

Traceability, Quality and Comparability of Chemical Measurements to Support
International Trade

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With world trade at nearly 25 % of the nation's GDP, it is becoming increasingly important for U.S. products and services to be accepted in overseas markets. Technical barriers to trade in the form of traceability and accreditation requirements can be just as effective as tariffs at closing potential markets and stifling competition. These barriers are often based on the apparent differences in physical and chemical measurement results between trading partners. Sometimes barriers exist only to the extent that metrology systems are not traceable to a mutually acceptable common base. Other barriers are erected through directives of mature regional programs that pose present and future technical barriers to trade with many developing markets. There are now systems of metrology and laboratory accreditation to address these issues. To the extent possible, evidence exists upon which confidence in the equivalence of measurements and accreditations can be gained. This talk will outline the common confidence gaining steps used by National Metrology Institutes in the delivery of measurement services and by accrediting bodies in the assessment of laboratories around the world.