



**Iranian Research Organization for Science and Technology
(IROST)**

IROST Programmes and Activities

2017-2018

Presented by:

Dr. Mahmoud Molanejad
Acting President for International Cooperation
and

Dr. Alireza Sedrpoushan
Director General
of President Office and Public Relations

in

20th Meeting of COMSATS Coordinating Council

Cairo, Egypt

14-15 May 2017





IROST Activities and Achievements in 2017

- ▶ The establishment of Madjid Samii International Center for Scientific Research and Medical Technology (MSIC):
- ▶ **The aims of the center:**
- ▶ to assist and facilitate the know-how, technology transfer, commercialization of knowledge-based products and to enhance international cooperation
- ▶ **The important outcome of the center:**
- ▶ to develop state-of-art technologies by joint cooperation between experts from Iran and other developed countries including Germany



IROST Activities and Achievements in 2017

- ▶ The joint Cooperation Committee between IROST and Aachen University
- ▶ **The results of setting up of the Committee:**
- ▶ identifying the areas of common interest for joint cooperation including:
 - development of advanced technology which are related to the dialysis machines
 - Exchanging information on production of heart stents
 - Development of the cochlea- related technology
 - Water resources management, preventing water tensions in Iran



IROST Activities and Achievements in 2017

- ▶ **Another results of setting up of the Committee:**
 - Establishing technical working groups in the above fields
 - Evaluating statues of mentioned areas and identifying their strong and weak points in Iran
 - Preparing a research proposal according to the finalized reports for Aachen University



IROST Activities and Achievements in 2017

Joint Cooperation Between Iran and Sultanate of Oman:

- Setting up of the IROST specialized research group
- Approval of **three IROST projects** by Sultanate of Oman to be implemented jointly between IROST and Sultanate of Oman under the titles of:
 - 1- New Generation of Solar Energy Equipment for EOR
 - 2- Microalgae Platform for Production of Recombinant Protein
 - 3- Treatment of Produced Water for Recycling
- Dispatching delegations from IROST to negotiate for implementation of the projects



IROST Activities and Achievements in 2017

IROST delegation visit from universities and research institutes of Germany :

The delegates from IROST visited the universities and research institutes of Germany such as Stuttgart University, Hohenheim University, University of Applied Sciences of Offenburg, Karlsruhe Institute of Technology (KIT), Nanotechnology and Nano Mat, Institute of Process Engineering in Life Sciences, Tuberjan Natural and Medical Sciences Institute (NMI) during 26-30 July 2017.



IROST Activities and Achievements in 2017

Outcome of the IROST delegation visit from universities and research institutes of Germany :

Joint international research project under the title of “SaWaM- Seasonal Water Resources Management: Regionalized Global Data and Transfer to Practice” has been approved to be implemented in cooperation with Germany, Brazil and Sri Lanka and financially supported by Federal Ministry of Education and Research.



The 31th Khwarizmi International Award (KIA)

Tehran, I. R. Iran

February 2018

The KIA secretariat invite researchers, innovators and inventors, from all over the world and to participate their invaluable achievements in various fields of science and technology as indicated bellow:

No	Field	No	Field
1	Technology Studies	8	Medical Sciences
2	Basic Sciences	9	Chemical Technologies
3	Materials & Metallurgy	10	Agriculture & Natural Resources
4	Electronic & Computer	11	Mechanical Engineering
5	Nanotechnology	12	Aerospace
6	Civil Engineering	13	Information Technology
7	Biotechnology & Basic Medical Sciences	14	Mechatronics



Commercialization of Technology as the new activity of IROST

- To target the research activities toward the production of technologies and increasing organization role to create knowledge based wealth
- To Create background for scientific and technological exchanges
- To assist the development of private sector through creating infrastructure to establish knowledge based private corporation based on technical knowledge
- To earn income through selling technological know-how or absorption of investor for investing, developing and benefiting achieved technologies



