Tufts CEE Seminar Series Presents

David Carrier

**Topic:** Please Forget Everything You Ever Learned About Terzaghi Consolidation Theory"
**Friday November 6, 2020 – 12:00pm – Virtual Event**

Dr. Carrier earned his Bachelor’s, Master’s, and Doctorate in geotechnical engineering at MIT many years ago. He has worked on projects in eighteen states, fourteen foreign countries, and two other planets. He is a pioneer in the application of large strain, non-linear consolidation to phosphatic clay, bauxite tailings, copper mill tailings, oil sand fines, dredged material, kaolin fines, heavy mineral tailings, fly ash, FGD fines, phosphogypsum, and alumina red mud. He has more than thirty-five years of experience with mineral slurries, covering field, lab, analysis, and design.

The seminar will attempt to upend Terzaghi consolidation theory. Virtually all of the field and lab analyses that have been done over the last century have been, well, wrong. In particular, the settlement rate is not proportional to H (except a 2t lab-scale); the degree of settlement is not equal to the degree of excess pore pressure dissipation; and the ratio of t90 to t50 is not constant. Terzaghi theory is fundamentally flawed; and should be replaced by large strain, non-linear (LSNL) consolidation theory.