FISH: The Friendly Face of SAS Data Model-Fitting

J. L. Rawle and R. K. Heenan

ISIS Facility and Diamond Light Source, Harwell Science and Innovation Campus, Didcot, OX11 0QX, UK

Jonathan Rawle@diamond.ac.uk

FISH is a powerful small-angle scattering data fitting program. It is best suited to the fitting of a curve with a large number of data points by a model with relatively few parameters. The built in models cover a wide range of possibilities including polydisperse spherical cores and multiple shells. Constraints may be applied and models combined and extended, making the possibilities of the program semi-infinite.

The program's previous text-based interface presented a steep learning curve for users. The new version features a graphical interface, making the software much more accessible, while retaining its power and flexibility. The graphics plotting routines have been replaced, and the plot now updates automatically as the fit progresses. Further planned enhancements include the ability to fit a series of datasets automatically and the ability to read and write standard data formats seamlessly without the need for conversion. The new interface is Java-based, making it cross-platform compatible, and leaving open the future possibility of integration with beamline data acquisition systems.

References

1. R. K. Heenan, Rutherford Appleton Laboratory Report RAL-89-129 (1989)