### CONTACT DETAILS

### Dr. Ismail AbdelHamid

Science Directorate
Islamic Educational, scientific and Cultural
Organization (ISESCO)

Avenue des F.A.R. P.O.Box 2275 Hay Ryad-Rabat, Kingdom of Morocco

Phone: +212-5-37566052-53 Fax: +212-5-37566012-13 Email: iamage@gmail.com

## Engr. Tahir Naeem

Coordinator/Executive Director INIT COMSATS Institute of Information Technology
Park Road, Chak Shehzad,

Islamabad – Pakistan

Phone 51-90495100 Fax: +92-51-9247006 Email: tnaeem@comsats.edu.pk

# Mr. Muhammad Atig-ur-Rehman

Senior Program Officer (INIT)
COMSATS Institute of Information
Technology,
Islamabad – Pakistan
Phone No. (+92-51) 90495024, 9247000-3
(Ext 5024)
Email: muhammad atiq@comsats.edu.pk

Mr. Tajammul Hussain

Advisor (Programmes)
COMSATS Headquarters
4th Floor, Shahrah-e-Jamhuriat, G-5/2
Islamabad - Pakistan
Phone: +92-51-9204892, 9214515-7

Phone: +92-51-9204892, 9214515 Fax: +92-51-9216539

Email: husseint@comsats.net.pk

# Mr. Abdul Majid Qureshi

Research Scholar COMSATS Headquarters Islamabad, Pakistan Tel: +92-51-9214515-7

Fax: +92-51-9216539

Email: majid13@comsats.net.pk

effectively to the challenges of building competitiveness amid globalization and rapid technological change. The specific objectives of the session include:

- To raise understanding of participants on cutting edge practical methods and techniques employed by ICT professionals in problem solving in areas of education, health and agriculture;
- To explore an enabling policy framework and ideas for strengthening ICT policies in developing countries for enhancing the national technological capability in achieving their development goals; and
- To provide a platform for research students, and IT experts from Education, Health and Agriculture to jointly explore avenues of scientific cooperation in solving problems impeding development.

## **FOCUS AREAS**

The following are few of the major focus areas of the Workshop:

- Contemporary concepts in applying ICTs to expanding literacy
- ICT Development
- Examples of ICTs in Health Research
- ICTs in agriculture sector integrating concepts of GPS and new technologies towards enhancing productivity
- Improving ICT environment for entrepreneurship
- IP Issues in ICT application development etc.

# **IMPORTANT DATES**

28th November 2014 – Notification about

- acceptance or rejection of Workshops
- 15th 16th December 2014 Workshop Days

### WHO SHOULD ATTEND WORKSHOP

Industry experts, academicians, PhD students, entrepreneurs, policy planners and system administrators coming from the COMSATS & OIC Member states. The incentives would include developing and understanding of the state of ICT applications in developing technological capability and enhancing productivity to respond effectively to the challenges of competitiveness amid globalization and rapid technological change.

## **ELIGIBILITY CRITERIA**

At least a Master's degree/demonstrated working experience in the areas relevant to the workshop title.



International Workshop on

# 'APPLICATIONS OF ICTs IN EDUCATION, HEALTHCARE AND AGRICULTURE'

December 15-16, 2014 Islamabad, Pakistan

# Organized by









COMSATS

INIT

CIIT

## INTRODUCTION AND BACKGROUND

Information and Communication Technologies (ICTs) are the electronic means used in conveying, manipulation and storage of data. ICTs are basically information-handling tools—a varied set of goods, applications and services that are used to produce, store, process, distribute and exchange information. These different tools are now able to work together, and can be combined to form our 'networked world' with a massive infrastructure of interconnected telephone services, standardized computing hardware, the Internet, radio and television, which reaches to every corner of the globe'.

## **ICTs IN EDUCATION**

Revolutions in information and communication technologies have reduced national boundaries to meaningless lines drawn on maps. In the new scenario, education has been identified as one of the twelve main services, which need to be opened up for free flow of trade between countries in addressing the problem of adult literacy in the developing world. ICTs have an ever increasing role in education. This is even more important for South Asia and Africa where mobility is fundamental challenge to the existing education systems on one hand, while the reality that the existing educational system cannot cope with the demand for education on the other hand, not foregoing issues of access, equity, and resources.

The new technologies offer us the chance to telescope decades of infrastructure building and development activities by providing us with the advantage of high speed delivery with no dilution in quality; wide reach; individualization of learning in a anytime, anywhere situation; and interactivity, a low per unit cost. These technologies and facilities can be equally used for language teaching, for literacy and adult learning, hence will be discussing important applications of ICTs in advancing education.

### ICTs IN HEALTHCARE

There has been considerable discussion at an international-level about the potential of ICTs to make major impacts for improving the health and well-being of the poor and marginalized populations, combating poverty, and encouraging sustainable development and governance. Despite all their potential, ICTs have not been widely used as tools to improve equitability health care access.

A critical mass of professionals and community users of ICTs in healthcare has not yet been reached in developing countries. Many of the approaches being used are still at a relatively new stage of implementation, with insufficient studies to establish their relevance, applicability or cost effectiveness.

ICTs have made an impact on health care by improved dissemination of public health information and facilitating public discourse and dialogue around major public health threats; enabling remote consultation, diagnosis and treatment through telemedicine; facilitating collaboration and cooperation among health workers. The cooperation in healthcare facilitated by ICTs may include sharing of learning and training approaches; more effective health research and dissemination of and access to research findings; strengthening

of the ability to monitor and respond in a more timely and effective manner; and improving the efficiency of administrative systems in healthcare facilities. This translates into saving lives, resources and directly improves peoples health.

### ICTs IN AGRICULTURE

All stakeholders of agriculture industry need information and knowledge about managing their work efficiently. Any system applied for getting information and knowledge for making decisions in any industry should deliver accurate, complete, concise information. The information provided by the system has to be in user-friendly form, easy to access, cost-effective and well protected from unauthorized accesses.

The application of ICT in agriculture is increasingly important. E-Agriculture is an emerging field focusing on the enhancement of agricultural and rural development through improved information and communication processes. More specifically, e-Agriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use ICT in the rural domain, with a primary focus on agriculture.

## THE WORKSHOP

In view of the importance of the foregoing, the Islamic Educational, Scientific and Cultural Organization (ISESCO), the Commission on Science and Technology for Sustainable Development in the South (COMSATS), Inter Islamic Network on Information Technology (INIT) and COMSATS Institute of Information

Technology (CIIT), Islamabad – Pakistan are jointly organizing an International Workshop on 'Applications of ICTs in Education, Healthcare and Agriculture' scheduled to be held on December 14-16, 2014 at Islamabad, Pakistan.

The Workshop will focus on applications and latest concepts in Telemedicine, drug information services and e-education and e-health. Case studies will be encouraged particularly those highlighting the impact of ICTs in education, health and agriculture of developing countries.

The mainstay of the theme of the workshop will be on main applications of ICTs in education, health and agriculture including those that enhance Automation, Agricultural resource & service management and those that can integrate modern concepts of Global Positioning System, Geographic information systems, Computer-controlled devices (automated systems), to provide better knowledge management to the Agri-Industry as well as expand literacy and innovation learning.

### AIMS AND OBJECTIVES

The international Workshop on 'Applications of ICTs in Education, Healthcare and Agriculture' aims at conducting a knowledge sharing exercise, about the impact of ICTs in innovating the sectors of Education, Health and Agriculture and their impact on a country's socioeconomic development. The main purpose of the Workshop is developing capability of the participants from the OIC and COMSATS Member States to understand and possibly develop new technologies for strengthening technical capability, as well as responding