



ARAB RESEARCH INSTITUTE for SCIENCE & ENGINEERING

Providing Opportunities for Technological Advancement

## ARAB RESEARCH INSTITUTE for SCIENCE & ENGINEERING (ARISE)

Proposal To

Kulliyyah of Engineering

International Islamic University (IIU), Malaysia

Establishing ARISE Chapter

### I- About ARISE

#### **ARISE**

ARISE was founded to serve as a professional platform for scientists and engineers to communicate and exchange knowledge in the area of applied industrial research and development.

#### **Where**

ARISE started its operation as a web-based institute and all activities are conducted over the Internet. As activities increased and membership continues to expand, ARISE has already established its first office in Beirut, Lebanon for the purpose of offering its members various services that meet their expectation.

#### **Activities**

ARISE activities cover various areas of science and engineering. The majority of activities conducted through ARISE will be of an applied nature. This objective is of primary importance. It is intended to create a suitable environment that allows researchers and students at universities to interact actively with engineers from industry and to conduct applied industrial research and development work that meets the needs of industry in attaining higher quality innovative products and more advanced managerial practices.

#### **Nature**

ARISE is an independent, non-profit, self-financing and scientifically oriented institution. ARISE membership is free of charge and is open to all those having the necessary background and interest to become members. At a later stage, when membership increases and activities grow, ARISE will partially secure its required funds from membership fees of participating members. In addition, ARISE is seeking funding from donor organizations as well as contributions from institutes and/or individuals who believe that ARISE objectives are important to engineering education, industry and the community at large.

#### **Vision**

ARISE will become the most prominent science and engineering applied industrial research and development institute in the Arab world.

ARISE will develop, through the efforts of its members, to become an internationally recognized professional institute.

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P. O. Box 13-5657, Beirut, Lebanon

[www.ararise.org](http://www.ararise.org)

Email: [info@ararise.org](mailto:info@ararise.org)

ARISE membership will include scientists and engineers from industry and academia from all Arab countries. Scientists and engineers from all over the world will become members of ARISE and participate in its activities.

ARISE will always remain a private, independent and non-profit institute.

ARISE members will fully control its activities and direction far from any external influences.

### Mission

ARISE motto is:

**“Creating Opportunities for Technological Advancement”**

### Collaboration

ARISE will bridge the gap between practicing engineers from industry, and, researchers and students from the academic world. ARISE will encourage both sides to set up a continuous and open dialogue to satisfy their mutual interests and meet their needs and expectations.

### Universities

ARISE will encourage its members from academia, both faculty and students, to undertake applied industrial research and development. It will support faculty-student projects aimed at advancing technological know-how for the benefit of industry and enabling fresh graduates to cope with the challenges of industry promptly following graduation.

### Industry

ARISE will encourage its members from industry to interact with the academic world and to offer science and engineering faculty and students the opportunity to understand the needs of industry, and to help direct science and engineering education to meet these needs.

## II- ARISE Current Status

### A- Membership Statistics

**Members Distribution by Type**

Member	Count
Academician (university)	100
Professional (Industry)	111
Student (University)	71
<b>Total</b>	<b>282</b>

**Member Distribution by Degree**

Degree	Count
Ph.D.	98
MS	49
BS	62
Technical	2
Students	71
<b>Total</b>	<b>282</b>

**Members Geographical Distribution**

Countries	Academics	Professionals	Students	All Members
Arab Countries	75	99	68	242
Non-Arab Countries	25	12	3	40
<b>Total Countries</b>	<b>100</b>	<b>111</b>	<b>71</b>	<b>282</b>

### List of Member's Countries (Alphabetical Order)

Arab Countries	Non-Arab Countries
Algeria	Austria
Bahrain	Canada
Egypt	France
Iraq	India
Jordan	Iran
Kuwait	Japan
Lebanon	Kyrgyzstan
Libya	Malaysia
Morocco	New Zealand
Palestine	Pakistan
Qatar	Singapore
Saudi Arabia	Sweden
Sudan	United Kingdom
Syria	United States
Tunisia	USA
United Arab Emirates	Zaire
Yemen	
17 countries	16 countries

#### B- Ariser: The ARISE Scientific Journal

A scientific, electronic, web-based journal is published by ARISE. Ariser was registered in 2007 with the International Standard Serial Number (ISSN) Center in Paris, France. This center operates under the United Nations Educational, Scientific and Cultural Organization (UNESCO). Ariser ISSN number is: ISSN 1994-3253.

Ariser has received recognition among Arab researchers, and articles are being written especially for publication in Ariser. A committee reviews and evaluates all articles and papers that will appear in Ariser to verify the quality and information content of published articles. ARISE members are encouraged to publish papers and articles in Ariser in order to establish the journal as a publication in which information on applied industrial research and development work appears in addition to original academic research.

#### C- ARISE In Lebanon:

ARISE has been officially registered with the Lebanese Authorities as a non-profit, scientifically oriented institute. This official recognition was achieved on 4 September, 2006.

لقد تم تسجيل ARISE لدى وزارة الداخلية في لبنان وذلك  
لأعطاء الصفة الرسمية للجمعية تحت اسم  
الجمعية العربية لبحاث العلوم التطبيقية  
علم و خبر رقم 407 / ا د تاريخ: 4 ايلول 2006  
مركزها: بيروت - لبنان

#### D- ARISE Partners

ARISE has already established a partnership with the Industrial Technology Initiative (ITI), which is a group formed by a number of university professors from various engineering disciplines of the Faculty of Engineering & Architecture (FEA) at the American University of

Beirut (AUB). ITI was launched in November 2007 and has objectives similar to ARISE. Joint activities between ARISE and ITI are being planned for earliest possible implementation.

