

# Center of Nuclear Physics Data

Status report to the NRDC Meeting, IAEA, Vienna,

April 9-12, 2019

S.M. Taova

**Russian Federal Nuclear Center-VNIIEF**

Russia, 607188, Sarov, Nizhnij Novgorod region, pr. Mira, 37

# EXFOR compilation

**TRANS.F068**

**TRANS.F069**

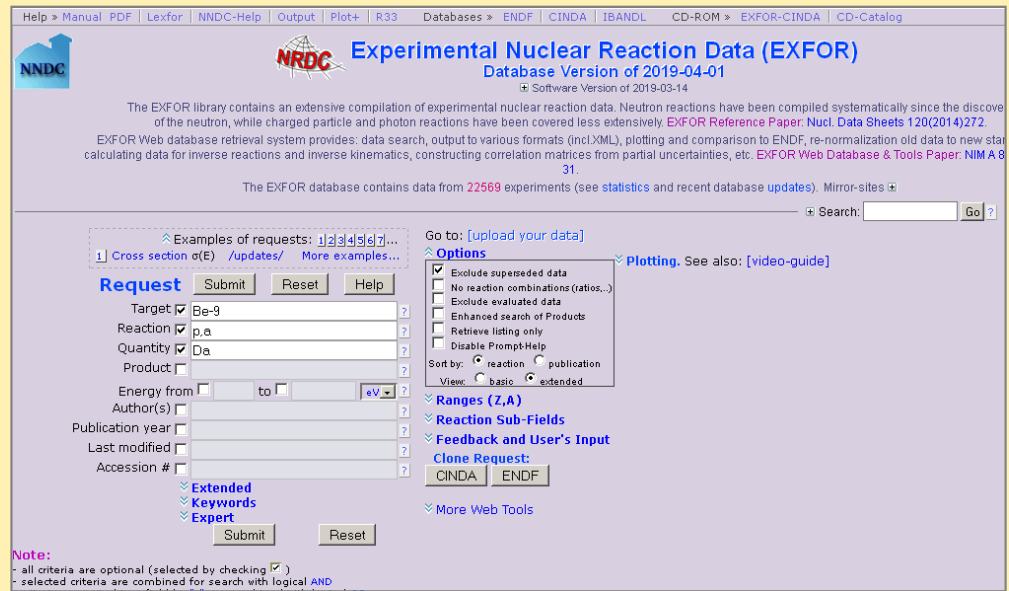
**TRANS.F070**

**TRANS.A089**

**TRANS.A090**

**40 new entries**

**118 revised entries**



**PRELIM.F071**

**18 new entries**

**3 revised entries**

# Software

## -EXFOR-Editor

### ExfData - 4.0\_

The screenshot shows the EXFOR-Editor software interface. The title bar reads "Nuclear Data Compilation into EXFOR Format Version 4.0". The menu bar includes "TRANS File", "Edit", "Processing", "Tools", "Help", "ENTRY Mode", and "TRANS Mode". The toolbar contains various icons for file operations and editing. The main window is split into two panes. The left pane, titled "TRANS File Structure", shows a tree view of a file named "TRANS F065". The tree includes several "ENTRY C" nodes (F0160, F0565, F0753, F0837, F0841) and a "SUBENT" node under F0841. The right pane displays a table of data for the selected "SUBENT" node. The table has columns for entry type, ID, and values. The data includes fields like "TITLE", "AUTHOR", "INSTITUTE", "REFERENCE", "SAMPLE", "FACILITY", "MONITOR", and "DETECTOR".

