

Current status and future plan of sample environment in J-PARC

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Abstract

In large user facilities such as neutron experimental facilities, sample environment (SE) is one of the most important factors to yield high-quality output. In the Materials and Life Science Experimental Facility (MLF) in J-PARC, various neutron experiments have been performed in wide range of scientific researches and industrial applications, and the number and variety of proposals will further increase after resuming operation of J-PARC. At the beginning stage, the SE team in MLF has discussed SE standardization, to save the cost and manpower, to make compatibility among instruments, and to increase the experimental efficiency by sharing the SE devices and techniques for operation. We have also planned effective use of the SE devices which had been used at KEK until 2006. Though their transportation from KEK (Tsukuba) to J-PARC on March 11, 2011 was interrupted by a big earthquake, recently we completed it. Then we will start to repair / modify the devices. Furthermore, we started preparation of "SE area" in the experimental hall, where we can do maintenance of SE equipments, pre-cooling of cryostats and so on. The SE team is now discussing future plan including user support system about SE.