

The Portuguese MX Block Allocation Group at the ESRF: a 14-year success history (1999-2013)

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The European Synchrotron Radiation Facility (ESRF) was founded in 1998 and began operation in 1994. Its annual budget of ca. 80 M€ is currently supported by 18 European countries and Israel. It is at the forefront of science using synchrotron X-rays and a hallmark of scientific and technological cooperation in Europe.

The first Portuguese users of the ESRF were given access through cooperation with the EMBL Grenoble Outstation and the importance of this facility to Portuguese scientists in diverse areas such as materials science and structural Biology was soon recognized, leading to Portugal joining the ESRF as an associated member in 1997. This novel statute was created to accommodate the Portuguese membership, but later allowed other small European countries to join the ESRF as well.

In 1999, the ESRF Director of Research for Life Sciences instituted a new scheme for access to the Macromolecular Crystallography (MX) beamlines, through Block Allocation Groups (BAG) instead of individual projects. This move was a response to the realization that the newly available CCD detectors made an MX experiment much faster, and to make the most efficient use of beamtime it was necessary to group several projects into a larger one, combining researchers from different labs within the same country. In recognition of the excellence of their work, several Portuguese MX groups were invited to form one of the first ESRF BAGs. Since then, the BAG scheme expanded to account for more than 90% of the total beamtime awarded to MX projects at the ESRF.

To ensure that the science done at the ESRF by the BAG members is of high quality, BAGs are subject to regular annual reviews: in alternating years one progress report or a full report must be submitted along with a new proposal.

Selected highlights from the current members of the Portuguese ESRF BAG will be presented, to illustrate the importance of the continued use of the ESRF by the Portuguese MX community and the quality of the research produced to date. The references listed below are just a sample of the high-impact publications generated by this research.

References

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