SCIENTIFIC COOPERATION AGREEMENT

between

Optical Spectroscopy Department, A.M. Prokhorov General Physics Institute, Russian Academy of Sciences,

and

Erlangen Graduate School in Advanced Optical Technologies and

Institute of Technical Thermodynamics, Friedrich-Alexander-University of Erlangen-Nuremberg

Preamble

Optical Spectroscopy Department (OSD) of A.M. Prokhorov General Physics Institute (GPI), Erlangen Graduate School in Advanced Optical Technologies (SAOT) and Institute of Technical Thermodynamics (LTT) are interested in the development of a mutually beneficial cooperation in the field of scientific research and education and agree upon the following articles:

1. Aims and Forms of Cooperation

The institutions mentioned above will cooperate in promoting scientific research, development and application of optical technologies in different fields of common interest, in particular:

linear and nonlinear optical diagnostics of physical and chemical processes in the gas phase;

optical characterization of laser-assisted production of nanoparticles; creation of unique optical equipment;

investigation of medical and biological applications of optical techniques; and the education of post-graduate students in carrying out these research activities. Such a cooperation will be realized by:

- 1. Setting up joint research projects which are financed totally or in part either by appropriate funding authorities of both countries, e.g., the German National Science Foundation (DFG), on the German side, and the Russian Foundation for Basic Research, on the Russian side, or by the industry.
- 2. Exchange of scientists or post-graduate students for carrying out parts of these research projects.
- 3. Participation of professors, scientific experts, staff members and post-graduate students in scientific conferences, seminars and training courses which are held by both institutions.
- 4. Taking part in the education programs of the LTT in frame of the activities of the Erlangen Graduate School in Advanced Optical Technologies.
- 5. Mutual information exchange of the results of each partner as published in scientific papers.

2. Financing of Cooperation

Each institution is responsible for the funding of his own part of the joint research projects. The usage of any equipment in the partners' laboratories is free of charge during the course of cooperation projects.

During the exchange of scientists or students, the visitors are responsible for their own personal social services and for all travelling and living expenses. The visitors may be financially supported by the hosting institution, which has to be discussed in each case separately by both partners.

3. Intellectual Property (IP) and Confidential Agreement

If an IP issue is expected as an outcome of a joint project, the Confidential Agreement should be signed before any public disclosure of the results of the project.

4. Entry of the Agreement into Force and Duration

- 1. The text of the signed Agreement is written in English.
- 2. The present Agreement enters into force after being signed by the directors of both institutions involved.
- 3. The present Agreement is valid for five years after signing. It will be extended automatically for another year if none of the partners states his interest to cease the Agreement at least three months before its validity expires.

Optical Spectroscopy Department. A.M. Prokhorov General Physics Institute, RAS

Erlangen Graduate School in Advanced Optical Technologies.

Institute of Technical Thermodynamics

Erlangen, October 31, 2008

Prof. Valery V. Smirnov

Erlangen, October 31, 2008

Director OSD

Prof. Dr.-Ing. Alfred Leipertz

UHL FÜR TECHNISCHE THERMODYNAMIT ALEXANDER UMWERSTÄT ERLANDER MITMERT

Director SAOT, Director LTT

Am Welcheelgarte, 8, 0. 570s

A.M. Prokhorov General Physics Institute, RAS

Moscow, November 07, 2008

Prof. Ivan A. Shcherbakoy **Director GPI**