What metrological traceability is and what it is not!

Traceability **IS a property of a measurement result** that can be related to a reference through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty (1).

The reference must be amongst the following

1. The definition of a SI unit
2. A certified value of a reference material
3. The result of a reference measurement system
4. The value assigned to an international conventional calibrator
5. The values assigned to international harmonization reference materials

It is unfortunately and frequently misunderstood that traceability **IS NOT** traceability to the producer of the reference material used for calibrating measuring systems, to the internal or external quality control samples used in the measurement or to the producer(s) of the reagents and measuring systems used.