



I. R. Iran  
Ministry of Science Research and Technology  
**Iranian Research Organization for Science & Technology (IROST)**

Presentation of the Programmers and Activities

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16<sup>th</sup> Meeting of COMSATS Coordinating Council  
Accra, Ghana  
2-3 May 2013



# IROST Background

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





# 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 equipments 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 level
- 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 including Robotic Competition
- 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

IROST provides the following facilities for developing new technologies and supporting innovations:

- Infrastructures and enhancement of human resources for development of technology in IROST technology incubators and technology parks, universities and industries
- An appropriate institutional and laboratory framework to support various national projects



# IROST structure & facilities

## IROST's 7 departments:

- Department of Advanced Material & Renewable Energies
- Department of Advanced Technologies
- Department of Agriculture
- Department of Biotechnology
- Department of Chemical Technologies
- Department of Electronics & Computer
- Department of Mechanics



# IROST structure & facilities

## Facilities:

- Necessary infrastructure
- High educated researchers and technicians
- Developed Research labs
- Pilot plants
- Projects oriented research set ups
- Reference labs





# Personnel

- ◆ Scientists: 126
- ◆ Experts and Technicians: 217
- ◆ Administration & Finance: 99
- ◆ Total: 442



# PhD and MSc Students

IROST new mission in training research based PhD and MSc.  
Students in:

- ◆ Chemistry
- ◆ Chemical Engineering
- ◆ Agricultural Engineering
- ◆ Biotechnology
- ◆ Mechanic
- ◆ Electronic

- **Number of PhD and MSc Students**
- **MSc. : 98**
- **PhD : 84**
- **Total : 182**



## Researchers Support

- Khwarizmi International Award
  - ✓ Annually
  - ✓ 27<sup>th</sup> at Feb 2014
  - ✓ to select best researchers , Inventors in the world,  
(based on application and evaluation)
- Khwarizmi Youth Award
  - ✓ Annually
  - ✓ 15<sup>th</sup> at Dec 2013
  - ✓ National
  - ✓ To select best young researchers and students  
(based on application and evaluation)



## 26<sup>th</sup> Khwarizmi International Award Ceremony

Tehran, I. R. Iran, 5 Feb. 2013

The 26<sup>th</sup> KIA ceremony had been inaugurated and honored by His Excellency the Vice President of the I. R. Iran to encourage the outstanding efforts of researchers, innovators and inventors, from all over the world and to appreciate their invaluable achievements in various fields of science and technology







## Researchers Support

- ☐ Feasibility study of research results of private sectors
- ☐ Commercialization of developed technologies
- ☐ Marketing of developed technologies
- ☐ Coordinating universities and research centers with industries
- ☐ Supporting students' research projects
- ☐ Organizing workshops and training programs for private sector

