PROTOCOL BETWEEN THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY OF THE DEPARTMENT OF COMMERCE OF THE UNITED STATES OF AMERICA

AND

THE CHINESE ACADEMY OF SCIENCES OF THE PEOPLE'S REPUBLIC OF CHINA

ON

COOPERATION IN THE FIELDS OF CHEMISTRY, PHYSICS, MATERIALS, AND ENGINEERING MEASUREMENT SCIENCES

The National Institute of Standards and Technology (NIST) of the Department of Commerce of the United States of America and the Chinese Academy of Sciences (CAS) of the People's Republic of China (hereinafter referred to as the "Parties"), in accordance with the Agreement between the Government of the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology (hereinafter refer as the "Agreement"), signed in Washington, D.C. on January 31, 1979, and most recently extended exchange of diplomatic notes dated April 24, 2001 and April 25, 2001, for the purpose of promoting basic research cooperation in the fields of chemistry, physics, materials, and engineering measurement sciences, have agreed as follows:

Article 1

The Parties intend to conduct exchanges and collaborative activities on the basis of equality, reciprocity and mutual benefit.

Article 2

The Parties agree to establish this framework for basic research cooperation in the fields of chemistry, physics, materials, and engineering measurement sciences and such other sub-fields and disciplines, or related activities as may be mutually agreed.

Article 3

The Parties agree that cooperation may take the following forms:

- Exchange and provision of information on scientific and technical developments, activities, and practices, including exchange of documents, and other technical information related to the cooperation; organization of jointly supported seminars; short-term visits by senior staff members and other mechanisms that may be mutually agreed:
- Joint basic research and development activities in the form of experiments, tests, and other technical collaborative efforts;

- Exchange of scientists, including visits and research studies by teams or individual to the facilities of the other Party;
- Exchange and provision of samples; materials, including standard reference materials; data, including standards reference data; instruments; and components of use in research programs of mutual interest or for testing and evaluation; and
- 5. Such other forms of cooperation and collaboration as are mutually agreed.

Article 4

The cooperative activities carried out under this Protocol will be subject to the financial and staff resources available to the Parties. The specific tasks, obligations, and conditions with respect to the above-mentioned activities, including responsibility for the payment of costs, shall be decided by mutual agreement on a case-by-case basis. Unless agreed otherwise, the cost of international transportation between China and the United States, subsistence (food and lodging), and local ground transportation within each country shall be borne by the sending Party. Each Party shall be responsible for its own costs incurred under this Protocol.

Article 5

Activities under this Protocol shall be conducted under the guidance of the US-PRC Joint Commission on Scientific and Technological Cooperation established pursuant to the aforementioned Science and Technology Agreement. In order to implement this Protocol, each Party shall designate a representative to be responsible for determining the directions and scope of cooperation and for ensuring the effectiveness of cooperation and exchange. The representatives of the Parties or their designated coordinators will, by correspondence, consult with each other and define the cooperative activities and other related matters. When necessary, a meeting may be convened by mutual agreement, to consider matters related to the implementation of this Protocol. For NIST the designated representative shall be the Director for the Office of International and Academic Affairs and for CAS, it shall be the Associate Director-General, Bureau of International Cooperation.

Article 6

Scientific and technical information transmitted by one Party to the other Party under Article 3 of this Protocol shall be accurate to the best of the knowledge and belief of the transmitting Party, but the transmitting Party does not warrant the suitability of the scientific and technical information transmitted for any particular use or application by the receiving Party or by any third Party.

Article 7

Scientific and technical information derived from cooperative activities under this Protocol may be made available, unless otherwise agreed in an Annex under Article 8 of this Protocol, to the world scientific community through customary channels and in accordance with the normal procedures of the Parties.

Article 8

The specific activities as mutually agreed, and the terms under which they will be conducted, including financial arrangements, if any, shall be embodied in Annexes to this Protocol. New cooperative programs will be confirmed by correspondence between the representatives of the Parties (see Article 5) and such new agreements will be attached as Annexes to this Protocol. In the case of any inconsistency between the terms of this Protocol and the terms of an Annex hereto, the terms of this Protocol shall be controlling.

Article 9

The protection of intellectual property created or furnished in the course of activities under this Protocol, the allocation of rights for such intellectual property, and business-confidential information obtained and/or exchanged pursuant to this Protocol, will be governed by the provisions of Annex I of the Agreement between the United States of America and the Government of the People's Republic of China on Cooperation in Science and Technology, signed at Washington on January 31, 1979, as extended and amended.

Article 10

Title to any equipment sent by one Party to the other Party shall remain with the sending Party, during or after the period of this Protocol. Any change in title of the equipment will be decided by mutual agreement.

Article 11

Both Parties agree that no information or equipment requiring protection in the interest of national defense or foreign relations and classified in accordance with its applicable national laws and regulations shall be provided under this Protocol. In the event that information or equipment which is known or believed to require such protection is identified in the course of cooperative activities pursuant to this Protocol, it shall be brought immediately to the attention of the appropriate officials. The Parties shall consult to identify legal requirements and appropriate security measures, if any, to be agreed upon by the Parties in writing and applied to this information and equipment, and shall, if appropriate, amend this Protocol to incorporate such measures.

Article 12

The transfer of unclassified export-controlled information or equipment between the Parties shall be in accordance with the relevant laws and regulations of each Party. If either Party deems it necessary, detailed provisions for the prevention of unauthorized transfer or retransfer of such information or equipment shall be incorporated into the

contracts of Project Annexes. Export controlled information shall be marked to identify it as export controlled and to identify any restrictions on further use or transfer.

Article 13

The Protocol shall remain in force for a 5-year period from the date signed by the Parties. It may be amended or extended by mutual agreement of the Parties. Either Party may terminate this Protocol upon ninety (90) days written notice to the other Party. The termination of the Protocol shall not affect the validity or duration of projects under this Protocol that are initiated prior to such termination.

Done in Beijing, People's Republic of China, this 2nd day of September, in duplicate, in the English and Chinese languages, both texts being equally authentic.

For the National Institute of Standards and Technology of Department of Commerce of the United States of America

For the Chinese Academy of Sciences of the People's Republic of China

Signature Signature

Signature Suadof

H.G. Semerjian Name

Sept. 2, 2005