***Some things you must know (and implement) to do great CPTs.***

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On the surface, undertaking a CPT seems straightforward:

1. You buy equipment.
2. You read the supplier’s manual.
3. You follow the manual carefully and push tests.
4. You process data and plot results.
5. Then you assert that the tests were all made to the highest standard

But nothing could be further from the truth. There are many aspects to making such tests properly, and a number of things to manage that, if not managed, might spoil, or even totally trash the results. Not a good outcome for a tester’s client who has high expectations.

The author is of the opinion that, worldwide, a significant percentage of CPT tests are pretty much unsatisfactory for the intended purpose, assuming that the purpose is “high quality data for geotechnical investigation” (etc). And a major problem is that this is not always detectable after the test is made. This is particularly true with tests made in very soft soils, sediments or mine tailings materials.

This presentation is focused on talking about the above matters and will touch on or sometimes deeply explore the following:

1. Current test standards – and are they good enough for all purposes.
2. CPT and CPTu cones - and variations on the norm.
3. Recent developments.
4. Measuring pore pressure – the ”why”, the “how”, the “consequences of stuffing this up”.
5. Calibration – what the standards say vs what the author thinks is proper.
6. Cone temperature, temperature change, and related issues.

The above will not necessarily be presented in the order shown, as much is inter-related and cannot be singled out for a discrete conversation.

The author is known to be a little opinionated in regard to some of these issues and will be prepared to be “blunt” where necessary to express his views clearly.