

**SPEECH BY MR S ISWARAN, SENIOR MINISTER OF STATE
FOR TRADE & INDUSTRY AND EDUCATION, AT THE
OFFICIAL OPENING OF THE CCQM SYMPOSIUM ON
WEDNESDAY, 3 NOVEMBER 2010, 0900 HRS AT ORCHARD
HOTEL**

Dr Robert Kaarls, Secretary, International Committee for Weights and Measures (CIPM) and President, Consultative Committee for Amount of Substance – Metrology in Chemistry (CCQM)

CCQM Working Group Chairs

Distinguished Guests

Ladies and Gentlemen,

Introduction

1 Good morning. I am pleased to join you this morning for the official opening of the CCQM Symposium. I would like to extend a warm welcome to all participants, including our overseas guests, and wish you an enjoyable stay in Singapore. I understand that there are seven working groups under the CCQM. This week,

Singapore is pleased to host the meetings for three of the Working Groups, namely Bioanalysis, Gas Analysis and Organic Analysis.

Growing Importance of Metrology in Chemistry

2 In the modern industrialised world, the science of measurement is crucial to advancing manufacturing and services, helping to ensure fair trade, improving public safety and security, and enhancing the quality of life. In the manufacturing and trade sectors, for example, the precise measurement and testing of products and services is vital. Manufacturers, suppliers and customers of goods and services rely on the accuracy and reliability of measurements made at the different stages of production and distribution.

3 Similarly, metrology is a key working tool for a wide range of other sectors such as food safety, clinical testing, environmental sustainability, anti-doping in sports, forensics in law enforcement, and the search for clean technology and new energy sources, such as bio-fuel and hydrogen fuel.

4 For these sectors, comparable chemical and bio-measurements are particularly important. Hence, the

establishment of the Consultative Committee for Amount of Substance, or CCQM, in 1993. Compared to most areas of physical metrology, metrology in chemistry had a late start. However, as the second youngest Consultative Committee under the Metre Convention, the CCQM has grown rapidly over the years to become the largest. About 200 measurement experts from metrology institutes all over the world participate in its seven Working Groups.

Development of Metrology in Chemistry Infrastructure in Singapore

5 Singapore is an active participant of the metrology community for we recognise the key role metrology plays in growing our economy.

6 In 2008, the Singapore Government committed a total of S\$31.4 million over three years to develop Metrology in Chemistry infrastructure. A*STAR's National Metrology Centre (NMC), as the National Metrology Institute, is responsible for setting up Gas Metrology capability. Meanwhile the Health Sciences Authority (HSA), which has been appointed as the designated institute, is setting up metrology capabilities in food, pharmaceutical, medical, healthcare and forensics.

7 Under the project, NMC and HSA will build up a broad range of capabilities to improve the quality of measurements that is essential to some of our key industries such as the chemical, petrochemical, pharmaceutical, food and bio-science sectors, as well as contribute to the cost-effectiveness of healthcare. With these measurement capabilities, we hope to better position Singapore as a global chemical and biomedical hub, facilitate access to overseas markets for Singapore-based enterprises, and raise the quality of life for our people.

Metrology in Chemistry in pollution control and climate change monitoring

8 The theme for today's symposium, throws the spotlight on the role of Metrology in Chemistry in the areas of pollution control and climate change monitoring. As governments seek solutions to pressing environmental challenges, metrology in chemistry plays a key role in the monitoring of key greenhouse gases, water quality, pollution control and in monitoring ecosystems and biodiversity as indicators of environmental pollution and climate change. In the case of Singapore, energy efficiency is a key thrust in our National Climate Change strategy. Metrology will be an essential tool as we look at various ways to improve our

energy efficiency. This includes energy saving electronic devices, power plant efficiency and energy harvesting.

Conclusion

9 I am confident that your discussions will yield much food for thought and I wish all of you a fruitful symposium. I also hope that our overseas guests will have the opportunity to explore Singapore and savour our multi-cultural heritage. Thank you.