



COMSATS Newsletter

Commission on Science and Technology for Sustainable Development in the South (COMSATS)

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Patron

Dr. Imtihan Elahi Qureshi, *T.I.*
Executive Director

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Contributions from readers are welcome on any matter relevant to the mission of COMSATS, namely the promotion of South-South cooperation in science and technology for sustainable progress of the developing countries. The responsibility for the accuracy of any information rests with the original source. Views expressed in this publication do not necessarily reflect those of its editors, publisher or COMSATS.

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From the Executive Director's Desk

As the world reels under the shock of global financial crisis, the harm to the economies of the South is aptly described by the Executive Director of South Centre as 'Collateral Damage'. The growth rates in most developing countries have plummeted with average losses of the order of 6 percent in gross national incomes. The nations that are rich and strong have scrambled to the rescue of their institutions at the heart of the crisis and poured in straggling sums of hard cash in their financial systems. Amidst this gloomy yet hopefully manageable scenario, an unexpected beneficiary has been the S&T sector. It is being shored up by all economic giants, as part of recovery measures with R&D budgets in between 2% to 3% of GDP. There is something to emulate here by those countries who have yet to bring S&T at the core of their development plans. COMSATS is hoping that its Commission Meeting at the level of Heads of States/Governments planned for April 2010 will be an occasion for the leadership of its member countries to take some bold decisions in this respect.

The objective of the Commission Meeting would be to infuse a new level of resolve among the developing countries to achieve excellence in science and technology. With vast natural and human resources, the countries of the South merely need a strong political will to harness S&T capacity for their long-term prosperity. COMSATS happens to be an appropriate forum to collectively strategize the long-haul march towards development with mutual cooperation. Through this note, I urge all our focal points in member countries and Heads of Centres of Excellence to kindly give a very serious consideration to the Agenda of the Commission Meeting circulated during the 1st Consultative Committee Meeting. Comments and suggestions from member countries are requested on highest priority.

Meanwhile, at COMSATS we are earnestly engaged in the process of follow-up on the decisions taken during the 1st Consultative Committee and the 12th Coordinating Council Meetings held in Abuja (Nigeria) in April 2009. The Minutes have been prepared and sent for comments to focal points/Centres of Excellence. One of the decisions regarding the recognition of the former Executive Director's services, in the form of presenting a plaque to him, has been implemented. From Centres of Excellence, we expect two urgent follow-up actions; (i) comments on the Commission Meeting Agenda and, (ii) contributions for COMSATS publications, especially for this Newsletter, by timely submitting activity reports of the Centres.



Dr. Hameed A. Khan, Former E.D. COMSATS, receiving a plaque from Dr. Ishfaq Ahmad, Advisor on S&T, Planning Commission of Pakistan

NEWS/ACTIVITIES/HIGHLIGHTS FROM COMSATS SECRETARIAT

COMSATS COORDINATING COUNCIL RECOGNIZES THE SERVICES OF FORMER EXECUTIVE DIRECTOR COMSATS

In recognition of his long-standing association with COMSATS, Dr. Hameed Ahmed Khan, former Executive Director COMSATS, was presented a memento on 18th June 2009, pursuant to the decision of the Coordinating Council during its 12th annual meeting held in Nigeria this year.

During a simple ceremony at COMSATS Secretariat chaired by Dr. Ishfaq Ahmad, Advisor on Science and Technology to the Planning Commission of Pakistan, Executive Director COMSATS, Dr. Imtihan Elahi Qureshi read out the resolution adopted by the Coordinating Council acknowledging Dr. Khan's untiring efforts during his 8-year tenure at COMSATS. Dr. Qureshi, availing himself of Dr. Ahmad's presence, who is also a member of COMSATS' Technical Advisory Committee, gave a briefing on the deliberations of the two international meetings of COMSATS held this April in Abuja, Nigeria. The guests of honour commended COMSATS' constant endeavours to foster S&T linkages between the countries of the South. Dr. Khan on receiving the plaque expressed his gratitude and wished COMSATS every success in its future ventures.