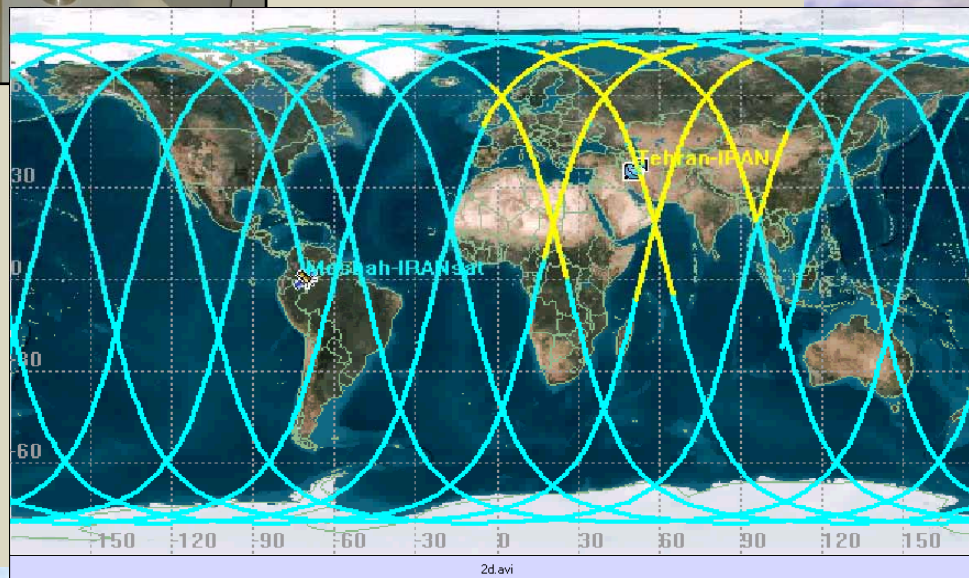
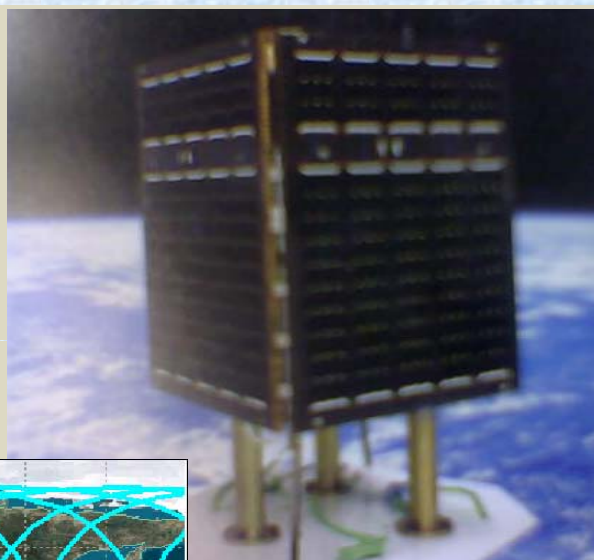
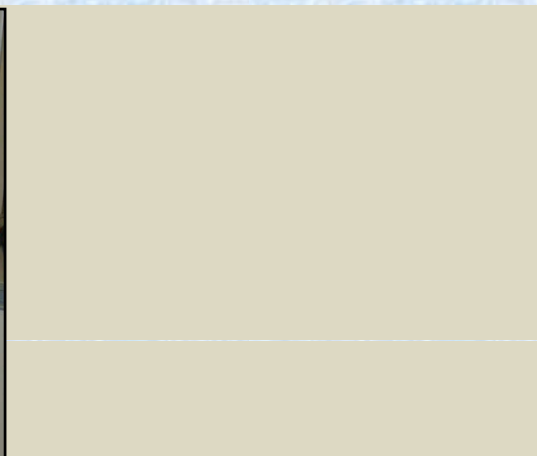
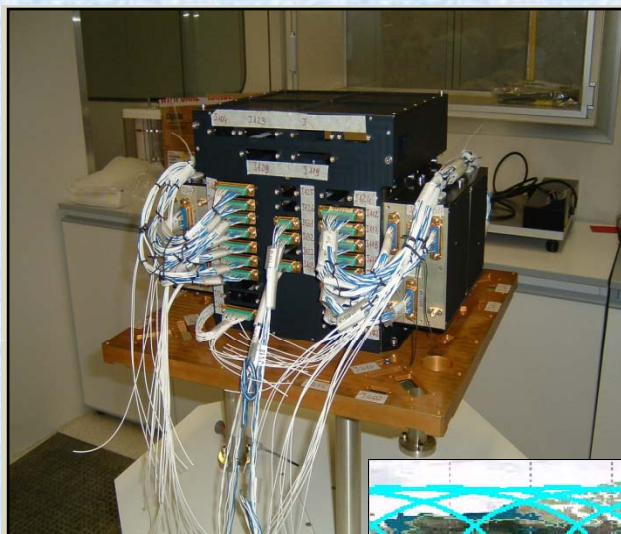


## Researchers Support

- ❖ Managing Iranian Scientific Data Network
- ❖ Providing scientific information and documents to research communities
- ❖ Supporting the Intellectual Property of the researchers
- ❖ Giving Consultancy R&D and R&T institutions to enhance their infrastructure and procedures
- ❖ Developing entrepreneurship centers in universities.



