

P R O T O C O L

ON THE SCIENTIFIC RESEARCH PROGRAM

FOR THE DEVELOPMENT OF NEW MATERIALS

AND TECHNOLOGIES

The National Academy of Sciences of Ukraine (hereinafter NASU) and the National Research Center of the Arab Republic of Egypt (hereinafter NRC ARE),

Recognizing the importance of international scientific and technical cooperation in fundamental and applied research aimed at creating new technologies in Ukraine and ARE,

Guided by the Protocol on scientific and technical cooperation between the National Academy of Sciences of Ukraine and the Egyptian Academy of Scientific Research and Technology (ASRT) of April 1994 and the Memorandum of Understanding between the National Academy of Sciences of Ukraine and the National Research Center of the Arab Republic of Egypt of May 1995,

Concluded this Protocol on the elaboration and introduction of the Scientific Research Program for the Development of New Materials and Technologies.

Article 1.

Object of the Protocol

1.1. The main object of the Program is to conduct the joint fundamental research with the aim of creating and introducing the new materials and technologies which are of interest to both Parties.

1.2. The Program shall be implemented by certain institutes of the NASU and the NRC ARE.

1.3. The Ukrainian party shall transfer technologies, including technical and technological documentation, licenses, "know-how", prototypes, technological equipment for the Program.

1.4. The Egyptian party shall finance the scientific and technical research.

Article 2.

Main directions of the Program.

2.1. The directions of fundamental and applied research in the fields mentioned below shall be determined by the interests of the Ukraine and ARE.

The fields of the scientific and technological research of the Program include:

2.1.1. Physical and physical-chemical processes of the formation and destruction of the metal, ceramic, composite, polymer materials.

2.1.2. Physical-chemical bases of technologies of:

- composite materials,
- oxide and non-oxide ceramics,
- special application materials and means (glue composites, biocompatible polymers, catalysts, reactionable oligomers, plant growth promoters, etc.),
- special methods for forming products out of new materials,
- modification of the surfaces of materials and their protection from corrosion and erosion,
- welding and soldering of materials,
- powder metallurgy.

2.1.3. The problem of sewage treatment.

2.1.4. Total recycling of the industrial production waste.

2.1.5. The development and engineering of the technological processes mentioned in paragraph 2.1.2.

2.1.6. Other technologies which are of interest for Ukraine and the ARE.

2.2. The training of specialists for the ARE in the fields mentioned in paragraphs 2.1.1. and 2.1.2. shall be carried out according to a coordinated project in the framework of the Program.

2.3. The examination of the projects and consulting on scientific and technical problems in the field of modern technologies shall be among the tasks of the Program.

Article 3.

Organizational structure of the Program

3.1. The following research institutions shall participate in the Program:

3.1.1. From the NASU:

- E.O.Paton Institute of Electric Welding,
- I.M.Frantsevich Institute for Materials Science Problems,
- V.M.Bakul Institute for Superhard Materials,
- H.V.Karpenko Physical-Mechanical Institute,

- L.V.Pisarzhevsky Institute of Physical Chemistry,
- Institute of Macromolecular Chemistry,
- Institute of Bioorganic Chemistry and Petroleum Chemistry,
- A.V.Dumansky Institute of Colloid and Water Chemistry.

3.1.2. From the NRC ARE:

- Department of the Non-Organic Chemistry,
- Department of the Applied Organic Chemistry,
- Department of the Textile Industry,
- Department of the Chemical Industry,
- Department of the Engineering Research,
- Department of the Ecological Research.

3.2.3. Tibin Metallurgical Research Institute (TMRI).

Article 4. Management of the Program and the basic principles of its implementation

4.1. For implementation of the Program the Executive Board and the Council of Consultants shall be formed.

4.2. The Executive Board shall consist of the General Director and the Vice-Directors (one from each Party).

4.3. The day-to-day administration of the Program shall be exercised by the General Director appointed by the NRC ARE.

4.4. The Council of Consultants is a collegiate body. It shall comprise scientists of the participating countries.

4.5. The Council of Consultants shall exercise the scientific guidance of the Program. The Council shall be headed by the Chairman, who shall be a Vice-Director appointed by the NASU.

