Compilation activity in CANRDB (Central Asian Nuclear Reaction Database)

N. Kenzhebayev¹, N. Takibayev¹, V. Kurmangalyieva¹
¹Faculty of Physics and Technics, al-Farabi Kazakh National University

Since Kazakhstan joined IAEA, Central Asian Nuclear Reaction Data Base (CANRDB) takes part in scanning Kazakhstan and Uzbekistan journals and compiling EXFOR entries for IAEA. Which the experiments were carried out by Kazakhstan and Uzbekistan researchers and the experiments were measured in there, CANRDB needs to scan and collect measured results and compile these data and information as EXFOR format including neutron and charge particle induced reactions. Since foundation of our Data Center, we have compiled 8 entries. To compilation for EXFOR format, we were advised by specialist from IAEA Dr. N.Otsuka.

In 23-25 October, 2013, Kazakhstan held 4th Asian Nuclear Reaction Database Development Workshop. 4th ANRDDW continued the series of Asian nuclear reactions databases workshops, following the workshops at the Hokkaido University (Japan, 2010), Beijing (China, 2011) and Pohang Accelerator Center (Republic of Korea, 2012). After the 4th ANRDDW was finished, N. Otsuka, leading specialist of IAEA, held a short course for young specialists: training on the procedure for compilation of nuclear data in EXFOR.

Now CA-NRDB is actively working to strengthen cooperation between Asian and Russian national centers of nuclear reactions databases, and with an international network of nuclear data (NRDC) at the IAEA. In the figure 1 there is shown the IAEA web site with our first INDC report.

For that purpose, a Center for nuclear reactions data has been established in Kazakhstan (CA-NRDB, Central Asia Nuclear Reaction Database), to develop the first in Central Asia database of nuclear reactions and to incorporate this resource into international network of nuclear data bases under auspices of IAEA. There is shown in table-1, the new EXFOR entries prepared by the Kazakhstan and Uzbekistan compile groups.

Entry #	First author	Article	Lab.	Status
31737	S.R.Palvanov	J,PAN,77,35,2014	4UZ UZB	PRELIM.3163
31738	Yu.N.Koblik	J,PAN,77,39,2014	4UZ UZB	PRELIM.3163
31741	G.A.Abdullaeva	J,NESE,3,72,2013	4UZ UZB	Compiled.
D0711	Sh.Hamada	J,PR/C,87,024311,2013	4KASKAZ	in EXFOR
D0712	N.Burtebayev	J,NP/A,909,20,2013	4KASKAZ	TRANS.D093
D0723	V.T.Gkadun	J,IZK,1980,(4),82,1980	4KASKAZ	in EXFOR
D0725	I.N.Khaustov	J,IZK,1990,(2),3,1990	4KASKAZ	in EXFOR
D0726	A.Vasidov	J,IZU,1981,(3),93,1981	4UZ UZB	in EXFOR
D0727	S.Muhammedov	J,IZU,1985,(5),81,1985	4UZ UZB	in EXFOR
D0728	V.V. Dyachkov	IET,56,521,2013	4KASKAZ	in EXFOR
G0041	S.R.Palvanov	J,PAN,77,35,2014	4UZ TSK	PRELIM.G029

Table 1. New EXFOR entries prepared by the Kazakhstan+Uzbekistan group