

Report for IBAME about the Portuguese Mössbauer community

There are presently in Portugal the following Mössbauer facilities:

The most active, which have managed to always have sources with a reasonable activity, are those in

- The University of Coimbra Fac. Sciences and Technology, Prof. Benilde Costa.
- The University of Lisbon, Faculty of Sciences, presently Dr. Liliana Ferreira.
- The University of Lisbon, Instituto Superior Técnico (IST), Campus Tecnológico e Nuclear (CTN), Dr. J. C. Waerenborgh.

They have transmission and CEMS spectrometers, cryostats. There are furnaces in the Faculty of Sciences of the University of Lisbon and in the Fac. Sciences and Technology of the University of Coimbra.

A facility which in the last years has also worked regularly had to temporarily stop as they had to move for new installations in a different building. Hopefully will restart soon:

- Universidade Nova de Lisboa, Prof. Pedro Tavares. Transmission Mössbauer spectrometer with a CCR cryostat. A small permanent magnet of 500 gauss is used when required.

Due to reduced financial support there are other facilities which not always have the possibility of acquiring sources:

- Universidade do Algarve, Dr. José Mariano. Transmission Mössbauer spectrometer, no cryostat.

Two more groups have been inactive in recent years:

- In the University of Lisbon, Instituto Superior Técnico, Tagus Park Campus, the facility has been inactive since Prof. Mircea Rogalski untimely demise in September 2013.
- In the University of Porto the Mössbauer spectroscopy facility has also been in stand by since the departure of Dr. David Schmool in 2013 for the Université de Perpignan, France.

Although most groups remain small, in most cases they comprise only one permanent staff, there was a slight improvement in the last 2 years. In Campus Tecnológico e Nuclear a contract research was hired. Permanent staff act as supervisor of MSc or PhD students, mainly in the field of materials science. Lectures on Mössbauer spectroscopy and the possibility to visit Mössbauer laboratories are also offered to students in several graduation courses.

Cooperation with Mössbauer groups in Spain has also started this year with a successful joint meeting, IBERMOSS2019, organized in Bilbao, Spain, by the IBAME representative in Spain, Fernando Plazaola. Six Spanish groups and two Portuguese ones (Univ. Coimbra and IST) participated. The next meeting is planned to take place in Coimbra, Portugal, on January 2021.