



Professor of Underground Construction

The Department of Civil, Environmental and Geomatic Engineering (D-BAUG, www.baug.ethz.ch) at ETH Zurich invites applications for the above-mentioned position.

The new professor is expected to develop a strong international research programme within the areas of underground construction, tunnelling, rock mechanics and geotechnical engineering, with the main focus on understanding, modelling, and developing the fundamentals of mechanics for underground construction. The new professor is expected to deal with significant challenges, which include complex underground structures with demanding boundary conditions (e.g. future underground cities, underground energy storage, geothermal energy, nuclear waste depositories), automation and monitoring in underground construction (mechanisation, interactions between construction processes), ground response to tunnelling and surface settlements, and underground construction in difficult geotechnical and geological conditions, including large rock deformations and pressures, thermo-poro-mechanical and chemical couplings.

The successful candidate is expected to be an established leader in one or more of these areas, ideally combining outstanding academic and industrial/consulting experience. She or he holds a PhD degree in geotechnical engineering or geosciences, with an outstanding research portfolio that combines strengths in numerical and physical modelling, advanced experimental and analytical methods, fully coupled thermo-poro-mechanical and chemical interactions (multi-physics), field monitoring and remote sensing. A strong commitment to teaching at the undergraduate (in German or English) and graduate (in English) level in the Civil Engineering curriculum is expected. Academic achievements should be complemented by the ability to lead a research group and generate external funding. The position will be filled at the full professor level. The professorship is embedded in the Institute of Geotechnical Engineering (IGT) at D-BAUG. IGT comprises four complementary chairs and an independent group, covering a wide range of fields in geotechnical engineering. Switzerland is an outstanding hub for tunnelling and underground construction, with excellent collaboration opportunities within ETH Zurich.

ETH Zurich is an equal opportunity and family-friendly employer, values diversity, and is responsive to the needs of dual-career couples.

Please apply online: www.facultyaffairs.ethz.ch

Applications should include a curriculum vitae, a list of publications and projects, a statement of future research and teaching interests, a description of the leadership philosophy, three key publications, a description of the three most important achievements, and a certificate of the highest degree. The letter of application should be addressed **to the President of ETH Zurich, Prof. Dr. Joël Mesot. The closing date for applications is 30 November 2023.**