4.6. The management of the Program gathers twice a year (in Kiev and in Cairo) to discuss the realization of the Program.

4.7. The research shall be conducted in the framework of specific scientific projects. The research teams consisting of the scientists from NRC ARE, TMRI, NASU shall be formed for the period of implementation of projects. Joint research, scientific guidance for theses, conferences, symposia and consultations, lectures on modern technologies for students and specialists shall be organized in the framework of these projects.

4.8. The sites for conducting research shall be chosen according to the technological possibilities of the Parties. In case the research and transfer of technologies take place on the territory of ARE, contracts (projects) must include travel and living expenses.

4.9. The profit gained from introduction of the results of scientific research shall be used for the development of scientific research in the NASU and the NRC ARE. The profit shall be distributed according to the Protocols on the introduction of technologies and organization of the

output of new production concluded between the research institutions of the NASU and the NRC ARE.

Article 5. **Use of objects of intellectual property**

5.1. The property rights for the objects of intellectual property created in the process of realization of the Program (results of joint scientific research, joint technologies, patents on industrial prototypes, trade-marks, service marks, "know-how") belong to the research institutions or authors, if it is provided for by the legislation of the member-countries of the Program. The transfer of the licenses, patents, technical and technological documentation, prototypes, industrial equipment, devices and materials in the framework of the Program shall be carried out by the research institutions of the NASU and NRC ARE on the basis of Protocols. Forms and conditions of the use of technologies, terms of granting the technologies and the conditions of their possible transfer to third parties shall be determined by the Protocols.

5.2. The Program participants shall take necessary measures to protect the objects of the intellectual property created in the process of the implementation of the Program.

5.3. Problems related to the use of joint inventions, industrial prototypes, other objects of intellectual property created within the Program shall be settled on the basis of the Protocol between the NASU and the NRC ARE on the legal protection of the objects of intellectual property according to paragraphs 5.1., 5.2.

5.4. Research institutions of the NASU and NRC ARE shall assist the Program by obtaining the protection documents in Ukraine and ARE on the intellectual property created in the course of implementation of scientific projects.

Article 6. **Other provisions**

6.1. This Protocol shall be open for joining by other organizations of the two countries. Conditions for their accession shall be decided upon by mutual consent of the three Parties signing this Protocol.

6.2. This Protocol shall come into force on signature.

6.3. This Protocol shall remain in force for the period of 5 years since the date of its signing. After its expiry it may be prolonged by mutual consent of the Parties.

6.4. Each Party has the right to denounce this Protocol by written notification in case the other Party violates the provisions of the Protocol.

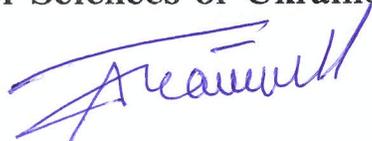
6.5. The denunciation of this Protocol shall be formalized by a special protocol to be signed upon the proposal of one of the Parties on six months' notice.

6.6. This Protocol is signed in two copies in English, both texts being equally authentic. The Parties shall translate the Protocol into Ukrainian and Arabic.

6.7. In case of differences in the interpretation of the text the preference shall be given to the English text.

Done in Cairo on " " December 1996.

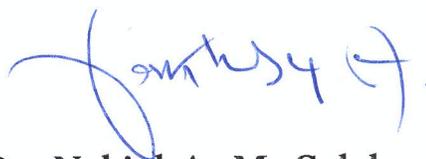
**For the National Academy
of Sciences of Ukraine**



**Academician
Borys Ye. Paton**

President of NASU

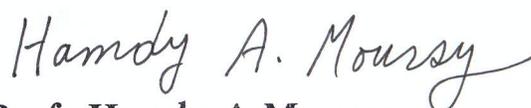
**For the National Research Center
of the Arab Republic of Egypt**



Dr. Nabil A. M. Saleh

President of the NRC ARE

**For the Academy of Scientific
Research and Technology of Egypt**



Prof. Hamdy A. Moursy

President of the ASRT