THE FEDERAL MINISTER FOR SCIENCE AND TECHNOLOGY VISITS THE SECRETARIAT FOR A BRIEFING ON THE TWO INTERNATIONAL MEETINGS OF COMSATS IN NIGERIA

H.E. Dr. M. Azam Khan Swati, the Pakistani Federal Minister for Science and Technology, paid a visit to COMSATS Secretariat on 20th May 2009, for a briefing on the Commission's recent programmes. The Executive Director apprised the Federal Minister about the proceedings and outcomes of the two COMSATS' international meetings in Nigeria. During the briefing, the Executive Director noted that the deliberations of the meetings paved way to create essential linkages among COMSATS' Focal Points in its member countries and the affiliated Centres of Excellence for implementing COMSATS' programmes and activities. The major recommendations of the Consultative Committee Meeting were highlighted that stressed the identification and prioritization of the needs of member countries, multilateral cooperation programmes, designing appropriate technical and economic work plans aimed at socio-economic uplift of the marginalized communities, and voluntary financial and

technical support to COMSATS from its member countries. The Federal Minister commended COMSATS on successfully organizing the two international meetings in Nigeria.

The Federal Minister was also shown various departments and sections of COMSATS Secretariat during his visit, including the tele-health unit. He complimented the healthcare services being provided by COMSATS Secretariat to the remote and marginalized Northern Areas of Pakistan. The Federal Minister also paid a visit to the head-office of COMSATS Internet Services (CIS) located within COMSATS building and appreciated its efforts for providing quality Internet services to the major cities of Pakistan.



Federal Minister for Science & Technology, Mr. M. Azam Khan Swati, while inspecting the Tele-health Unit located at COMSATS Secretariat

CHINESE SCIENTISTS VISIT COMSATS HEADQUARTERS

Prof. Xiang Gao and Prof. Xianzu Gong from the Institute of Plasma Physics, Chinese Academy of Sciences visited COMSATS on 26th June 2009 to learn about organization with China as one of its founder members. The Chinese delegates were visiting Pakistan with a travel grant from COMSATS, in connection with the '34th International Nathiagali Summer College on Physics and Contemporary Needs', jointly organized by the Pakistan Atomic Energy Commission and National

Centre for Physics.

The Executive Director COMSATS briefed the distinguished guests about the programmes and activities of COMSATS, especially those with the People's Republic of China. Dr. Gao who is the Director of Tokamak Division, also informed the Executive Director about the research work being undertaken at his institute. He further apprised that several other groups in the Universities are also engaged in plasma fusion research based on magnetic confinement. It was Dr. Gao under whose supervision one of the faculty members of COMSATS Institute of Information Technology completed his doctorate in 2008.

COMSATS PARTICIPATES IN PCST-ISESCO WORKSHOP

COMSATS participated in a workshop jointly organized by the Pakistan Council for Science and Technology (PCST) and the Islamic Educational, Scientific and Cultural Organization (ISESCO). The workshop was held from 5th to 7th May 2009, in Islamabad on the theme of 'S&T Statistics

and Policy Making'. While representing COMSATS on the occasion, Executive Director COMSATS, Dr. I. E. Qureshi presented a paper on "Engagement in International Collaborations as a Measure of S&T Capacity". The key point of his paper was that the countries that are involved in international scientific collaborations are the ones with a relatively sound indigenous scientific base. Dr. Qureshi said that as a policy matter international engagements are desirable and can be facilitated by organizations such as COMSATS.

Delegates from Iran, Jordan, Kazakhstan, Oman, Saudi Arabia, Sudan, Turkey, in addition to various S&T/R&D organizations of Pakistan, participated in the workshop. The workshop concluded on a note to promote closer cooperation and information sharing among the participating states in developing S&T indicators and thus facilitating to build better S&T policies.

COMSATS SECRETARIAT HOSTS AN ORIENTATION CAMP OF SELECTED PAKISTANI RESEARCHERS FOR PARTICIPATION IN 59TH MEETING OF NOBEL LAUREATES

On 24th June 2009, an Orientation Camp was organized at COMSATS Secretariat for the young Pakistani researchers who were selected to participate in 59th Meeting of Nobel Laureates held in Lindau, Germany, from 28th June to 3rd July 2009. The Lindau Nobel Laureates Meetings provide a globally recognized forum for the exchange of knowledge between Nobel Laureates and aspiring scientists. Young researchers from all over the world are selected to participate in the Meeting after being nominated by a global network of 'Academic Partners' and evaluated by a review panel.