Commercialization of Technology as the new activity of IROST

- To target the research activities toward the production of technologies and increasing organization role to create knowledge based wealth
- To Create background for scientific and technological exchanges
- To assist the development of private sector through creating infrastructure to establish knowledge based private corporation based on technical knowledge
- To earn income through selling technological know-how or absorption of investor for investing, developing and benefiting achieved technologies



Strategies and Approaches of Organizational and Management Investment

Strategy	Executive Approach
- To provide legal and executive mechanisms for commercialization of developed technologies	1. To propose rules and regulations to accelerate bringing developed technologies in to the market 2. To support formulation of development and expansion of commercialization of research in university and research institutes
- To design and carry out intellectual property rights system in technology filed	1. To develop data banks related to patents 2. To enrich and develop regional centers supporting intellectual property 3. To prepare needed rules and regulations for supporting intellectual property rights



Strategies and Approaches of Organizational and Management Investment

Strategy	Executive Approach
- To support the establishment and development of technology based corporations in line with organizational mission	1. To develop qualitative and quantitative incubators 2. To cooperate extensively for realizing rules of knowledge based corporations 3. To study and identify approaches for creating and developing knowledge based corporations and providing specialized consultants 4. To create innovative unit networks 5. To establish financial institutions and or non - governmental fund for research and technology 6. To assist commercialization, market making and technology and knowledge based corporations products developed marketing



Technology Commercialization Foresight and Executive Programmes

- ▶ Identification of the country's developed technological and research achievements as well as the classification and introduction of its capabilities
- ▶ Identification of interested investors
- ▶ Opening permanent and virtual techno-markets
- ▶ Identification of researchers' educational needs for documentation and commercialization of technology while planning and providing an annual time schedule
- ▶ Studying persuasive approaches and strategies for commercialization and providing related executive mechanisms

Technology Commercialization Foresight and Executive Programmes

- ▶ Planning and implementing sub-systems for documentation under supply and demand system of technology while running the pilot in the organization
- ▶ Holding national and international workshops to train commercialization approaches and transfer of technology
- ▶ Holding national conferences in partnership with other institutions and ministries, i.e. technology suppliers and demanders
- ▶ Holding domestic and non-domestic technology tours for innovators, technology-inventors and technology demanders, especially the researchers who are linked with the Organization

Approved Project in Foundation Meeting of COMSATS' ITRG on 'Renewable Energy' (2nd November 2016, Zahedan, Iran)

The project proposal under the title of **“Measurement and Characterization of Silicon Crystalline Solar Cell”** has been submitted to COMSATS Coordinating Council for sensitizing the participating Heads of Centres of Excellence regarding the significance of the research project, and requesting them to nominate suitable scientists for active participation as members of the group and acquiring necessary funds for its execution.



IROST Proposed Programmes for 2017- 2018



IROST Programmes for 2017 -2018

Department of Electronics and Computer has proposed the International Workshop on “Diagnostic System Based on Micro Fluidic Method (Lab on Disc)”

Date: to be announced

Venue: IROST, Tehran, I.R. Iran

In Cooperation with and Supported by: COMSATS



IROST Programmes for 2016 -2017

Department of Electronics and Computer has proposed the International Workshop on “**Medical Thermography (Basic Theory, Image Processing Algorithm, Clinical Application)**”

Date: to be announced

Venue: Tehran, I. R. Iran

In Cooperation with and Supported by: COMSATS



IROST Programmes for 2016 -2017

Department of Mechanical Engineering has proposed the workshop on “ Renewable Energy” considering the following issues by support of COMSATS and in cooperation with Member Countries:

- To promote scientific level, transfer of technology
- To develop commercialization of renewable energy
- To implement joint research projects
- To design and manufacturing of biomass gasification and purification of external gasses
- To acquire knowledge and experience and to use extensive markets for reducing energy consumption
- To create and develop research and technology cooperation in filed of renewable energies and energy engendering systems based on projects capable for commercialization



IROST Programmes for 2016 -2017

Department of Agriculture has proposed to prepare a project proposal on “**Biological Control of Pests**” in cooperation with Prof. Zeini from Turkey and Trabozan University



**Thank you very much for your kind
attention**

