

## IAEA/SESAME Training Fellowships

### Background

The International Center for Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) is established in Jordan, under the auspices of UNESCO. Its mission is to promote international collaboration in the Middle East and the Mediterranean region using synchrotron light for basic and applied research in physics, chemistry, biology, materials science, environmental and medical investigations, archaeological studies and other research areas of relevance to the region.

Seven Beamlines have been approved for the first operational phase of the third generation 2.5 GeV Electron storage ring of SESAME. These are:

1. Protein crystallography
2. X-Ray Absorption Fine Structure (XAFS) and X-Ray Fluorescence(XRF)
3. Infrared Spectro-microscopy
4. Soft X-ray Photoemission and Photo-absorption Spectroscopy
5. Small Angle X-Ray Scattering (SAXS)/Wide Angle X-Ray Scattering(WAXS)
6. Powder Diffraction
7. Extreme UltraViolet (EUV).

In 2006, a Memorandum of Understanding (MoU) was signed between the International Atomic Energy Agency (IAEA) and SESAME. One of the results is a Capacity Building Project in the use and operation of SESAME that aims *inter alia* at enhancing the skills of potential SESAME operators and users in different fields of operation of the SESAME Laboratory.

In the context of this Capacity Building project, IAEA fellowships, through SESAME, are available for young scientists from SESAME Members to allow them to carry out research on any of the aforementioned seven beamlines in well-established synchrotron radiation laboratories around the world.

All applications received will be reviewed by a team consisting of SESAME and IAEA officials and the final selection is made by IAEA.

### Eligibility for a Fellowship

- Nationals of SESAME and IAEA members (Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestinian Authority and Turkey).
- A PhD or evidence of being engaged in research for a doctoral thesis in any of the disciplines of the Physical or Biological sciences.
- Ability to work effectively in a multicultural environment with a multidisciplinary team of scientists, engineers and technicians.
- Excellent oral and written command of English
- Good communication skills.
- Willingness to travel abroad.

### Fellowships available and their duration

In 2010, through the above-stated Capacity Building project, fellowships are being offered for the following:

1. Beamline Users (4 Fellowships, 6 months each), Code: BEAMUSER6MO
2. Beamline Operators (2 Fellowships, 1 month each), Code: BEAMOP1MO
3. Radiation Protection (1 Fellowship, 6 months), Code: RADIATION6MO

### Fellowship Conditions

No application will be deemed complete without the following in English:

- A duly completed application form (IAEA Fellowship form).
- A detailed C.V. with a clear indication of academic qualifications and positions held; major fields of training and research experience; and, in no more than five lines, current research work.
- A list of publications with an asterisk against the five most significant ones (articles are not to be submitted and abstracts are not to be listed or submitted).
- At least 2 recommendation letters from experienced scientists who know the applicant's work.

Though not obligatory, candidates are encouraged to submit a letter of "acceptance" from a host institution indicating that it is willing to accept them if the fellowship is awarded but the IAEA will decide the final location of the training.

### How to apply

By 28 February 2010, the documents referred to in the Section "Fellowship Conditions" are to be sent electronically directly to the SESAME Secretariat, and not through "Governmental Channels", to the following address [fellowships@sesame.org.jo](mailto:fellowships@sesame.org.jo) clearly indicating in a separate letter the category of fellowship mentioned above for which the application is being submitted.

For further Information: please consult the SESAME web site: [www.sesame.org.jo](http://www.sesame.org.jo)