The Camp was organized by the Pakistani node of Council for Lindau Nobel Laureates Meetings. A panel of experts delivered lectures so as to familiarize the group of 6 selected



Young Pakistani scientists selected to attend the 59th Meeting of Nobel Laureates at Lindau, Germany, attending an Orientation Camp at COMSATS Secretariat

Pakistani researchers with the scientific and social programmes of the Meeting. The panel comprised: Dr. N. M. Butt, Representative of Council for Lindau Nobel Laureates Meetings in Pakistan; Ms. Kathrina Lack, Head of Cultural Section, German Embassy in Islamabad; Dr. Ishfaq Ahmad, Advisor on Science and Technology, Planning Commission of Pakistan and Dr. I. E. Qureshi, Executive Director COMSATS, as well as academicians from various Pakistani Universities.

COMSATS PARTICIPATES IN 4TH MEETING OF SAARC TECHNICAL COMMITTEE ON SCIENCE AND TECHNOLOGY

Technical Committee on Science and Technology of the South Asian Association for Regional Cooperation (SAARC) held its fourth meeting on 29th and 30th June in Islamabad, Pakistan. Dr. Muhammad Azam Khan Swati, Federal Minister for Science and Technology, Government of Pakistan inaugurated the meeting hosted by the Government of Pakistan at Best Western Hotel, Islamabad. Delegations from SAARC member countries including Pakistan, Bangladesh and Sri Lanka, which are also the members of the Commission on Science and Technology for Sustainable Development in the South (COMSATS), attended the Meeting.

On behalf of COMSATS, Dr. Imtihan Elahi Qureshi, Executive Director COMSATS participated as a member of Pakistani delegation. Besides taking under consideration important agenda items of the meeting, the Committee reviewed the status of implementation of the decisions taken in the 3rd Meeting of SAARC Technical Committee on Science and Technology, held in New Delhi, India, on 15th September 2008.

IMPORTANT MEETINGS OF THE EXECUTIVE DIRECTOR COMSATS

8 th May 2009	Mr. Rune Stroem Country Director, Asian Development Bank
31 st May 2009	Mr. Muhammad Kashif Murtaza Federal Secretary, Ministry of Science and Technology, Islamabad
2 nd June 2009	Mr. Saqib Aleem Secretary General, Pakistan National Commission for UNESCO
4 th June 2009	Ms. Shahnaz Wazir Ali Special Assistant to the Prime Minister of Pakistan
29 th June 2009	Dr. K.K. Dwivedi Advisor, International Cooperation Division, Department of Science and Technology, India
30 th June 2009	Prof. Dr. Sirmali Fernando and Air Chief Marshal (R) Jayalath Weerakkody Chairperson, Sri Lanka's National Science Foundation and Sri Lankan High Commissioner for Pakistan, respectively

ACTIVITIES/NEWS OF COMSATS' CENTRES OF EXCELLENCE

H.R.H. PRINCESS SUMAYA BINT EL HASSAN APPOINTED PRESIDENT OF EL HASSAN SCIENCE CITY

H.R.H. Prince Hassan, the President of the Higher Council for Science and Technology (HCST), has appointed H.R.H. Princess Sumaya as the President of El Hassan Science City on 27th May 2009, in addition to her post as President of the Royal Scientific Society (RSS). Established in 2007, El Hassan Science City comprises the HCST, the RSS, the Princess Sumaya University for Technology and the Queen Rania Centre for Entrepreneurship.

SCIENTIFIC AND ACADEMIC ACTIVITIES AT RSS

Royal Scientific Society (RSS) participated in the '6th International Machines and Electro-mechanical Exhibition – JIMEX 2009', from 14th to 17th June 2009. The exhibition was held under the patronage of H.E. Nader Al-Dahabi, Prime Minister of Jordan. The event was a joint venture of Jordan Engineers Association, National Energy Research Centre, and Tuyap of Turkey, among others.

