INSTITUTE OF NUCLEAR PHYSICS

Compilation of experimental nuclear reaction data measured in Central Asia region

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Short information about CARNDC data

Compilation activity started in 2013

MEMBERS:

Dr. Zholdybayev:

N.Kenzhebayev:

USING SOSTWARES:

HENDEL (Japanese compilation tool)

GSYS (Japanese digitization tool)

Cumulative number of EXFOR entries created from the experiments performed in Kazakhstan and Uzbekistan

Year of compilation	2013	2014	2015	2016	2017	2018	2019
Kazakhstan	4	4	5	6	5	4	6
Uzbekistan	2	4	0	0	1	0	0
Total	6	8	5	6	6	4	6

COMPILED ARTICLES

Entry #	First author	Article	Status 2019
D0892	A.Duisebayev	J,BAS,81,1170,2017	Compiled
D0906	N.Burtebayev	J,JP/CS,940,012034,2017	Compiled
D0907	N.Burtebayev	J,IMP/E,27,1850042,2018	Compiled
D0911	T.K. Zholdybayev	J,APP/B,49,693,2018	Compiled
D0917	V.V. Dyachkov	Bull. RAS. Physics, 81,1174, 2017	Compiled
D0938	N.Burtebayev	J,IMP/E,27,1850094,2018	Compiled

Number of Kazakh author's articles placed in EXFOR

Author's data 80
Digitized 20

Experimental data on nuclear reaction in INP are obtained on the following basic facilities

- **Isochronous cyclotron U-150 M**
- **Accelerator Complex DC-60**
- **Electrostatic recharging accelerator UKP-2-1**
- **Research nuclear reactor WWR-K (laboratory was closed)**
- **Neutron d-t generator (decommission)**

Action A33 "Scan domestic publications (e.g., journals, laboratory reports) to identify articles for EXFOR compilation"

After scanning of the domestic journal "Izvestya of Kazakh Academy of Science" 8 new EXFOR entries were prepared by Dr Otsuka, Dr Selyankina and Dr Zholdybayev on the basis of experimental data received in Institute of Nuclear Physics (Almaty, Kazakhstan).

For entries below we prepared numerical data, and the relevant EXFOR entries are ready for transmission from NDS to other centres.

- Numerical data for elastic and inelastic scattering of a-particles on ^{68}Zn ready for including to new EXFOR entry (EXFOR **D0939**);

- Numerical data on double-differentials cross-section from interaction of ^{3}He ions on ^{124}Sn ready for including to new EXFOR entry (EXFOR **D0929**).

- Numerical data for elastic and inelastic scattering of ^{3}He on ^{28,29,30}Si, ^{31}P, ^{32}S ready for including to new EXFOR entry (EXFOR **D0924**)

- Numerical data for elastic and inelastic scattering of a-particles on ^{48,50}Ti ready for including to new EXFOR entry (EXFOR **D0926**).

After scanning of Institute's preprints and laboratory logbooks we prepared numerical data listed below.

- Numerical data on elastic and inelastic scattering on nuclei with Z=6-50 from iyfk-p-_1990 (Pavlova preprint) were made computer readable;

- Numerical data on double-differentials cross-section from interaction of ^{3}He ions on ^{27}Al, ^{59}Co, ^{112}Sn were made computer readable and ready for revising EXFOR entry **F0940** by including the restored numerical data;

- Numerical data on double-differentials cross-section from interaction of deuterons on ^{60}Ni were made computer readable and ready for revising EXFOR entry **F0570** by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on Zn isotopes were made computer readable and ready for revising EXFOR **F0865** entry by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on ^{24}Mg and ^{58}Ni were made computer readable and ready for revising EXFOR **F0497** entry by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on ^{28}Si were made computer readable and ready for revising EXFOR **F0668** entry by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on ^{12}C were made computer readable and ready for revising EXFOR **F0672** entry by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on ^{74}Ge were made computer readable and ready for revising EXFOR **F1184** entry by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on ^{206,207,208}Pb isotopes were made computer readable and ready for revising EXFOR **F1168** entry by including the restored numerical data;

- Numerical data for elastic and inelastic scattering of a-particles on ^{54}Fe were made computer readable and ready for revising EXFOR **F1160** entry by including the restored numerical data.

The 10th Asian Nuclear Reaction Database Development Workshop (AASPP 2019) as a part of the II International Scientific Forum "Nuclear Science and Technologies" will be hold on June 24-27, 2019 in Almaty at the Institute of Nuclear Physics.

All of you are welcome to the Workshop!

THANKS FOR YOUR ATTENTION