Further discussions are underway to establish partnerships with similar groups at other universities in Lebanon, the Middle East and Internationally. Presently, partnerships are under discussion in Saudi Arabia, Algeria.

#### **E- ARISE Activities (Highlights)**

ARISE conducted a number of presentations at universities in Lebanon and the Kingdom of Saudi Arabia to introduce ARISE and encourage membership and participation in its activities. These presentations were successful in attracting faculty members and students in joining ARISE.

During the year 2007, ARISE established contacts with a number of international leading technology companies to obtain technical and financial support for its activities and to set up academic-industry collaboration. A highly prominent technology industry company in the USA responded favorably by offering the opportunity for university professors to submit research proposals for possible funding. Consequently, ARISE established contacts and held meetings at a number of universities in Lebanon. Some of the contacted university faculty members are in the process of preparing proposals for submission, through ARISE, to secure funding based on budget allocation for the year 2008.

#### **F- Planned Future Activities**

ARISE planned future activities are based on its objectives. These activities include, but are not necessary limited to those listed below. Any suggestions from interested parties are welcome and will be given full consideration.

- Establishing work groups in the following areas:
  - Academic-Industrial Collaboration
  - Applied Industrial Research and Development
  - Engineering Education Quality Management by Review, Assessment and Accreditation
  - Computers and Communication
  - Renewable Energy and Energy Efficiency
  - Environmental Protection
  - Water, Wastewater and Sewage Treatment Technologies
- Encouraging the use of ARISE technical journal as a medium for scientific and technical publications possible division of the journal into specialized professional journals.
- Conducting technical seminars, conferences and offering technical courses open to a wide range of interested participants.
- Establishing branches for ARISE in various Arab universities.
- Establishing branches for ARISE at universities in various countries.
- Seeking funding from parties interested in promoting ARISE and partnering with such donors in conducting ARISE activities.
- Establishing networks with institutions that have interests similar to those of ARISE.

Participation in the above activities is open to members from universities as well as from industry and community organization. The success and time frame for implementing the above is dependent on the availability of funds from donors, organizations and individuals, whose contributions will enhance the chances for success of ARISE.

### **III- Establishing a Chapter for ARISE, Kulliyah of Engineering, IIU, Malaysia**

ARISE Vision states "Scientists and engineers from all over the world will become members of ARISE and participate in its activities". In addition, the planned future activities include "Establishing branches for ARISE at universities in various countries".

Fulfillment of ARISE Vision and implementation of its planned future activities have led me, as ARISE Founder & President, to initiate contact with universities in Arab countries and Internationally in order to propose the establishment of chapters for ARISE at interested universities. I firmly believes that enhancing the image of ARISE in various countries is best achieved through participation of universities, as they are more inclined to be active in professional institutions than industry. I believe that universities can take the lead in the university-industry collaboration efforts.

On behalf of ARISE, I am honored to initiate cooperation with the Kulliyah of Engineering at IIU, Malaysia and to propose the formation of a chapter for ARISE at the Kulliyah of Engineering hoping that the Board will view this proposal favorably.

Establishing a chapter for ARISE at IIU Kulliyah of Engineering could be of benefit to both sides as outlined below.

#### **A- Benefits for ARISE**

The benefits that ARISE could derive from establishing a chapter at Kulliyah of Engineering, IIU, Malaysia are:

- Build an image of ARISE as an international professional institute.
- Diversify and increase membership to give ARISE higher credibility.
- Widen the scope of activities conducted by ARISE.
- Utilize expertise of Kulliyah faculty in industrial research & development projects.
- Utilize expertise of Kulliyah faculty in offering seminars and training as applicable.
- Increase publication of articles in Ariser journal.

#### **B- Benefits for Kulliyah of Engineering**

The benefits that Kulliyah of Engineering IIU, Malaysia could derive by establishing a chapter of ARISE are:

- Establish contacts with members of ARISE at a large number of universities.
- Exchanging knowledge with 100 Ph.D. academic ARISE members.
- Participate in joint industrial research & development projects with ARISE members.
- Undertaking development projects from ARISE industry members.
- Building on the experience of ARISE members in Academic-Industry collaboration.
- Participate in and host future planned RAISE conferences

The above are some of the benefits to both sides from this cooperation. Additional benefits can be identified and utilized if the ARISE chapter is approved by the Board of Kulliyah of Engineering and commences its activities. Kulliyah of Engineering Board and faculty members are welcome to make suggestions that could be of further benefit to ARISE.

### **C- Concluding Remarks**

Professional institutes or societies that are open to wide participation from engineers and scientists have made important contributions to the development of the professions they represent. Such institutes and societies are normally established and based in countries that are technically advanced. Many countries that have developed technological advancement over the past two to three decades, have realized the importance of establishing collaboration between academia and industry. This collaboration has provided high benefits to both sides.

As an electrical engineer, I joined the Institute of Electrical and Electronic Engineers (IEEE) and achieved the status of Senior Member. IEEE is undoubtedly the largest professional institute in the world and has the highest number of members, conducts the largest number of technical conferences, issues a large number of technical publications and has made a huge contribution to the establishment of standards and good practices. This is why I have always viewed IEEE as a model in developing ARISE. IEEE is open to members from all over the world and has over 1,500 chapters and 1,400 student branches all over the world.

ARISE is still a relatively young institute. However, it is up to its members and those who believe in its objectives to make it grow and play an important role in collaborative efforts and technological advancement. With the support of the Board of the Kulliyyah of Engineering at IIU, ARISE will have taken an important step on its way to develop into an international institute with large international participation and recognition.

Omar Mardam-Bey, Ph.D.  
ARISE Founder & President