The event exhibited latest products and developments in construction and industrial machines, electricity, energy, renewable energy, automation, electrical installation, water technology and electro-mechanical equipment. RSS presented its products and services at a special booth.

During May-June 2009, the Quality Assurance Department of RSS conducted two training courses at its premises. The first training course: 'ISO /IEC 17025:2005 Standard Fields of Applications and Requirements' was conducted on 27th and 28th May 2009.

The course was meant for lab. technicians, quality managers, quality auditors & assessors and personnel of non-accredited laboratories, and laboratories with ISO 9001:2000 certification that are considering or would like to know more about laboratories accreditation. The second course: 'Practical Application in Total Quality Management (TQM)' was held from 14th to 18th June 2009, with an objective to educate corporate executive directors, heads of departments, quality managers and engineers in the concept and philosophy behind Total Quality Management, Quality Awards and Quality Certification, as well as integration between different management systems within an organization.

WORKSHOPS AT ICCBS DURING MAY 2009

A one-day workshop on 'Natural Product-Based Drugs and Other Botanicals: Present Status and Future Prospects' was organized at International Centre for Chemical and Biological Sciences (ICCBS), Karachi, Pakistan, on 16th May 2009, in collaboration with British Council - Pakistan. Key subject experts including Director ICCBS, Prof. Dr. M. Iqbal Choudhary and Director British Council, Mr. Mashood Rizvi delivered lectures to help develop understanding about the elemental basis of Natural Products in Modern Medicine.

Earlier, on 9th May 2009, the National Core Group in Chemistry (NCGC) based at ICCBS, organized a one-day seminar titled 'Swine Flu: A Deadly Disease'. The seminar touched upon various issues, including diagnosis, treatment and preventive measures of Swine flu. Also, later in the month, from 21st to 24th, in collaboration with Umair Basha Foundation and NCGC, ICCBS organized an important workshop on 'Effective Use of Digital Resources'. There were 19 participants from Shah Abdul Latif University, Khairpur, Pakistan who attended the workshop.



H.R.H. Princess Sumaya being designated the President of El Hassan Science City during a ceremony at RSS Main Administration Building

R&D ACTIVITIES AT ICCBS

Researchers at the International Centre for Chemical and Biological Sciences, Karachi Pakistan have successfully developed a bio-pesticide named Biosal and a biofertilizer, Neemex. These products have proved to be very effective in protecting crops like rice, cotton, sugarcane, vegetables, such as egg plant, tomato, cucumber, green-chilies, lady finger,

cabbage and peas, against pests that result in various diseases in plants and eventually damage the whole crop.

On the other hand, another group of scientists at ICCBS have discovered many new base pairs of DNA sequences of Mango. Such valuable research is believed to help in enhancing the production of mangoes in the country.

EMBRAPA AGROBIOLOGIA MAKES LITERARY CONTRIBUTION TO PRESERVING ATLANTIC BIO-DIVERSITY

Researchers from Embrapa Agrobiologia, in collaboration with their counterparts from Embrapa Maize and Sorghum, Embrapa Solos, CEPERJ, BioAtlantica Institute, Institute Biomes and UERJ have jointly authored a book titled

'Strategies and Actions for Biodiversity Conservation'. The book was launched, on 27th May 2009, at the Botanical Gardens, Tom Jonim, in Rio de Janeiro. This book is a result of four years of intense research work where the researchers have tried to help reverse the degradation of the Atlantic Forest in Rio de Janeiro, in order to preserve its valuable biodiversity. Rather than formulating strategies for conservation with the only elements of flora and fauna, the analysis of the current scenario and the routing of proposals have been based on integrated and systemic dimensions of biological, economic, social, environmental and politico-institutional factors.

