independent Power Producers Association of Nepal
- International Road Federation
- Ministry of Transport, Kingdom of Saudi Arabia
- Institution of Engineers of Malaysia
- Czech Tunnelling Association
- Engineering Institute of Thailand