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Message from the Applied Science Private University President:

Welcome to the 4th International Multi-Conference on Computer Science and Information Technology (CSIT2006) as a major scientific event that is hosted in the Applied Science University, (ASU) the all-Arab- University and the home of Virtue and Knowledge.

The ASU Philosophy is to encourage scientific research so we are proud to be the only University in the area to have the ISO certificate in Scientific Research and Higher Education. In addition, a month ago the (ASU) was ranked the 1st in Scientific Research among all private universities in Jordan (13 in number) and ranked the 9th among all Arab Universities in the Arab World both from the number of published pieces of research and from the per-faculty- member published pieces of research points of view, according to the Islamic States Research Organization (COMSTEC) report in its 12th meeting that held during the period 21st-23rd of Feb., 2006.

The CSIT2006 gives the opportunity to scientists, researchers, developers, and students coming from almost all over the world to present their latest work and achievements and share them with their colleagues in the area of Information Technology.

At this gathering, over than 200 research papers and posters from 45 countries to be presented. These papers have covered different areas of Computer Science and IT including Parallel and Distributed Computing and Networking, Information Retrieval and Internet Applications, Software Engineering, E-Technology, Artificial Intelligence and Applications and Database and Applications.

To encourage researchers to present their best work, the best papers will be published in a number of selected International Journals, along with presenting special awards to the best three papers.

I wish all the participants good stay, to their efforts to be fruitful, and to the CSIT 2006 to be a real Success.

The President

Prof.Zeyad Ramadan, Ph.D
Message from the CSIT2006 Chair:

It has been both a challenge and a thrill for me to chair this year's CSIT Conference. I do look at the CSIT2006 as a "Get-Together" event for researchers and practitioners in the field of IT from all over the globe. This "Get-Together" event facilitates adequate atmosphere for people to meet, present their latest work, share ideas, and most importantly enjoy themselves.

As a refereed conference, our aim has been to give researchers, from all over the world, a chance to present their work, while stressing on general research standards and quality. This was encouraged by offering seven tracks covering a wide range of specializations in Computer Science and Information Technology, by offering our participants a chance to have their work published in a number of International Journals, and by presenting the best three papers with special awards.

Out of the 325 research papers received, we have selected 187 papers for presentation and for appearing in the conference proceedings. Over than 35 sessions have been organized, including 4 special sessions, and three tutorials.

I would like to thank our guest of honor, his Excellency the Minister of Higher Education, for accepting our invitation and for his support. A special thanks to the Applied Science University President and Vice-President for their continuous assistance and support. I sincerely thank the CEO and Vice-CEO of the International Arab Corporation for Education and Investment for their generous Financial Support.

I would like also to thank our financial sponsors: Microsoft, JTC Funds, and Wanadoo, who have embodied the true relationship between Academic Institutions and the Private Sector. I thank IEEE Local Chapter and the Jordanian Computer Society (JCS) for their support. I also thank the public domain in Jordan represented by the Ministry of Tourism, the Municipality of Amman, and the Jordan Civil Aviation Authority.

I also appreciate the efforts of the CSIT2006 Vice-Chair, the Program Chair, the Organization Chair, and all members of the Organization Committee.

Last but not least, a special thanks and appreciation to the ASULINK Team (Khetam AL-Hsoun, Heba Aljoulani, Anas al-assaf, and Mones Al-Tuwesy) who have devoted all their time and efforts to assist the conference chair with the tiniest details.

Sincerely Yours,

Ghassan Issa,
CIST2006 General Chair
His Excellency Dr. Khalid Touqan

It has been a great honor for the CSIT2006 Conference to be held under the Patronage of his Excellency the Minister of Higher Education. Dr. Khalid Touqan, has not only been recognized for his efforts in the development and enhancement of education quality at all its levels, but also recognized as one of the major driving forces in the planning and implementation of E-Technologies in the Education Sector.

Dr. Touqan was born in Amman – Jordan, in 1954. He received his BS.C in Electrical Engineering in 1977, from the American University in Beirut (Lebanon). He continued his higher education in the United States, where he received his Masters Degree in Nuclear Engineering from the University Michigan (Ann Arbor). He later, received his PhD in Nuclear Engineering from MIT (Massachusetts Institute of Technology, USA).

Dr. Touqan held several key positions in a number of universities including, Jordan University, Al-yarmouk University, University of Petrol & Minerals in the Saudi Arabia, and Al Balqaa Applied University. His Excellency was appointed Minister of Education in the year 2000, Minister of Education & Higher Education in 2001, and was reappointed for the third time as a Minister of Education & Higher Education in 2005.

On behalf of the Applied Science University and the CSIT2006 Organization Committees, I would like to extend our warm welcome and great appreciation to his Excellency.

Dr. Ghassan Issa
CSIT2006 General Chair
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