# Achievements: Mesbah Satellite Project







# Achievements: Vertical Wind Tunnel







## Achievements: Freeze Dryer

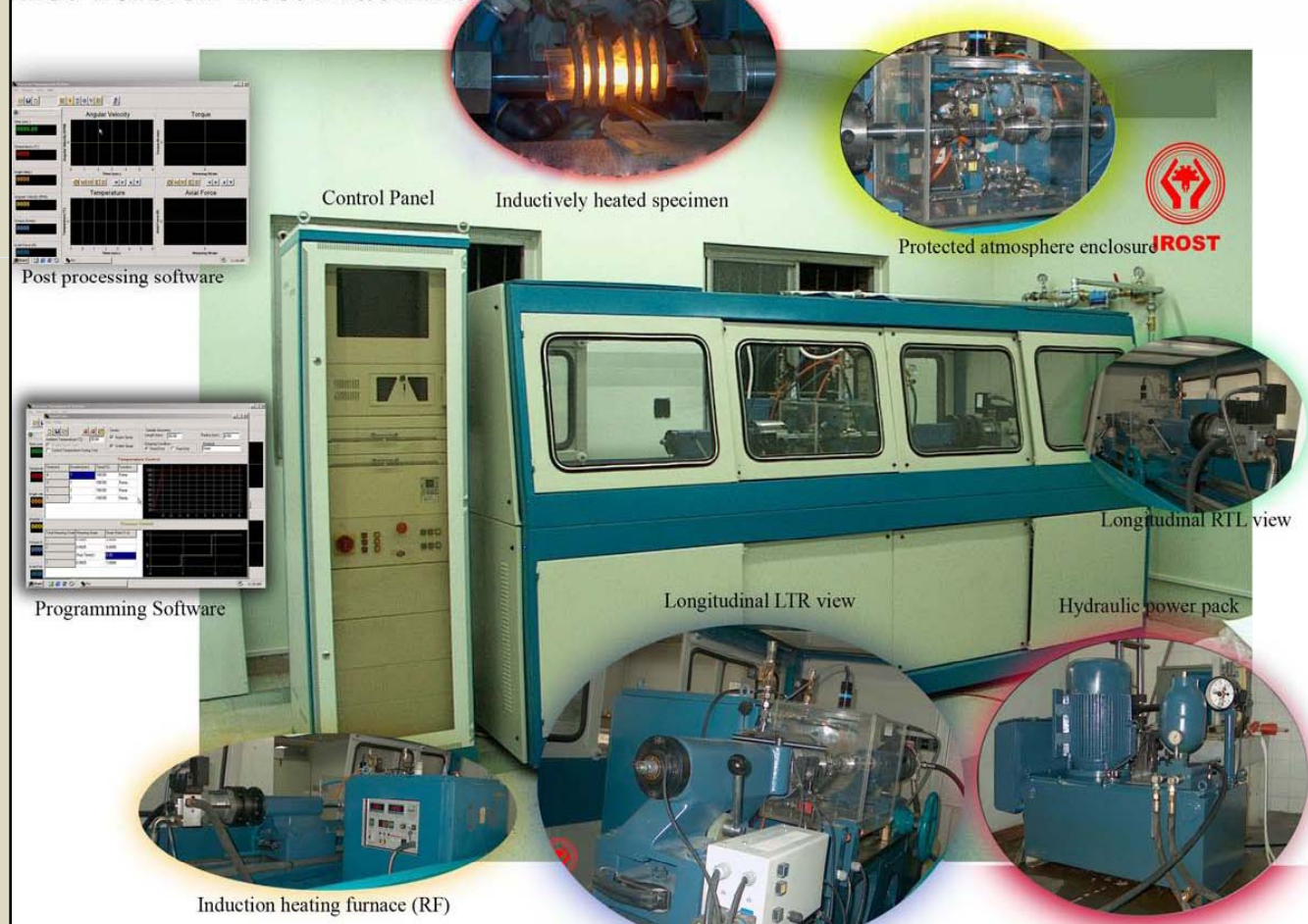


Fully designed & made at IROST



## Achievements: Torsion test

### Hot Torsion Test Machine







## Achievements: Hemodialysis