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## Sample environment for reflectometry

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For hard matter samples the sample environment (SE) is covering a huge number of different fields, starting from a simple sample holder for normal ambient conditions to SE used for in situ growth of a thin layer by beam epitaxial growth or pulsed laser deposition. In between is a wild zoo serving all the different scientific investigation on your instrument. In soft matter and biology, it is not less diverse starting by simple liquid cells reaching to a set of such cells moved into the beam by a sample changer and filled by externally controlled pumps and valves starting a chemical reaction studied in situ by neutrons.

Most of the sample environment is bought from the shelf and luckily the variety is huge and most of the time it is pushed button ready for daily use. Additionally we have sample environment developed in collaboration or purely by users themselves dedicated to a single scientific question.

All these SE devices have to be adapted to the individual environment of the reflectometer where it is going to be used, for simple geometric constraints, influence of magnetic fields to the rest of the instrument, maximum load of the sample table, etc.

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