



IROST Brief Introduction

- **Founded: 1980**
- **IROST is affiliate organization of the Ministry of Science, Research and Technology (MSRT)**



Iranian Research Organization for Science and Technology
(IROST)

IROST Programmes and Activities

2018-2019

Presented by:

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IROST
in

21st meeting of COMSATS Coordinating Council,
3-4 April 2018
Almaty, Kazakhstan



IROST Mission

- ▶ Strengthening the foundations of self-reliance in science and technology
- ▶ Supporting Iranian inventors, innovators, researchers and industrialists
- ▶ Responding to the increasing demands for science and technology development programs
- ▶ Supporting applied and developmental research
- ▶ Developing technologies through employing qualified experts and utilizing modern equipment and facilities



The Major Objectives of IROST

- ▶ to provide support and facilities and making necessary arrangements with inventors, innovators, researchers and industrialists in S&T
- ▶ to support development of technology at national and international levels
- ▶ to encourage a positive interaction between technology supply and demand
- ▶ to provide ground for growth, creativity and innovation in utilizing the research results
- ▶ to facilitate and support technology transfer and commercialization in a competitive environment



The Major Objectives of IROST

- ▶ to organize annual Khwarizmi International Award (KIA) and Khwarizmi Youth Award
- ▶ to spread awareness on the investment opportunities available in various fields of science and technology
- ▶ to extend help and training to the entrepreneurial communities in technology development
- ▶ to attract investments in the fields of advanced technologies



IROST Structure & Facilities

Eight Technology Institutes namely :

1. Advanced Material & Renewable Energies
2. Advanced Technologies
3. Agriculture
4. Biotechnology
5. Chemical Technologies
6. Electronics & Computer
7. Mechanical Engineering



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 statuses 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 32nd Khwarizmi International Award (KIA)

Tehran, I. R. Iran

February 2019

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 below:

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

- 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



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Strategies and Approaches of Organizational and Management Investment

Strategy	Executive Approach
- To provide legal and executive mechanisms for commercialization of developed technologies	<ol style="list-style-type: none">1. To propose rules and regulations to accelerate bringing developed technologies in to the market2. 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	<ol style="list-style-type: none">1. To develop data banks related to patents2. To enrich and develop regional centers supporting intellectual property3. 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	<ol style="list-style-type: none">1. To develop qualitative and quantitative incubators2. To cooperate extensively for realizing rules of knowledge based corporations3. To study and identify approaches for creating and developing knowledge based corporations and providing specialized consultants4. To create innovative unit networks5. To establish financial institutions and or non - governmental fund for research and technology6. 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



COMSATS' ITRG on 'Renewable Energy'



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

The project proposal entitled “**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.

➤ **We propose that for such a project related to COMSATS working groups, the COMSATS may provide 10.000\$ and project coordinator may provide in-kind support.**



IROST Proposed Programmes for Joint Cooperation



IROST Programmes for 2018

Department of Chemical Technologies has proposed the International Conference/Workshop on “Water Re-use, Alternative Water Supply”.

This activity will be supported by IDB for 2018, we propose that the COMSATS may sponsor 5 experts (air ticket) from it's member states to attend this programme and local hospitality would provided by IROST.



IROST Programmes for 2018

Department of Biotechnology has proposed the International Workshop on “Molecular detection of genetically modified organisms ” to be hosted by Iran in 2018.

It is requested that 5 experts from COMSATS member states may be supported (air ticket) by COMSATS in cooperation with the ISESCO/TWAS and the local hospitality will provided by IROST.



IROST Programmes for 2018

Department of Biotechnology has proposed the International Expert Meeting on “Establishment of COMSATS’ Regional Laboratories for Risk Assessment and Detection of Living Modified Organisms (LMOs)” to be hosted by Iran in 2018.

It is requested that 5 experts from COMSATS member states may be supported (air ticket) by COMSATS in cooperation with the ISESCO/TWAS and the local hospitality will be provided by IROST.



IROST Programmes for 2018

Department of Chemical Technologies has proposed the International Seminar/Workshop on “Food Security by Food Waste Management ” to be hosted by Iran in 2018.

► It is requested that 5 experts from COMSATS member states may be supported (air ticket) by COMSATS in cooperation with the ISESCO/TWAS and the local hospitality will be provided by IROST.



IROST Programmes for 2018

Department of Agriculture has proposed “**First International work shop on commercialization of agricultural research results with emphasis on technology & know how transfer procedures and agreement**” to be hosted by Iran in 2018.

► **It is requested that 5 experts from COMSATS member states may be supported (air ticket) by COMSATS in cooperation with the ISESCO/TWAS and the local hospitality will provided by IROST.**



Iran Polymer and Petrochemical Institute (IPPI) has proposed 4 programmes to be implemented in cooperation with IROST, COMSATS and PCSIR.

► **During the recent visit of Dr. Shahzad Alam, Chairman of PCSIR, he welcomed any cooperation between Iran and PCSIR, therefor we propose that this activity could be organized jointly by PCSIR, IROST and COMSATS.**



1. International Workshop on “Rheology of polymers, polymer nanocomposites, polymer blends”
2. International Workshop on “ Encapsulated catalysts: a step forward to enzyme-mimic catalysts”
3. International Workshop on “Organic nanoreactors: introduction and their potential applications”
4. International Workshop on “ Industrial protective coatings in oil, gas, petrochemical, water and waste water projects”



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

