

RIBF ULIC Symposium/mini-WS Report

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Summary of discussions and its (expected) results:

The research collaboration between RIKEN Nishina Center and Hokkaido University Nuclear Reaction Data Centre (JCPRG) is crossing the third anniversary. The purpose of this mini-workshop is to understand the current status of the research collaboration between RIKEN-JCPRG. In addition, we also aim to discuss the possibility of future development of database and the ways to make this collaboration more effective.

In this mini-workshop, there were nine presentations in total, five from JCPRG, three from RIKEN Nishina Center and 1 from Osaka University. From these presentations, we learned the recent activities of nuclear physics field, nuclear power field, medical applications and IT technique.

Co-operation between RIKEN-JCPRG for the development of database, especially compilation work, become more stable than before. In this year, 20 RIBF experimental papers, which should be compiled in EXFOR(IAEA) / NRDF(JCPRG) database, were published. 15 papers of them were already compiled and stored in the database. In addition, the consensus within the participants about compilation of proceedings, doctoral thesis and unpublished experimental data has been discussed. Furthermore, newly developing software tools by using "Webble World" was introduced from JCPRG. "Webble World" is also expected to apply the use of RIKEN experimental data.

In addition, current status of evaluation activities was introduced from JCPRG and Osaka University. Especially, discrepancy between theory (AMD, QMD etc.) and experimental data for light nuclei, which is

important in the medical application field, was discussed. This issue makes uncertainties for the result of simulation code such as PHITS. One of the possible idea to solve this problem is to evaluate each reaction precisely based on the physical insight. Evaluated result will be able to converted and stored as the special nuclear data file library.

We will continue our collaboration in line with the discussion.

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Please attach other documents as needed.