

Call for Applications/Expression of Interest

**Emerging Regional Centres of Excellence
(EMS-ERCE)**

European Mathematical Society

With the proliferation of emerging economies worldwide there are among developing countries varying degrees of development, just as among the developed world. In order to benefit from this situation our strategy of cooperation and help has to be adapted to the different levels of development.

Very good centres exist in emerging economies where students from the least developed regions can be trained to the master's level or higher; after the master's degree, such a student could be given the option of coming to Europe to do a Ph.D. This is much more cost-effective than sending such a student directly to Europe. In fact, EMS-CDC in collaboration with CIMPA, has already educated a Cambodian student in Vietnam to master level, with two more doing the course right now.

It is in this spirit that the Committee for Developing Countries of the European Mathematical Society (EMS-CDC) wishes to propose a scheme of Emerging Regional Centres of Excellence (EMS-ERCE). The idea is for EMS to select, endorse and help a number of such centres to offer training to M.Sc. level to students from less developed countries in their region. With the above encouraging example, provided there are institutions in the emerging economies who are interested in participating, and with the backing of the EMS, our committee is confident that such a scheme will work well.

We have spoken of this idea to a number of mathematicians and the reaction has been really positive, from Europe, South America, South Africa and Asia.

The advantages of such a procedure are threefold:

1. It is cheaper in general to send a student to a nearby country or region.
2. The student will be less disoriented, and in some cases, they may not need a higher European degree.
3. The educating institution will gain experience and prestige.

First, to test practicability and to make sure we can handle properly the applications we get, we propose as a **Pilot Scheme** to stagger the regions and start our first call with

Southern Asia, including the Indian Subcontinent

and shall concentrate on other regions in subsequent calls.

Secondly, as we know, there are already a number of prestigious institutions in emerging regions of international renown. They are of course welcome to apply, if the scheme interests them. In that case, they would add lustre to the scheme.

The criteria for eligibility are:

1. The centre is of good scientific standing in the region and neighbouring regions.
2. It has a good track record both in research and in pedagogy.
3. The centre has a fairly international outlook.
4. The centre has a long-term prospective with reasonable guarantee for such.
5. The centre is willing to admit and educate graduate students from less developed regions. It should have the infrastructure to do so, e.g. the language of instruction should preferably be in one of the main European languages (English, French or Spanish).
6. The degree aimed at is M.Sc., and Ph.D. in exceptional cases.
7. The centre is willing to welcome well-established foreign visiting mathematicians for collaboration in research and for teaching the graduate courses.

If selected, the centre will be labelled EMS-ERCE, initially for four years, but renewable thereafter subject to mutual agreement.

The advantages for the centre are:

1. The label can add prestige and visibility to the centre, which will most probably attract more and better students.
2. Often this will in turn attract funding from local and regional sources.

3. The members of CDC will be there to give support and advice whenever needed. Since this will be considered part of our direct mission, they will get priority of our time and resources.
4. CDC will be on hand to help those of the students who might wish to and who are capable of continuing their studies after their M.Sc.
5. CDC will try to send experienced lecturers to give short or medium courses, e.g. by involving the Voluntary Lecturers Scheme, run by the IMU.
6. CDC will seek European hosts for researchers from these centres for visits or collaborations, or both.
7. CDC will make available small grants for members of the centres to attend conferences, when appropriate.

If this scheme succeeds, these EMS-ERCE will provide education to other, less developed, regions and get in exchange help to further develop themselves. We think it will be a very advantageous scheme for all. At the same time, with much less expenditure a larger number of students can receive their first graduate education, in a culture not too removed from their own. This will be a practical and efficient way for mathematicians to help other mathematicians.

The members of the ERCE subcommittee of EMS-CDC are:

Georg Bock (Heidelberg)
Giulia Di Nunno (Oslo)
Anna Fino (Torino)
Michel Jambu (Nice)
Mikael Passare (Stockholm), chair
Michel Thera (Limoges)
Ramadas Ramakrishnan Trivandrum (ICTP)
Tsou Sheung Tsun (Oxford)
Begona Victoriano (Madrid)
Paul Vaderlind (Stockholm)
Michel Waldschmidt (Paris)

Application or Expression of Interest
European Mathematical Society Emerging Regional Centres of Excellence

In this **Pilot Scheme**, we welcome applications from

Southern Asia, including the Indian Subcontinent

Each interested institute is asked to send us a brief description, its activities, and its suitability, together with a covering letter and supporting material if any, to:

Mikael Passare: passare@math.su.se *or*

Michel Waldschmidt: miw@math.jussieu.fr *or*

Tsou Sheung Tsun: tsou@maths.ox.ac.uk

Institutes are welcome to discuss informally with any member of the ERCE subcommittee (named above) before sending their applications.

The preliminary deadline for application or expression of interest is **30 April 2011**, which is expected to be extended if there is sufficient interest.

Please note that calls for other emerging regions will soon follow this first call.

<http://www.euro-math-soc.eu/comm-develop.html>