The strategies and actions for the conservation of biodiversity, identified in the book, have a regional perspective considering the new dynamics of the State that are characteristic to its region. The book provides information and proposes actions to support the policies for conservation, as well as disseminates information and helps planning of land-use and protection of remaining forests and biodiversity of Rio de Janeiro. The selected strategies in the book aim at strengthening the system of units of conservation, management of the landscape, enhancing quality of life and income generation opportunities, education, increased environmental awareness, involvement of civil society and the strengthening of local governance, consolidation of existing knowledge about the environment and its processes.

CIIT ABBOTTABAD HOLDS TECHNOMOOT - 2009

A high-tech national-level scientific event, TechnoMoot-2009, was organized by COMSATS Institute of Information Technology (CIIT), on 11th & 12th May 2009 at its campus in Abbottabad, Pakistan. This event, comprising seminars, symposia, student competitions and exhibitions, was a gathering of people from various fields of science and technology. TechnoMoot-2009 was inaugurated by Dr. Imtinan Elahi Qureshi, Executive Director COMSATS.

The activities undertaken during the event were: Embedded Systems, Microcontrollers and Telecommunications exhibition and competition (EMCOT-2009); Computational Complexities, Innovation & Solutions (CCIS-2009); Conference of Software Enterprises (CSE-2009); Managing Innovations, Leadership, Entrepreneurship & Strategies (Miles-2009); Vision Information & Communication Technology (Vision ICT-2009), and Science for Development (S-Dev-2009).

CIIT CARRIES OUT RESEARCH ON GENETIC DISORDERS

The Department of Biosciences of CIIT Islamabad Campus is currently carrying out research on Mental Retardation, specifically Autosomal Recessive Non-syndromic Mental Retardation, at the Human Molecular Genetic Lab. The research focuses on the genetic mapping of candidate genes involved in Autosomal Recessive Non-syndromic Mental Retardation prevalent in various families of Pakistan.

The Principal Investigator, Dr. Asif Mir, is collecting samples from a range of families in different areas of Pakistan for carrying out the benchmark work, in which he is genotyping the samples with microsatellite markers and trying to identify the locus or gene involved in the disorder in a specific family.

CIIT ABBOTTABAD CELEBRATES 'WORLD ENVIRONMENT DAY'

CIIT Abbottabad celebrated 'World Environment Day' on 5th June 2009. The theme for the Environment Day of year 2009 was "Your Planet Needs You - Unite to Combat Climate Change". The Department of Environmental Sciences (DES), The Environmental Management Unit (EMU), COMSATS Literary Society (CLS), The Environmental Volunteer Organization (EVO) and Earth Sciences Programme (ERS) actively participated in organizing various events to create awareness about environmental issues. The events were actively participated by people from all walks of life, including a large number of students from



A young student presenting his project during TechnoMoot-2009 at COMSATS Institute of Information Technology, Abbottabad

academic institutions, public office bearers and politicians.

CIIT ABBOTTABAD WINS UNICEF FUNDED PROJECT – WAQIPH

UNICEF has entrusted CIIT Abbottabad with a project namely: 'Water Quality Improvement and Promotion of Hygiene (WAQIPH)'. Nearly Rs. 5 million have been granted for this project, which is expected to be completed within three months of its commencement. CIIT Abbottabad bided for this project, which would undertake water quality testing, sanitary inspection and gathering GPS-coordinates of 342 water supply schemes in Bagh and Poonch Districts of Azad Jammu and Kashmir (AJK). This project is being jointly undertaken by the Department of Chemistry, the Department of Environmental Sciences and the Department of Development Studies of CIIT, Abbottabad.

SCIENCE, TECHNOLOGY AND DEVELOPMENT

UN CLIMATE CHANGE CONFERENCE TO WORK OUT S&T SOLUTIONS FOR A BETTER ENVIRONMENT

The UN Climate Change Conference is taking place in Copenhagen from 7th to 18th December 2009, to clinch a new climate change agreement replacing the famous Kyoto Protocol. The track record of the Kyoto Protocol, since its inception in 1997, has not been quite upto the world's expectation. Socio-economic and political ups and downs all across the globe during this period, coupled with the over ambitious nature of the protocol, were the main reasons for its ineffectiveness. The world community is now more determined to strike a better deal at Copenhagen to address the myriad issues of climate change.

