

Serguei Foss, Heriot-Watt University, Edinburgh, UK, and Gideon A. Ngwa, Senior Lecturer, Applied Mathematical Modelling and Mathematical Biology, University of Buea, Cameroon

A visit by Foss to Cameroon in 2010 was reciprocated with a visit by Shu to Heriot-Watt the following year. While in Cameroon Foss gave an intensive course in applied probability to postgraduate students (Master's and PhD) in the mathematics department. For purposes of continuity, he was assisted by Dr Felix Shu, and the course is now an established part of the curriculum.

A team consisting of the mentor and Drs Shu and Ngwa was set up for the purpose of the training and co-supervision of research students.

The visit of the mentor coincided with the curriculum review taking place at Buea. He reviewed the existing syllabuses and made a number of recommendations that were taken into account when preparing the final versions.

Two research publications are now in print. Through the mentorship scheme, the Department of Mathematics at the University of Beau has been able to procure around 90 mathematics textbooks, which are now on display in the Department/Faculty Library and are available for consultation by the staff and postgraduate students of the Science Faculty.

During Dr Shu's reciprocal visit to Heriot-Watt the following year, progress of their joint PhD student was discussed, the possibility of procurement of research journals for the library in Beau was discussed, as was their joint research interests. While at Heriot-Watt, Dr Shu had useful discussions with students from Cameroon who were studying in Edinburgh, and took the opportunity to attend a Workshop on Networks running at the ICMS. The Workshop offered an excellent opportunity to meet other mathematicians with similar research interests

Developing new MSc and PhD programmes

The department at Buea started MSc and PhD programmes in October 2007, when Prof Foss visited there for two weeks. They selected two MSc and two PhD students for these programmes. Prof Foss gave a 50-hour course on Bayesian Statistics and MCMC. All students attended all lectures and tutorials, and Dr Shu took an active part. Later Dr Shu organized a number of extra tutorials, where he discussed questions and problems Prof Foss and Dr Shu had prepared together. Prof Foss' course was included in the programme, and it was planned that Dr Shu should continue to teach it every second year. Dr Tom Fisher (Heriot-Watt) visited Buea in 2009 and provided a further material for courses on financial and actuarial mathematics.

Supervision of research students

In October 2007, joint supervision of two PhD students and two MSc students was undertaken with Dr Shu and Dr Ngwa. The themes were on the border-line between applied probability and statistics.

Books

About 90 new books were sent to Cameroon in January 2009 to form the basis of a departmental library, mainly for the use of postgraduate students.

Donations

1. The Applied Probability Trust has donated in 2008 about 100 recent issues of journals. A further donation has been made in 2009/10.
2. The journal "Stochastic Models" has provided free on-line access.
3. A private estate in Oxford has donated the last 40 years (series A and B) of RSS journals. The shipping was paid for by the MARM grant.

Conference

With the help of MARM support, the Mathematics Department at Buea organised an international conference (12-16 May 2009). Dr Fisher was among the participants from abroad.

Meetings with University of Buea officials

During his visit to Buea in October 2007, Serguei Foss had a number of discussions with the Rector, two Vice-Rectors and the Head of the School of Natural Science.