Indian EXFOR Compilation Progress Report

VIDYA DEVI

INDIA

EXFOR Compilation activity

India continues to compile data on neutrons, charged particles, and photonuclear-induced reactions. This report details all EXFOR entries compiled and transmitted to the IAEA-NDS since the NRDC-2023 meeting.

The software used for the EXFOR compilation are: -

- For compilation: Russian EXFOR editor (http://wwwnds.iaea.org/nrdc/nrdc_sft/)
- For digitization: “GSYS" (https://www.jcprg.org/gsys/2.4/
- For checking purpose: (https://www.jcprg.org/exfor/tool/)

EXFOR Compilation activity

The EXFOR compilation work is done by:

- Regular compilation activity by Vidya Devi
- Organization of workshop for EXFOR compilation every two years by Dr. Devesh Raj
- The numerical data collection is done by Dr. Gayatri Mohanto from BARC.

EXFOR Compilation activity

The DAE-BRNS coordinates EXFOR compilation in India with support from IAEA-NDS through:

I. Offering project and funding opportunities to university faculties in partnership with different DAE units.

II. Hosting EXFOR theme meetings and workshops.

III. Encouraging and engaging voluntary compilers, including young researchers and article authors.

List of EXFOR workshops held in India:

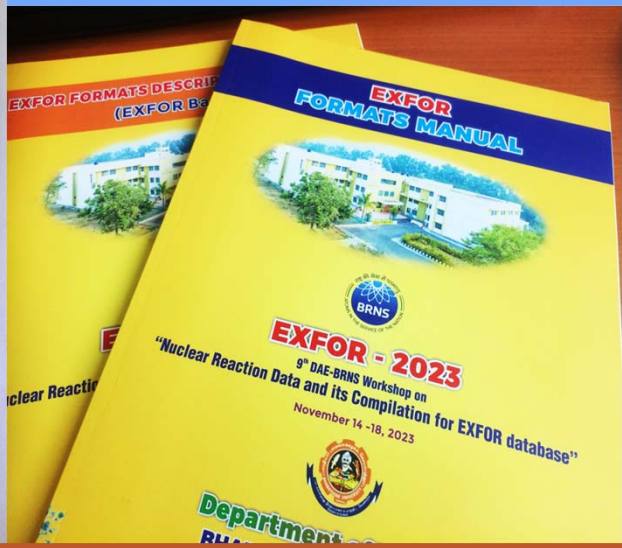
1. EXFOR 2006 (BARC, Mumbai)
2. EXFOR 2007 (BARC, Mumbai)
3. EXFOR 2009 (Jaipur)
4. EXFOR 2011 (Chandigarh)
5. EXFOR 2013 (Varanasi)
6. EXFOR 2015 (Bangalore)
7. EXFOR 2017 (Shillong)
8. EXFOR 2019 (Vadodara)
9. **EXFOR 2023 (Coimbatore)**

EXFOR entries Compiled in EXFOR workshop 2023

EXFOR entries were compiled during the EXFOR workshop held in Coimbatore in 2023, supervised by V. Devi and N. Otsuka.

- Neutron = 6 entries (Trans.3212)
- CPND = 20 entries (Trans.D141)
- PhND = 1 entry (Trans.G052)

Total= 27



Transmission Statistics since NRDC 2019 Meeting

The table represents the Indian Centre's contribution to EXFOR compilation activities since NRDC 2019 meeting.

	New Entries (India)	Fraction to New Entries (NRDC)
NRDC2023-NRDC2024	**53**	**12%**
NRDC2022-NRDC2023	19	5%
NRDC2021-NRDC2022	55	10%
NRDC2019 NRDC2021	110	9%

ACKNOWLEDGEMENT

We would like to thank M. Balasubramaniam and his university for hosting the EXFOR workshop. We also extend our thanks to the experimentalists for their data submissions:

- S. Mann, VECC, Kolkata
- K. Hajara, Calicut University
- R. Shil, Visva-Bharati, Santiniketan
- K. Chakraborty, University of Delhi
- H. Kumawat, BARC
- S. Paul, BARC
- S. Nath, IUAC, Delhi

Finally, we would like to thank Naohiko for his insightful discussions and thorough review.

THANK YOU