

**Measurement and Uncertainty
-Concept and its application-****JongOh Choi**

Korea Research Institute of Standards and Science, Daejeon, South Korea

E-mail address of main author: choijongoh@kriss.re.kr

Based on VIM3 (Vocabulary in metrology 3 ed. BIPM 2007) and GUM (Guide to the uncertainty in measurement, ISO 1993), the concepts of measurement, traceability and uncertainty are discussed. Based on GUM endorsed by 7 International organizations BIPM, IEC, IFCC, ISO, IUPAP, IUPAC, and OIML, uncertainty evaluation is emphasized for the publication of the SRD. It is shown that there are two different views on concept of measurements currently. Uncertainty approach and error approach on the concept of measurement are discussed. Based on the discussion, the documentation based on uncertainty approach is recommended for publication of the SRD. The difference between uncertainty and error, which is used to be confusing for scientist all over the world, is explained and discussed. For the publication of the SRD, the importance of uncertainty evaluation will be acknowledged by participants and is expected to be reflected in their future works.