The threat due to climate change is believed to be dire unless the entire world puts serious efforts to mitigate it. The worst assertion is that poor societies will suffer the most. Increase in poverty, mass migration and hundreds of thousands of human casualties will be witnessed unless the present trend of climate change is checked at the earliest. The conference is expected to touch upon S&T led initiatives for mitigation, adaptation, capacity building, etc., which strongly demand strategies to combat the above scenario. In this connection, it is believed that the new protocol would facilitate the implementation of policies related to climate change in the coming years that will bring S&T closer to solving the anticipated socio-economic problems.

DISCOVERY OF THE GENE 'DEAR1' TO OPEN NEW HORIZONS FOR BREAST CANCER PROGNOSIS

According to *EurekAlert!* (4th May 2009), the researchers from the M.D. Anderson Cancer Centre of University of Texas have identified a new gene called 'DEAR1' that is genetically altered by mutation and deletion in breast tumors. This gene may provide a new breast cancer prognostic marker. Each year, more than one million women discover that they have breast cancer. Although breast cancer is usually diagnosed in women in their 50s or 60s, however some women develop breast cancer much earlier. It would, therefore, be particularly useful to be able to identify those young women who are specifically at a greater risk of cancer recurrence, so that they could be offered intensive surveillance.

In addition, it was found that DEAR1 expression was frequently lost in women with early-onset breast cancer and the loss of DEAR1 expression correlated with a strong family history of breast cancer and with a breast cancer sub-type that has a poor outcome. At 5-year follow-up of a cohort of 123 pre-menopausal women with onset of breast cancer between the ages of 25 and 49 years, DEAR1-positive expression correlated significantly with a 95% local recurrence-free survival. Other independent researchers also indicate DEAR1 as an excellent predictive biomarker for early onset of breast cancers. This discovery provides a

great promise to young females' health and life, and also enhances socio-economic benefits to women work force.

NEW POTENT DRUG BELIEVED TO CURE MULTI-RESISTANT T.B.

SciDev.net (19th June 2009) has reported a major breakthrough in the treatment of Tuberculosis. The researchers in South Africa have announced the discovery of the first new tuberculosis drug in 40 years that has successfully treated multidrug-resistant T.B. patients in clinical trials. The new drug works on both drug-susceptible and drug-resistant T.B., and with an added benefit that the drug might even shorten treatment-time for the disease. The research shows that most of the patients do not show any signs of resistance towards the drug, enabling it to cure a comparatively larger number of patients.

CARBON-NANOTUBE BASED MEMORY DEVICE: A NEW APPROACH TO LONG-LIVED ELECTRONIC STORAGE

A team of physicists led by Alex Zettl of the University of California, Berkeley, has created a carbon-nanotube based electro-mechanical memory device that they say can store bits safely for upto a billion year. This scientific development was covered by *IEEE's* online newsletter (5th June 2009). Zettl and his colleagues constructed a memory device by taking an iron nanocrystal and placing it inside a hollow carbon nanotube. The iron particle is able to shuttle back and forth along the hollow cylinder, which provides a mechanism to create the 1 and 0 states required for digital bits. Electrodes are attached to the ends of the carbon nanotube, and the movement of the iron particle is controlled through the application of an electrical current. Writing information into the new memory cell is relatively easy. This new approach to really long-lived electronic storage can bring revolutionary changes in electronics commerce.

FUNDING BOOST FOR PAKISTANI SCIENCE

The Government of Pakistan has shown its determination to boost its S&T sector by increasing the relevant budget by more than a quarter for the fiscal year 2009-10. The country will spend around 48 billion rupees (US\$590 million) on science, up from last year's around Rs. 38 billion (US\$573 million) for various S&T projects, reports *SciDev.net* (26th June 2009). The major beneficiaries, directly linked with socio-economic implications are the Ministry of Science and Technology, Higher Education Commission and the Ministry of Food and Agriculture. This year's science budget allocation makes upto 1.9% of the total budget compared with 1.8% of the last year. The Advisor on Science and Technology to the Planning Commission of Pakistan, Dr. Ishfaq Ahmad told *SciDev.net* that the Government has a clear vision that knowledge is the way forward for development and the current increase in the science budget shows the government's resolve to boost this sector.

