

EMS ERCE LABEL

Emerging Regional Centres of Excellence

Name of Institution and address:

Institute for Mathematical Research (INSPEM)
Universiti Putra Malaysia
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Director:

Prof Dato' Dr Kamel Ariffin Mohd Atan

Introduction

The Institute for Mathematical Research (INSPEM) housed in the complex of the Universiti Putra Malaysia is a research-focused institute first established in 2002. The main activities of INSPEM are to conduct research in the field of mathematics and sciences whose major components are mathematics based. This also includes other related areas such as philosophy and history of mathematics and mathematics education. Led by a director and his deputy as well as heads of research laboratories in various subfields of mathematics the institute is the first of its kind in the country and run on financial support from government agencies and the university.

In recognition that mathematics is a field of knowledge that is universally studied and its development is dependent on the contributions of mathematicians globally the institute embarked on the program of providing facilities to invited mathematicians, local and international, to initiate and expand collaborative activities with the mathematicians in the institute. Thus far more than 120 visitors have come to the institute as funded research scientists or visitors. With the vision to provide opportunities to young and budding mathematicians to benefit from the research activities in the institute, places are offered to them to pursue structured research programs leading to postgraduate degrees conferred by the university. This program has certainly benefited the institute and the students in terms of training and making contributions to the area of studies. Most of the research carried out in the institute found publications in journals worldwide. It also publishes its own international journal: the Malaysian Journal of Mathematical Sciences.

Based upon the achievements and standing of the institute the label ERCE was conferred by EMS since May 2014.

Current status of INSPEM

INSPEM continues to be active in its usual activities since gaining the label ERCE. These includes conducting research, publication, organizing conferences and lecture series, establishing networking national and international, soliciting of research funding and providing places for

young researchers local and international to earn postgraduate degrees at the institute.

International students training potential under the ERCE label

Presently INSPEM are yet to have students under the ERCE label. Perhaps this is because the label was accorded to INSPEM just over a year ago. However efforts are being made by CDC of EMS to encourage students from the region to enroll in the institute. One student will start his postgraduate research work in INSPEM by February 2016. The institute looks forward to receiving this student under the ERCE label.

The institute certainly welcomes more students to pursue their postgraduate studies under this arrangement. INSPEM gladly participate in this program of giving opportunities for further studies to students from less developed countries under the ERCE label. Besides participating in developing human capital necessary for the progress of the student's own country, the presence of international students in the institute under the ERCE label will certainly increase the number of international students in INSPEM. This will help to accelerate our efforts to balance the ratio of local students compared to international ones in the institute.

The presence of international students we believe will promote INSPEM as a centre of higher learning in the field of mathematics in the region and elsewhere. From another angle it certainly will develop and increase

interactions and promote better cultural understanding among students from different culture backgrounds through interactions among themselves. As future scholars of mathematics, interactions among budding mathematicians from all around the globe are indeed encouraged to ensure their area of studies can be shared and collaborative work can be initiated and expanded, perhaps initiated with their fellow students in the institute. With the ERCE label these can be realized earlier than anticipated.

Hosting of international students

Since its inception INSPEM provides places for promising students local and international to conduct research in the institute leading to MS and PhD degrees. The current enrollment of postgraduate students in INSPEM is 146 out of which 41 are international students. They are mainly from countries in the Asian region that include Nigeria, Saudi Arabia, Iran, Iraq, Libya, Jordan, Pakistan, Bangladesh, India and Indonesia.

Since its inception a total of fifty-six international students have graduated from INSPEM out of which forty-two are PhD graduates. In the last graduation exercise in 2014 six international postgraduate students trained at the institute received their graduation scrolls. Three of them are from Iran and one each from Iraq, Nigeria and Tanzania. Out of these four are PhD graduates. In the

coming graduation exercise to be held in October this year another six international students will graduate. They are each from Nigeria, Pakistan, Saudi Arabia, Iran, Iraq and Libya. Of these three are PhD graduates.

The institute continues to offer places to qualified students to pursue postgraduate research degrees supervised by the institute's research professors. Some financial assistance is available to those enrolled at the institute. Beginning last year places are reserved for candidates under the sponsorship of EMS. Under this scheme the institute is expecting some students proposed by EMS from less developed countries in the region to enroll in INSPEM. Five names have actually been proposed to INSPEM for the last intake. Three students have been offered places. One is from Nepal and the other two from Cambodia. However two of them (one from Nepal and the other Cambodia) did not take up the offer. One will start commencing study in INSPEM in February 2016. As for the remaining two names proposed INSPEM have yet to receive any formal applications from them.

Conclusion

To conclude this report INSPEM would like to suggest that this program be continued and machinery of inviting and offering places to international students be improved. Publicity on the type of courses available in the institute be increased and done by the institute themselves

through the CDC. Brochures and posters can be prepared by the institutes and forwarded to CDC to be distributed to regions chosen by CDC of EMS especially in the less developed areas where accessibility of communications through the internet is limited.

We would like also to suggest that meetings between ERCE-labeled members be annually held (or at a period agreed by all parties) to exchange reports, views and ideas on the running of the program. INSPEM is willing to be the host at the convenient time of all involved.