Machine





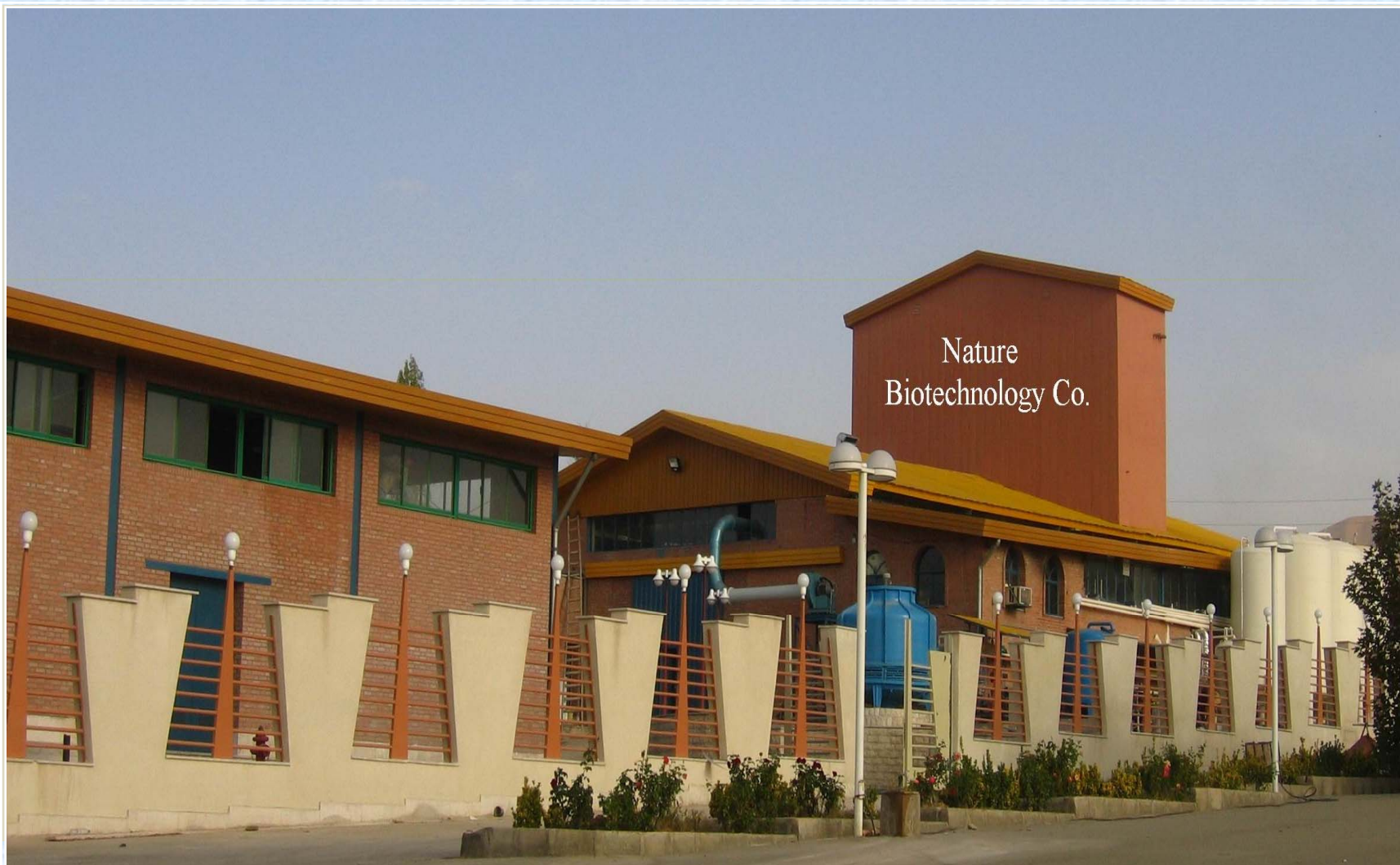
## Achievements: Herbal Medicine

- ❖ Iran has a fairly well established herbal medicine sector
- ❖ Pilot plant already constructed
- ❖ To provide training, research and technology development
- ❖ Herbal extraction
- ❖ Finished products preparation