PROFILE OF COMSATS' INTERNATIONAL S&T CENTRE OF EXCELLENCE

TÜBİTAK MARMARA RESEARCH CENTRE (MRC), TURKEY

Introduction

The TÜBİTAK Marmara Research Centre (MRC) is a leading science and technology institution of Turkey, which has well established reputation internationally. Established in 1972, TÜBİTAK MRC maintains alignment with national development objectives, while carrying out the following activities: conducting research on advanced and conventional technologies to improve the competitiveness of Turkish industry, identifying and solving technological problems, and ensuring the application of developed technological solutions.

TÜBİTAK MRC is a multi-disciplinary, technologically advanced institution, which has sophisticated laboratories equipped with the most advanced equipment and a group of well respected scientists as its staff members who provide extensive services. TÜBİTAK MRC is always at the service of industrial entities, defence institutions, universities and other public institutions, (e.g. local administrations, regional management boards, ministries, etc).

Institutes

TÜBİTAK MRC consists of the following Institutes: Chemistry Institute; Earth and Marine Sciences Institute; Energy Institute; Environment Institute; Food Institute; Genetic Engineering & Biotechnology Institute, and Materials Institute.

Objective

The primary goal of TÜBİTAK MRC, with its seven institutes, is to become one of the world's leading centres of science and technology for applied research. It aims to contribute to the improvement of Turkey's global competitiveness through the application of science and technology.

Services

MRC's activities can be classified in the categories of Industrial Projects (e.g. developing products and processes, reducing costs, increasing productivity, etc.) or Industrial Services (e.g. testing, analyses, measurement/monitoring, training and consultancy, etc).

With its technologies and academic services, TÜBİTAK MRC contributes towards enhancing the technological quality and development of high-tech products in Turkey, by:

- Developing new knowledge, for situations that cannot be resolved with readily available methods/ technologies and therefore, require the application of scientific principles and the development of specialized methods for associated testing and/or measurement/ monitoring;

- Developing solutions for technological problems, improvement of existing technologies and technology transfer and/or adaptation, including a whole new generation of useful tools, materials, methods, processes, systems and production techniques that result from basic and/or applied research;
- Conducting training for increasing the activity areas, productivity and international competitiveness of clients, as well as training for improving management, by transferring the latest scientific and technical development and experience to clients; and
- Offering consultancy for the identification of feasible alternatives or the provision of infrastructure for solving technological problems and developing technological systems or methods.

Some Statistics

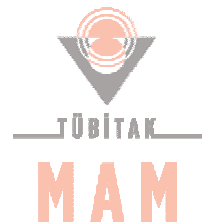
TÜBİTAK MRC adopted a client-oriented approach, during mid-1990s, as its fundamental principle. As an outcome, it has been receiving associated benefits, so that, it now:

- Carries out an average of 160 projects per year;
- Has more than 130 laboratories, in which approximately 65,000 tests/analyses are carried out per year, and
- Has over 60 patents and this figure increases by roughly 10 % every year.

TÜBİTAK MRC shares the knowledge it has accumulated over the years, as well as its advanced equipment and laboratory infrastructure with universities, science and technology institutions and industrial entities by means of the Industrial Partnership Programme (IPP). Along with the IPP, TÜBİTAK MRC anticipates and determines the needs and expectations of Turkish industry and plans future-oriented studies, in order to fulfill these needs. The objective of the IPP is to implement long-term research and development projects with the participation of all stakeholders and to contribute to the improvement of Turkey's competitive power. Information about the programme and participation details can be viewed at www.mam.gov.tr.

