

Symposium on Biofuels

Measurements and Standards to Facilitate the Transition to a Global Commodity

Hosted by:
the US National Institute of Standards and Technology (NIST)
and
Brazil's National Institute of Metrology, Standardization and Industrial Quality (INMETRO)



in conjunction with the
11th Annual Green Chemistry & Engineering Conference:
***From Small Steps to Giant Leaps – Breakthrough Innovations
for Sustainability***
Capital Hilton in Washington, DC
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**A Symposium on Biofuels:
Measurements and Standards to Facilitate the Transition
to a Global Commodity**

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Welcome Welcome

A Symposium on Biofuels hosted by the US National Institute of Standards and Technology (NIST) and Brazil's National Institute of Metrology, Standardization and Industrial Quality (INMETRO).

The Biofuels Symposium is held in conjunction with *The 11th Annual Green Chemistry & Engineering Conference*. This conference is an ideal venue for our symposium, since the entire conference focuses on environmentally sound, green alternatives to products and services provided by industries that use chemistry and chemical engineering. The sustainable use of biomass as an industrial feedstock for alternative fuels promises to be a breakthrough “green” technology.

This Symposium is a follow-up to the Workshop held in Rio de Janeiro in September 2006, where we discussed measurements and standards needed to facilitate the transition of biofuels to global commodities. The goal of this NIST-INMETRO hosted Symposium is to bring together key stakeholders from around the world, and provide a venue for open discussion and information exchange on issues of mutual interest as they relate to biofuels. The sessions are structured to present and discuss international perspectives with respect to both biofuels R&D, and associated reference standards and measurement needs.

As you know, research on biofuels is a high priority on the R&D agendas of many countries and regions around the world. Several bilateral and multilateral initiatives have been launched during the last few months, including the US-Brazil Agreement on Biofuels Cooperation, and the UN International Biofuels Forum, signed by the US, Brazil, China, EU, India and South Africa. These activities reflect the importance of biofuels for energy and economic security, and climate change, and the potential to create and open new markets. As the new markets for biofuels emerge, issues around fair trade with associated standards and underpinning measurements also emerge. The planned sessions will address research, measurements as well as standards issues for biofuels as an international commodity.

The success of these discussions depends on experts such as you, sharing your wisdom and insights into this important and pressing topic. Thank you for your participation in this important meeting

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From automated teller machines and atomic clocks to mammograms and semiconductors, innumerable products and services rely in some way on technology, measurement, and standards provided by the National Institute of Standards and Technology.

Founded in 1901, NIST is a non-regulatory federal agency within the U.S. Commerce Department's Technology Administration. NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

NIST carries out its mission in four cooperative programs:

- the NIST Laboratories, conducting research that advances the nation's technology infrastructure and is needed by U.S. industry to continually improve products and services;
- the Baldrige National Quality Program, which promotes performance excellence among U.S. manufacturers, service companies, educational institutions, and health care providers; conducts outreach programs and manages the annual Malcolm Baldrige National Quality Award which recognizes performance excellence and quality achievement;
- the Hollings Manufacturing Extension Partnership, a nationwide network of local centers offering technical and business assistance to smaller manufacturers; and
- the Advanced Technology Program, which accelerates the development of innovative technologies for broad national benefit by co-funding R&D partnerships with the private sector.

Innovation is critical to the future of U.S. competitiveness and for enhancing our quality of life. This is increasingly important as political and technological changes open access to the global economy—producing both new markets and increased competition NIST is well positioned—at the nexus of academia and industry—to help America address this challenge. NIST has a 100-plus-year track record of serving U.S. industry, science, and the public with a mission and approach unlike any other agency of government.

About 2,800 employees—including three Nobel Prize winners—and 1,800 visiting researchers and 1,400 affiliated field agents each year team to make NIST a globally respected source of information and research that drives innovation in business and in the research laboratory. The work done by NIST underlies much of our nation's business and public infrastructure—strengthening US innovation and industrial competitiveness.

<http://www.nist.gov/>



The Instituto Nacional de Metrologia, Normalização e Qualidade Industrial (National Institute of Metrology, Standardization and Industrial Quality - INMETRO) was created by law in December, 1973, to support Brazilian enterprises, to increase their productivity and the quality of goods and services.

Its major task is to improve the quality of life of the ordinary citizen as well as to seek the competitiveness of the economy through metrology and quality.

Some of the duties of INMETRO are:

- to provide technical support to Conmetro - the National Metrology, Standardization and Industrial Quality Council, responsible for establishing the national policies on metrology and quality;
- to implement the national policies on metrology and quality set by Conmetro;
- to maintain the national measurement standards in the country; to establish and maintain their metrological traceability to the units of the International System of Units (SI), by participating in international or regional comparisons establishing their equivalence to internationally accepted standards and or to standards of other countries; to extend the traceability chain to the standards of measurement in the country, turning them internally harmonic and compatible with the international level, envisaging its worldwide acceptance, all of them necessary to assure the quality of goods and services;
- to coordinate the compulsory and voluntary certification of products, processes, services and the voluntary certification of personnel;
- to plan and carry out the activities of accreditation of calibration and testing labs, of proficiency test suppliers, of certification bodies, of inspection, drilling and others, all of which are necessary for the development of the infrastructure of technological services in the country;
- to manage the Focal Point for Technical Barriers to Trade, responsible for the Brazilian WTO/TBT Enquiry Point, for providing Brazilian exporters with information on technical requirements, as well as supporting the Brazilian government in all international negotiations on technical barriers to trade;
- to harbor the use of the management technique of quality by the Brazilian enterprises;
- to foster the presence of Brazil in the international activities related to metrology and quality, plus promoting the interchange with and international bodies.

Legal Metrology

INMETRO works to ensure fair trade and to protect consumers from being deceived by inaccurate measurements the mandatory control of measuring instruments through verification has been imposed by the governs across the centuries. It is considered the vulnerability of the consumer in the market in many consumers defense codes, which prescribe the govern action aiming effectively to protect the consumer assuring products and services with adequate standards of quality, security, durability and performance.

<http://www.inmetro.gov.br>