

Automation of MX Data Collection and Processing

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We present the DNA project, a collaboration with the aim of fully automating the collection and processing of macro-molecular X-ray crystallography data including rapid crystal screening. The DNA system takes strategic decisions about the data collection based on information provided by the data processing software and some basic parameters relating to the project which will be supplied by the user. The modular nature of the system simplifies installation on different beamlines and allows the use of different data collection and data processing software.

The DNA system forms a major part of the fully automated sample screening pipeline being put in place at many European synchrotron radiation facilities. Version 1.0 of the software is now working successfully at both the ESRF (Grenoble, France) and SRS (Daresbury, UK) and will be transferred to beamlines of other synchrotrons in the near future. We are also working on an off-line version that will be used at laboratory sources.

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