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SELECTED FORTHCOMING SCIENTIFIC EVENTS IN COMSATS' MEMBER COUNTRIES

- 2-6 August 2009** 38th Brazilian Congress of Agricultural Engineering, Juazeiro - BA and Petrolina - PE, Brazil
(www.embrapa.br)
- 16-18 August 2009** International Conference on Environmentally Sustainable Development (ESDev-2009), Abbottabad, Pakistan.
(www.ciit-atd.edu.pk)
- 17-19 August 2009** International Workshop on "Mineral Aerosol and Its Impacts on Climate and Environment", Lanzhou, China
(www.icces.ac.cn/ctwf/CTWF2009/ctwfInfo.asp?id=13)
- 18-30 August 2009** Theoretical and Practical Course on "Developments in Biosciences for Enhanced Food and Environmental Biosafety", Dar es Salaam, Tanzania
(www.icgeb.org/meetings-2009.html)
- 26-28 October 2009** COMSATS-COMSTech National Meeting on "Challenges for Socio-economic Development in Pakistan: Role of Science and Technology", Islamabad, Pakistan
(www.comsats.org)

CALL FOR PAPERS FOR "SCIENCE VISION"

Commission on Science and Technology for Sustainable Development in the South (COMSATS) is resuming the publication of its scientific journal "Science Vision". The journal now has a thematic character with articles highlighting the impact of latest developments in S&T on economy and the society, in general.

COMSATS invites contributions in the form of high quality review and research articles/papers in line with the theme of the journal from scientists, researchers, policy makers and young scholars from S&T and R&D institutions. The contributors would be compensated for their time and efforts with a modest amount of honorarium. Please visit COMSATS' website for more details. Contributions may be sent at comsats@comsats.org.pk.

NATIONAL SEMINAR ON POLICIES AND STRATEGIES FOR SUCCESSFUL IMPLEMENTATION OF EMPLOYMENT GENERATING PROGRAMMES IN RENEWABLE ENERGIES, BIOTECHNOLOGY, AGRICULTURE, ENVIRONMENT AND ICTs

COMSTech Secretariat, Islamabad (August 11-12, 2009)

COMSATS in collaboration with the OIC Standing Committee on Scientific and Technological Cooperation (COMSTech), and the Higher Education Commission (HEC) of Pakistan, is organizing a two-day national seminar on 'Policies and Strategies for Successful Implementation of Employment Generating Programmes in Renewable Energies, Biotechnology, Agriculture, Environment and ICTs'. The event will take place at COMSTech Secretariat in Islamabad on 11th and 12th August 2009.

The seminar aims to underscore the need for effective policies and strategies for creation of sustainable livelihoods in the targeted areas. Government representatives, policy makers, scholars, scientists, industrialists and sociologists are encouraged to participate in this event. To register for the subject event, please fill in the online registration form available at COMSATS website: www.comsats.org.

Announcement

Tajammul Hussain
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A BRIEF ON COMSATS

The Commission on Science and Technology for Sustainable Development in the South (COMSATS) is an inter-governmental organization, with its Secretariat located in Islamabad.

COMSATS, currently, has 21 countries as its members, spread across three continents, i.e., Latin America, Africa and Asia. A network, of 16 International Science and Technology Centres of Excellence, is also affiliated with COMSATS to contribute to scientific development of its member states. For detailed information, please visit COMSATS' website: www.comsats.org.

LIST OF COMSATS' NETWORK OF INTERNATIONAL S&T CENTRES OF EXCELLENCE

- The Biosphere Reserve – Beni Biology Station (BBS), Bolivia
- Embrapa Agrobiologia, Brazil
- International Centre for Climate & Environmental Sciences (ICCES), China
- Centro Internacional de Fisica (CIF), Colombia
- National Research Centre (NRC), Egypt
- International Centre for Material Science and Technology (ICMST), Ghana
- Iranian Research Organization for Science and Technology (IROST), Iran
- International Centre for Environmental and Nuclear Sciences (ICENS), Jamaica
- Royal Scientific Society (RSS), Jordan
- National Mathematical Centre (NMC), Nigeria
- International Centre for Chemical and Biological Sciences (ICCBS), Pakistan
- COMSATS Institute of Information Technology (CIIT), Pakistan
- Industrial Research and Consultancy Centre (IRCC), Sudan
- Higher Institute for Applied Science and Technology (HIAST), Syria
- Tanzania Industrial Research and Development Organization (TIRDO), Tanzania
- Marmara Research Centre (MRC), Turkey