TRANS	F065	20171003			F0000	0	0
ENTRY	C	F0160	20170720		F0160	0	1
SUBENT	C	F0160001	20170720		F0160	1	1
BIB		9	34		F0160	1	2
TITLE	Elastic scattering of protons by beryllium.				F0160	1	3
AUTHOR	(F.S.Mozer)				F0160	1	4
INSTITUTE	(IUSACAL)				F0160	1	5
REFERENCE	(J,PR,104,1386,1956)				F0160	1	6
SAMPLE	Unsupported beryllium foils, 10-30 keV thick to 1-MeV protons.				F0160	1	7
FACILITY	(VDG,IUSACAL)				F0160	1	9
MONITOR	(29-CU-0(P,EL)29-CU-0,,SIG) Magnetic spectrometer calibration using Rutherford scattering cross section for natural copper.				F0160	1	10
	Incident particle electrostatic analyzer calibrated by comparison with 873- and 1372-keV resonances in 19F(p,alpha).				F0160	1	11
					F0160	1	12
DETECTOR	(MAGSP,CSICR) Particles elastically scattered in the				F0160	1	13
					F0160	1	14
					F0160	1	15
					F0160	1	16

“A65 (Continuing action) Continue development and testing of the EXFOR-Editor and InpGraph in cooperation with NDS and other data Centres”.

## Workshop on the Compilation of Experimental Nuclear Reaction Data

October, 22-25, 2018, Vienna

### Manual

“Examples and exercises to work with the program of discrete image treatment InpGraph on entering numeric data into the Exfor library”

#### Start



To run InpGraph double-click the InpGraph icon on a desktop or double-click the filename in a program folder.

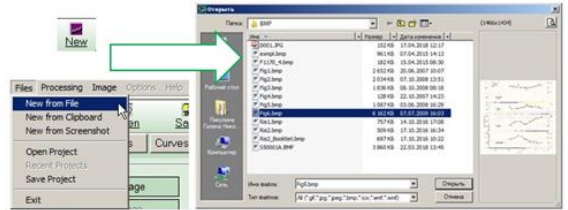
Notes:

#### Exercise 1: Uploading of a picture to be digitized

1. Run InpGraph.

#### Procedure 1

2. Click the New button on a Toolbar or click Files menu ► New From File.

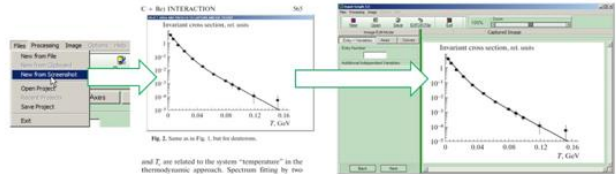


3. Select and open a file for digitizing.

#### Procedure 2

4. Open an image file (of any graphic format) containing a plot for digitizing.

5. Click Files menu ► New From Clipboard Select the New From Clipboard menu item from menu Files.



6. Select an image area to be loaded dragging and resizing window frame.

“C5 (2) Digitization could be a good subject in the NRDC progress report presented in the ND2019 conference”.

## Publications on CNPD activities

1. G. Pikulina, S. Taova. “Activities of the RFNC-VNIEF Center of Nuclear Physics Data on the Compilation of Experimental Data for the EXFOR International Library”.

Voprosy Atomnoy Nauki i Tekhniki, Seriya Reak., Issue 4, 2018. (In Russian).

2. G. Pikulina, S. Taova. «Activities of the RFNC-VNIEF Center of Nuclear Physics Data on the Compilation of Experimental Data for the EXFOR International Library. EXFOR-EDITOR Software Package».

Physics of Atomic Nuclei, 2018, Vol. 81, No. 10.

“C5 (1) Centres will be encouraged to publish their EXFOR related activities in journals. NDS will assist it if necessary”.

# Exfor Leaflet

**EXFOR:**

- THE FORMAT
- THE LIBRARY ITSELF
- THE INFORMATION SYSTEM

**EXPERIMENTAL NUCLEAR REACTION DATA LIBRARY**

**EXFOR**

International Network of Nuclear Reaction Data Centres (NRDC) coordinated by the IAEA Nuclear Data Section  
<http://www-nds.iaea.org/nrdc/>  
 Last updated March 2018

“C23 The EXFOR Leaflet edited by CNPD (WP2018-31) is ready for printing. An EXFOR poster is also available”.

## Scanning of Journals

**“Izvestiya Akademii Nauk”**

**“Yadernaya Fizika”**