## Achievements: Biological Control of Mosquitoes Born diseases







## Achievements: Chem. Technology Pilot Plants







## Achievements: Alumina Pilot Plant







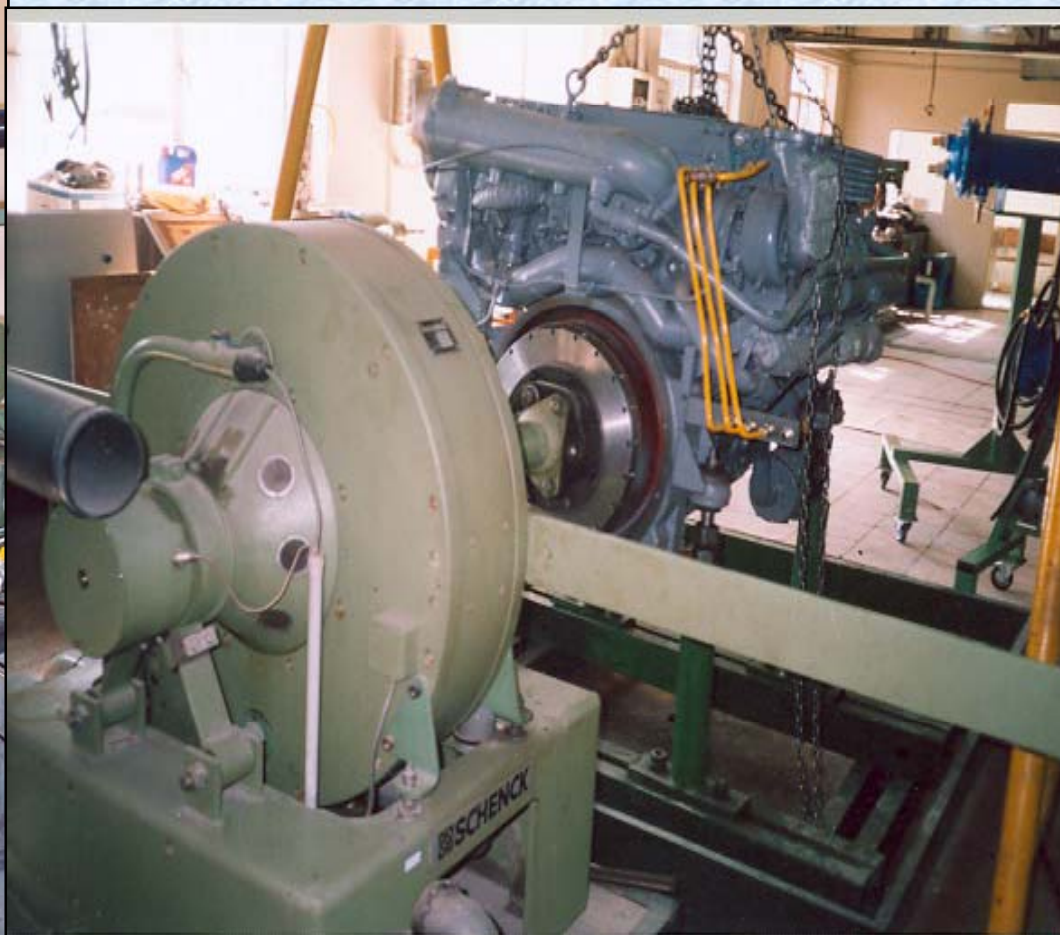
## Achievements: De-Methyl Ether (DME) Pilot Plant







## Achievements: Engine prototype for DME and Bio-diesel fuel







## Achievements: Biotechnology Pilot Plant







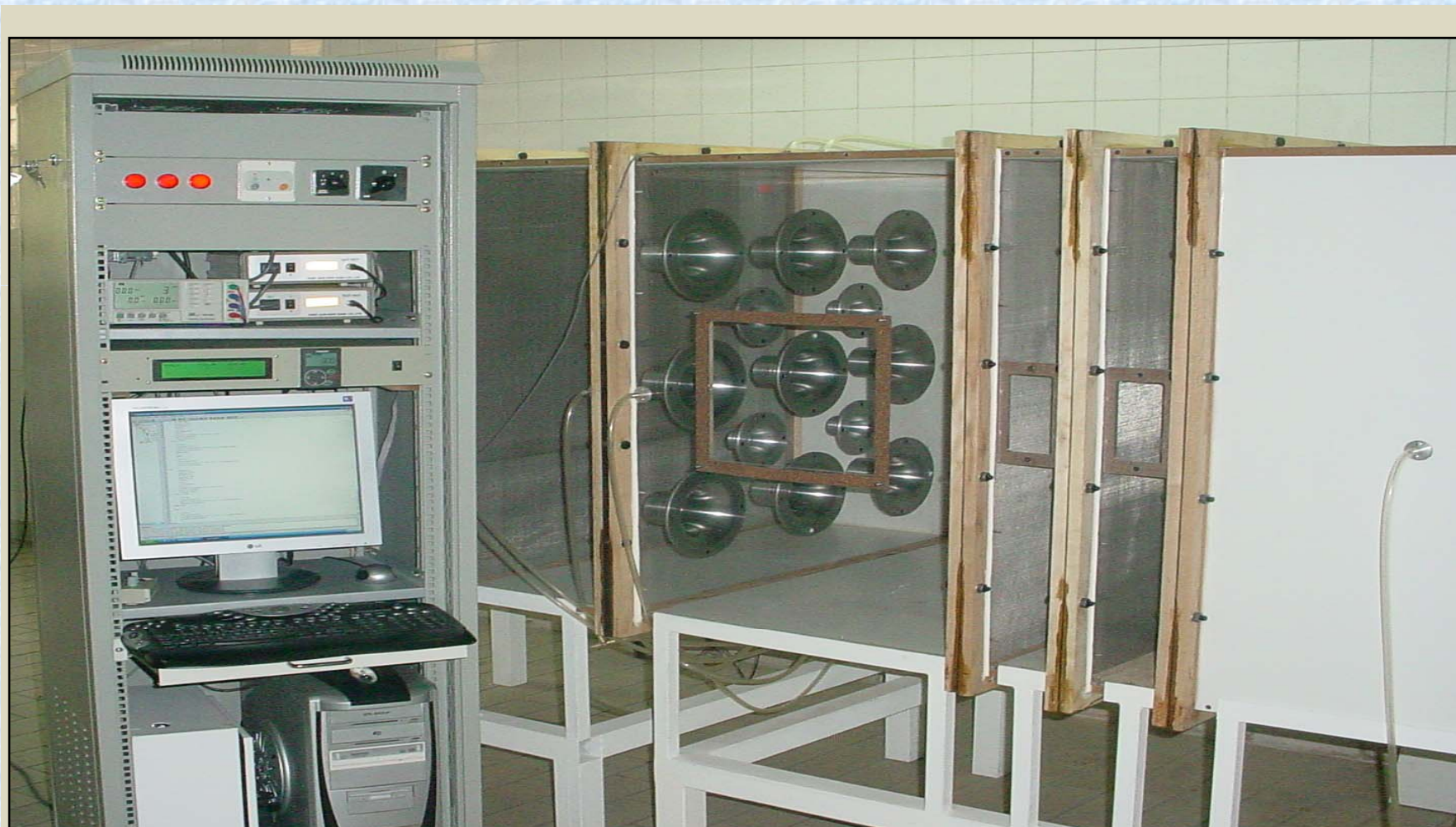
## Ref Labs: Tube Flame tester







## Ref Labs: Fan Tester





# International Cooperation

IROST is official focal point of following international organizations:

- ❑ Asian And Pacific Centre For Transfer Of Technology (UN-APCTT)
- ❑ Commission on Science & Technology for Sustainable Development in the South (COMSATS)
- ❑ Organization of Islamic Conference Standing Committee on Scientific & Technological Cooperation (COMSTECH)
- ❑ IOR-ARC Regional Centre for Science and Technology Transfer (IOR-ARC RCSTT)
- ❑ Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre)
- ❑ World Association of Industrial & Technological Research Organizations (WAITRO)



# IROST Programmers for 2013 -14

Following the decision made in 15<sup>th</sup> meeting of COMSATS coordinating council, IROST will host and organize

International Seminar/Workshop on  
**‘Sustainable Utilization of Natural Products for Human  
Health and Well Being’,**

August 25-27, 2013, Tehran, I. R. Iran

This event will jointly organized by the COMSATS’ ITRG on ‘Natural Products Sciences’ and the Iranian Research Organization for Science & Technology (IROST)





# IROST Programmers for 2013 -14

1<sup>st</sup> International Conference on  
**‘IT Industry and Export’**,  
20-21 May, 2013, Tehran, I. R. Iran

Participants from COMSATS, IOR-ARC, UN-APCTT, COMSTECH, ECO, NAM S&T Center, WAITRO and other interested participants from developed and developing countries are welcome to take part in this conference.



# IROST Programmers for 2013 -14

**The 27<sup>h</sup> Khwarizmi International Award (KIA)**

**Tehran, Islamic Republic of Iran**

**February, 2014**

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 in bellow table:

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



# IROST Programmers for 2013 -14

The 6<sup>th</sup> Fajr International Inventions & Innovation Exhibition  
Tehran, Islamic Republic of Iran  
February, 2014

Participants from COMSATS, IOR-ARC, UN-APCTT, COMSTECH, ECO, NAM S&T Center, WAITRO and other interested participants from developed and developing countries are welcome to take part in this exhibition.





**IROST wishes to initiate collaboration with other COMSATS Centers of Excellence in the areas of:**

- Bio-fuels and their applications,
- Renewable Energies and their applications
- Agriculture and Water-Industrial Waste Management
- Training and Capacity Building
- Space Technology and its application
- Medicinal Plants Training, Technology Transfer, and Commercialization of Technology.



*Thank you very much for your kind attention*

